Supporting Students who Self-Injure: Understanding the Perceptions of School Staff and Students

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Abstract

Non-suicidal self-injury (NSSI), the deliberate destruction of body tissue without suicidal intent, among adolescents is a growing concern, especially for school staff. Although NSSI is a significant risk factor for further self-injury and suicide, many adolescents who self-injure do not seek professional help, and hide their behaviour from adults. Teachers and other school staff are in a prime position to identify and intervene with these youth. However, while teachers and other school staff are likely to encounter youth who self-injure, school staff are uncertain and lack training when responding to these students. Understanding the knowledge and training needs of school staff regarding NSSI, and exploring adolescents' views about strategies to help young people who self-injure, will inform the development of prevention and early intervention initiatives to address NSSI in the school environment. Therefore, the primary aims of this thesis were to: 1) evaluate adolescents' perspectives on how to help youth who self-injure; 2) establish the level of knowledge, confidence, and training needs of school staff and pre-service teachers; and 3) understand how school staff currently respond, and perceived barriers to effectively responding, to NSSI in schools.

To achieve these aims, self-report data were collected from 2637 students, and thematic analysis used to explore what adolescents believe teachers, parents, peers, and online friends could do to help young people who self-injure. Quantitative and qualitative data were also collected from 267 pre-service teachers and 501 school staff (including school leaders, teachers, psychologists, and counsellors), and multivariate statistics used to explore the relationships between attitudes, knowledge, and confidence towards NSSI, exposure to student self-injury, prior training, and actual responses to students who self-injure. Finally, 48 teachers and other school staff reviewed a new school policy for addressing NSSI in schools and provided written feedback on the strengths and suitability of the policy for responding to students who self-injure in the school setting.

Adolescents suggested that youth who self-injure could be helped by talking to them about the behaviour and referring them to mental health professionals. However, adolescents with a history of NSSI, or with friends who had engaged in NSSI, were unsure how teachers could help young people who self-injure. Although pre-service teachers and school staff were concerned about and willing to help students who self-injure, they were unsure how to respond and acknowledged their lack of training regarding NSSI. School staff with training regarding NSSI had greater knowledge and confidence to address self-injury in schools, while those with greater perceived knowledge and confidence were more likely to communicate with students who self-injure. Collectively, although students would like access to non-judgmental teachers to talk to about NSSI, teachers feel ill-equipped to discuss self-injury with students. These results have implications for education programs to encourage adolescents to access help for peers or themselves. Additionally, the results can inform the development of training programs and school policies for school staff to enhance their knowledge and confidence, and prepare them to identify, safely communicate with, and refer students who self-injure.

General Declaration for the Thesis

Monash University

In accordance with Monash University Doctorate Regulation 17.2 Doctor of Philosophy and Research Master's regulations the following declarations are made:

I hereby declare that this thesis contains no material which has been accepted for the award of any other degree or diploma at any university or equivalent institution and that, to the best of my knowledge and belief, this thesis contains no material previously published or written by another person, except where due reference is made in the text of the thesis.

This thesis includes six original papers published, or accepted for publication, in peer reviewed journals. The core theme of this thesis was to understand adolescents' perceptions of what could be done to help youth who self-injure, and establish the knowledge and training needs of school staff, to inform development of education programs and policies for school staff to identify and refer at-risk youth. The ideas, development, and writing up of all the papers in this thesis were the principal responsibility of myself, the candidate, working under the supervision of Associate Professor Penelope Hasking and Associate Professor Andrea Reupert.

The inclusion of co-authors reflects the fact that the work came from active collaboration between researchers and acknowledges input into team-based research. In the case of Chapter 4 and Chapter 5, and Chapter 7 to Chapter 10 my contribution to the work involved the following:

Thesis	Publication	Publication	Nature and extent of candidate's
chapter	title	status	contribution
4	Adolescents'	in press	The candidate was involved in the
	perspectives of		development of project materials, liaising with
	youth non-		schools, recruitment of participants and
	suicidal self-		obtaining active parental consent, data
	injury		collection, data entry, and data cleaning. The
	prevention.		candidate also conceptualised the study, and
			was involved in statistical and qualitative
			analyses, interpretation of the results, and
			prepared the paper for publication, all in
			consultation with the co-authors.
5	'Listen to	published	The candidate was involved in the
	them':		development of project materials, liaising with
	Adolescents'		schools, recruitment of participants and
	views on		obtaining active parental consent, data
	helping young		collection, data entry, and data cleaning. The
	people who		candidate also conceptualised the study, and
	self-injure.		was involved in statistical and qualitative
			analyses, interpretation of the results, and
			prepared the paper for publication, all in
			consultation with the co-authors.
7	"We're working	published	The candidate was involved in the
	in the dark		development of project materials, liaising with
	here":		schools, recruitment of participants, data
	Education		collection, and data cleaning. The candidate
	needs of		also conceptualised the study, and was
	teachers and		involved in statistical and qualitative analyses,
	school staff		interpretation of the results, and prepared the
	regarding		paper for publication, all in consultation with
	student self-		the supervisory team.
	injury.		

8	Pre-service and	in press	The candidate was involved in the
	in-service		development of project materials, liaising with
	teachers'		schools and universities, recruitment of
	knowledge,		participants, data collection, and data cleaning.
	attitudes, and		The candidate also conceptualised the study,
	confidence		and was involved in statistical and qualitative
	towards self-		analyses, interpretation of the results, and
	injury among		prepared the paper for publication, all in
	pupils.		consultation with the supervisory team.
9	Response and	published	The candidate was involved in the
	training needs		development of project materials, liaising with
	of school staff		schools and universities, recruitment of
	towards student		participants, data collection, and data cleaning.
	self-injury.		The candidate also conceptualised the study,
			and was involved in statistical and qualitative
			analyses, interpretation of the results, and
			prepared the paper for publication, all in
			consultation with the supervisory team.
10	Developing a	accepted	The candidate was involved in the
	policy to	pending minor	development of project materials, liaising with
	address non-	revisions	schools, recruitment of participants, data
	suicidal self-		collection, data entry, and data cleaning. The
	injury in		candidate also conceptualised the study, and
	schools.		was involved in statistical and qualitative
			analyses, interpretation of the results, and
			prepared the paper for publication, all in
			consultation with the supervisory team.

I have renumbered sections of the six papers published, in press, or accepted for publication pending minor revisions to generate a consistent presentation within the thesis.

Signed:



Date: 09/09/2014

List of Publications

Journal Articles (*publications from the thesis)

- *Berger, E., Hasking, P., & Reupert, A. (accepted pending minor revisions).
 Developing a policy to address non-suicidal self-injury in schools. *Journal of School Health*.
- *Berger, E., Reupert, A., & Hasking, P. (in press). Pre-service and in-service teachers' knowledge, attitudes, and confidence towards self-injury among pupils.

 *Journal of Education for Teaching.
- *Berger, E., Hasking, P. & Martin, G. (in press). Adolescents' perspectives of youth non-suicidal self-injury prevention. *Youth and Society*. doi: 10.1177/0044118X13520561.
- *Berger, E., Hasking, P., & Reupert, A. (2014). Response and training needs of school staff towards student self-injury. *Teaching and Teacher Education*, 44, 25-34. doi: 10.1016/j.tate.2014.07.013.
- *Berger, E., Hasking, P., & Reupert, A. (2014). "We're working in the dark here": Education needs of teachers and school staff regarding student self-injury. *School Mental Health*, 6(3), 201-212. doi: 10.1007/s12310-013-9114-4.
- *Berger, E., Hasking, P., & Martin, G. (2013). 'Listen to them': Adolescents' views on helping young people who self-injure. *Journal of Adolescence*, *36*(5), 935-945. doi: 10.1016/j.adolescence.2013.07.011.
- **Berger, E.**, Jenvey. V., & Coughlan-Ward, V. (2010). Children's and adolescents' concepts of poverty: Association with cognitive development and social disadvantage.

In S. Howard (Ed.). *International Education Conference Proceedings*. Melbourne, Victoria: Australian Association for Research in Education.

Manuscripts Under Review

• Hasking, P., **Berger, E.**, Callaway, T., & Martin, G. (under review). Emotion regulation moderates the relationship between BIS/BAS and non-suicidal self-injury.

Invited Presentations

- Hasking, P., Tatnell, R., Kelada, L., Berger, E., & Melvin, G. (2013). Understanding
 and addressing self-injury. Invited symposium. Monash University, Melbourne,
 Victoria.
- Berger, E., & Andrews, T. (2010). *Helping to enhance adolescent living*(H.E.A.L.ing): Coping with emotional problems. Self-injury in schools: Does zero tolerance work? Community Forum. Monash University, Melbourne, Victoria.
- Berger, E., Hasking, P., & Martin, G. (2010). How do we help those who self-injure:

 An examination of what young people think. Self-injury in schools: Does zero tolerance work? Community Forum. Education Centre. Royal Brisbane Women's Hospital, Brisbane, Queensland.

Conference Presentations

- **Berger, E.**, Hasking, P., & Reupert, A. (2014). *Developing a policy to address non-suicidal self-injury in schools*. International Society for the Study of Self-Injury 9th Annual Meeting. Chicago, Illinois.
- **Berger, E.**, Hasking, P., Reupert, A. & Martin, G. (2013). What can school staff do to help young people who self-injure? Perceptions of school staff and students.

- International Society for the Study of Self-Injury 8th Annual Meeting. Vancouver, British Columbia.
- Andrews, T., Hasking, P., Martin, G., Aitken, S., Berger, E., Callaway, T., Friend, L.,
 & Tanner, A. (2011). A cross-sectional investigation into the continuation and
 cessation of non-suicidal self-injury among community adolescents. International
 Society for the Study of Self-Injury 6th Annual Meeting. New York, NY.
- Hasking, P, Martin, G., Aitken, S., Andrews, T., Berger, E., Callaway, T., Friend, L.,
 & Tanner, A. (2011). The role of resilience in the relationship between predisposing factors and self-injury. International Society for the Study of Self-Injury 6th Annual Meeting. New York, NY.
- Hasking, P., Thompson, H.K., Aitken, S., Andrews, T., Berger, E., Friend, L.,
 Martin, G., & Swannell, S. (2010). Non-suicidal self-injury in secondary schools:
 How do young people view those who self-injure? Australian Association for
 Research in Education. International Education Research Conference. Melbourne,
 Victoria.
- Berger, E., Jenvey, V., & Coughlan-Ward, V. (2010). Children's and adolescents'
 concepts of poverty: Association with cognitive development and social disadvantage.
 Australian Association for Research in Education International Education Research
 Conference. Melbourne, Victoria.
- Martin, G., Hasking, P., Swannell, S., Berger, E., Aitken, S., Andrews, T., Friend, L.,
 & Thompson, H.K. (2010). Self-injury in schools: Does zero-tolerance work? 4th Asia
 Pacific Regional Conference of the International Association for Suicide Prevention.
 Brisbane, Queensland.

- Berger, E., & Hasking, P. (2010). Self-injury: help-seeking attitudes and behaviours
 of Australian adolescents. 27th International Congress of Applied Psychology.
 Melbourne, Victoria.
- Hasking, P., Martin, G., & Berger, E. (2010). How do we help those who self-injure?
 An examination of what young people think. International Society for the Study of Self-Injury 5th Annual Meeting. Chicago, Illinois.

Reports

- Berger, E., Hasking, P., & Reupert, A. (2014). Knowledge and experiences of school staff towards student self-injury: Final report for schools and universities. Monash University, Australia.
- Hasking, P., Martin, G., Berger, E., Andrews, T., & Swannell, S. (2013). Adolescents
 coping with emotional problems: Final research report for schools. Monash
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Author's Note

The following thesis includes published works, known as a thesis by publication. A thesis by publication is not a different qualification, but rather, it is one in which the core chapters of the thesis include studies or articles that have been published, accepted for publication, or prepared for publication in peer-reviewed journals. The Faculty of Education at Monash University requires that studies or articles included in a thesis by publication have at least been submitted for publication, though not necessarily accepted. In accordance with the Monash University Institute of Graduate Research guidelines, published studies or articles are presented in their publication format within the main body of the thesis.

A thesis by publication must incorporate framing and linking text for each study or article included in the thesis to provide a cohesive link between each of the studies or articles, and to describe how the reported research fits within the overall premise of the thesis.

Footnotes are also used sparingly for this purpose. Tables are re-numbered and, in some cases, re-formatted to retain consistency within the thesis. While every effort has been made to minimise repetition within the thesis, some overlap and/or repetition was unavoidable. This is particularly true when describing previous research that underlies the aims of the studies, and when describing the overall research design and methodology.

The six studies included in this thesis have been published or accepted for publication in different peer-reviewed journals. Therefore, the format and language used varies across the studies. In particular, terminology has been changed to reflect the goals of each individual journal or in response to reviewer feedback (e.g., the terms student and pupil have been used interchangeably in the thesis based on reviewer comments).

List of Abbreviations in the Thesis

NSSI Non-suicidal self-injury

RCT Randomised control trial

BPD Borderline Personality Disorder

DSM Diagnostic and Statistical Manual of Mental Disorders

S.A.F.E. Alternatives Self-Abuse Finally Ends Alternatives

ISSS International Society for the Study of Self-Injury

INSYNC Interdisciplinary National Self-Injury in Youth Network Canada

SPA Suicide Prevention Australia

DSH Deliberate self-harm

UK United Kingdom

US United States

ANR Automatic negative reinforcement

ANESSI Australian National Epidemiological Study of Self-Injury

SOQ Suicide Opinion Questionnaire

NIMH National Institute of Mental Health

LIFE Living is for Everyone

SOS Signs of Suicide

QPR Question, Persuade, Refer

TPB Theory of Planned Behaviour

H.E.A.L.ing Helping to Enhance Adolescent Living

IPA Interpretative phenomenological analysis

SHBQ Self-Harm Behaviour Questionnaire

ADSHQ Attitudes towards Deliberate Self-Harm Questionnaire

MCAR Missing completely at random

MAR Missing at random

MNAR Missing not at random NMAR Not missing at random

EFA Exploratory factor analysis
CFA Confirmatory factor analysis

MANCOVA Multivariate analysis of covariance

ANCOVA Analysis of covariance

SOSI	Signs of Self-Injury
LifeSIGNS	Life Self-Injury Guidance and Network Support
CRPSIR	Cornell Research Program on Self-Injury and Recovery
SiOS	Self-Injury Outreach and Support

Chapter 1: Overview

Introduction to the Thesis

Adolescence is a critical period of development between childhood and adulthood, when physical, biological, cognitive, and emotional changes occur, and youth begin to assume adult roles and responsibilities (Yurgelun-Todd, 2007). The primary developmental tasks and challenges of adolescence include pubertal development and sexual maturation, formation of personal and sexual identity, independence from parents and other adults, development of peer and intimate relationships, and formation of vocational skills for economic independence in adulthood (Christie & Viner, 2005). Given these developmental challenges, and because physical, biological, cognitive, and emotional processes mature at different rates, adolescence can be a period of increased psychological vulnerability and stress (Steinberg, 2005). Consequently, psychiatric disorders, and emotional and behavioural problems, such as alcohol and drug abuse, anxiety disorders, depression, and suicidal behaviour typically begin in adolescence and young adulthood (Kessler et al., 2007; Nock et al., 2013; Steinberg, 2005).

In addition, *non-suicidal self-injury* (NSSI), defined as the deliberate destruction of one's own body tissue without suicidal intent, and for purposes not culturally or socially sanctioned (Nock & Favazza, 2009), usually begins between 12 and 14 years of age (Jacobson & Gould, 2007). Common methods of NSSI in adolescence include skin cutting, scratching, and burning, interfering with wounds, self-hitting, punching, and slapping, and hitting a part of the body on a hard surface (Hasking et al., 2010; G. Martin, Swannell, Harrison, Hazell, & Taylor, 2010; Ross & Heath, 2002). Adolescents typically engage in NSSI to manage intense emotions or to punish themselves (Klonsky, 2007a), as a result of distal risk factors (e.g., childhood trauma, or genetic predisposition for emotional and

cognitive reactivity) which increase vulnerability to poor distress tolerance and maladaptive coping in response to stress (Nock, 2009b).

Prevalence of NSSI among adolescents varies considerably from approximately 10 to 33% (Hasking et al., 2010; G. Martin et al., 2010), raising concerns among researchers about the reliability and validity of NSSI research, and resulting in calls for greater methodological consistency in how NSSI is conceptualised and measured (Muehlenkamp, 2005). Recent pooled international prevalence of NSSI has been estimated between 17 and 18% in adolescence (Muehlenkamp, Claes, Havertape, & Plener, 2012; Swannell, Martin, Page, Hasking, & St John, 2014), or approximately five to six students in every Australian classroom. Although, anecdotally, teachers have reported increases in the prevalence of NSSI in schools (Heath, Toste, & Beettam, 2006; Heath, Toste, Sornberger, & Wagner, 2011), mean prevalence rates of youth NSSI have remained stable over recent years (Muehlenkamp et al., 2012).

While most NSSI in schools is relatively minor and transient, some school-based adolescents who self-injure present with similar psychological profiles as those who self-injure and are admitted to hospital (Hawton, Rodham, Evans, & Harriss, 2009). Although the long-term course of NSSI is not well known due to a lack of longitudinal research (Nock, Teper, & Hollander, 2007), NSSI is a significant risk factor for further more severe self-injury and attempted suicide (Andrews, Martin, Hasking, & Page, 2013). Young people who self-injure are almost three times more likely to engage in suicidal behaviour compared to those who do not self-injure (Whitlock et al., 2013). NSSI can also negatively impact on adolescents' physical health, and their academic and social wellbeing (G. Martin, Richardson, Bergen, Roeger, & Allison, 2005; Rotolone & Martin, 2012). As such, NSSI presents immediate health risks during adolescence, and is associated with a leading cause of preventable death in young adulthood (Australian Bureau of Statistics, 2014a).

Despite this, young people who self-injure tend to hide their behaviour from adults and avoid seeking professional help, instead turning to peers and online friends for support (De Leo & Heller, 2004; Evans, Hawton, & Rodham, 2005; Fortune, Sinclair, & Hawton, 2008b; Mitchell & Ybarra, 2007). Only about 6% of adolescents and young adults seek or receive medical attention for NSSI (Hasking et al., 2010; Whitlock, Eckenrode, & Sliverman, 2006). This reflects both the relatively low severity of most NSSI in young people (Andrews et al., 2013), and the preference to hide NSSI from professionals. Although less than one in ten adolescents seek medical attention for NSSI, in Australia, the estimated annual economic burden of NSSI is over \$180 million for hospitalisations alone (G. Martin et al., 2010).

Given increasing national and international concern regarding NSSI, the adverse outcomes for adolescents who engage in NSSI, and the significant social and economic burden NSSI presents, detection and early intervention of youth NSSI is of major importance. In particular, parents, teachers, and school-based mental health professionals are increasingly concerned about the prevalence of NSSI and seeking strategies to prevent NSSI among adolescents (Heath et al., 2006; Raphael, Clarke, & Kumar, 2006; Roberts-Dobie & Donatelle, 2007). When asked about strategies to prevent self-harm (including suicidal behaviour as well as NSSI), adolescents suggested that school staff could talk non-judgementally with students about the behaviour, that teachers, parents, and peers should be educated about self-harm and how to intervene, and that students who self-harm should have improved access to support services in schools (Fortune, Sinclair, & Hawton, 2008a).

Despite identifying peers, parents, and teachers as primary helpers, no study has examined what adolescents believe parents, teachers, and peers could actually do to help young people who self-injure. Adolescents' use of Internet discussion forums to disclose NSSI (Duggan, Heath, Lewis, & Baxter, 2011) suggests research could also explore adolescents' views of how online friends might help youth who engage in NSSI. Research on

the views of young people regarding what could be done to help young people who self-injure will inform the development of education programs to enhance help-seeking intentions and behaviour of adolescents, and minimise inappropriate reactions among teachers, parents, and peers towards young people who self-injure. Given the frequent contact teachers have with adolescents, they are in an ideal position to recognise warning signs that may signal NSSI, and respond, preventing escalation of the behaviour and later suicide (Heath et al., 2011).

Although teachers and other school staff are among the first to access professional support for adolescents who self-injure (Oldershaw, Richards, Simic, & Schmidt, 2008; Roberts-Dobie & Donatelle, 2007), most receive no formal training in NSSI, leading to a general lack of knowledge regarding youth NSSI and how to appropriately respond to these students (Carlson, DeGeer, Deur, & Fenton, 2005). Teachers and school-based mental health professionals have expressed fear, uncertainty, and helplessness when responding to young people who self-injure, and called for further education to improve their confidence and skills (Best, 2005, 2006; Carlson et al., 2005; Heath et al., 2006; Roberts-Dobie & Donatelle, 2007). Teachers can also misinterpret NSSI as manipulative and attention seeking (Carlson et al., 2005; Heath et al., 2011).

Together, negative attitudes and misconceptions may result in insensitive, and potentially harmful, responses to adolescents who self-injure (Gagnon & Hasking, 2012; McAllister, Creedy, Moyle, & Farrugia, 2002), and may reinforce stigma attributed to NSSI, influencing whether young people seek help for the behaviour (Hadfield, Brown, Pembroke, & Hayward, 2009; Patterson, Whittington, & Bogg, 2007b). Fortunately, an evaluation of a training program with school welfare staff found that training in self-harm (including suicidal behaviour) improved staff knowledge about self-harm and confidence to communicate with adolescents who engage in the behaviour (Robinson, Gook, Yuen, McGorry, & Yung, 2008).

However, no study has investigated the relationship between staff attitudes and confidence, and how they actually respond to young people who self-injure.

Although most teachers are not trained mental health professionals, many have responded to students who self-injure, and desire further education to enhance how they respond (Carlson et al., 2005). To provide effective education and training resources to teachers and other school staff we first need to establish their level of knowledge, confidence, and attitudes regarding NSSI, and identify their training needs and how they currently respond to adolescents who self-injure. However, no study has specifically focused on the views of Australian teachers towards youth NSSI. School nurses in Australian secondary schools have indicated that teachers experience anxiety when working with young people who self-injure and lack adequate knowledge about the behaviour (McAllister, Hasking, Estefan, McClenaghan, & Lowe, 2010).

In addition, the lack of mandatory mental health training for student teachers (i.e., pre-service teachers) in Australia (Graham, Phelps, Maddison, & Fitzgerald, 2011) suggests research could also examine the knowledge and training needs of pre-service teachers towards NSSI. It is possible that education programs on how to identify and respond to young people who self-injure should commence during pre-service teaching courses, leading to appropriately skilled teachers before they experience direct need in schools (Koller, Osterlind, Paris, & Weston, 2004). Identification of the knowledge and confidence of future teachers alongside current teachers and other school staff may also help determine the most appropriate allocation of training resources for NSSI in schools.

While gatekeeper training with teachers is an internationally recognised and widely used strategy to improve early detection and referral of at-risk adolescents (Isaac et al., 2009; Robinson et al., 2013), a randomised control trial (RCT) with teachers found that education

alone did not increase communication with and referral of suicidal students (Wyman et al., 2008). Wyman et al. (2008) argued that rehearsal of skills may encourage teachers to respond to at-risk students. The effect of training on teachers' responses to students who self-injure could also be enhanced by introducing school policies that advise teachers and other school staff how they can respond to students who self-injure. However, schools tend to lack policies for managing NSSI among students (Duggan, Heath, Toste, & Ross, 2011; Roberts-Dobie & Donatelle, 2007), and although guidelines have increased in recent years (Bubrick, Goodman, & Whitlock, 2010; Onacki, 2005; Toste & Heath, 2010; Walsh, 2012), limited research has investigated the utility of these policies, and the needs of teachers and other school staff regarding development of school policies addressing youth NSSI.

Aims and Outline of the Thesis

This thesis will further our understanding of how pre-service teachers and school staff view NSSI, and identify their training needs. This is an essential first step in providing targeted education and training programs for school staff who are in a prime position to identify early indicators of NSSI and refer youth who self-injure. Specifically, this thesis includes six empirical studies using data from adolescents, pre-service teachers, and school staff which together aim to improve understanding and early intervention of NSSI among young people. The first aim was to investigate what adolescents believe peers, online friends, parents, and teachers could do to help young people who self-injure. The second aim was to determine the knowledge and attitudes of school staff and pre-service teachers towards youth NSSI, and their confidence responding to adolescents who self-injure. The third aim was to explore how school staff currently respond to students who self-injure, how effective they believe their response to be, and perceived barriers to managing youth NSSI in schools. The fourth aim was to examine the training needs of pre-service teachers and school staff

regarding youth NSSI. Finally, the fifth aim was to develop, with input from school staff, a policy providing guidance on how to address NSSI in schools.

By examining the perceptions of both staff and students, this thesis will provide an important starting point for the development of targeted training programs and policies to equip school staff to identify students who self-injure, and provide early intervention and referral, improving student wellbeing and the confidence of school staff. Preparing teachers and other school staff with sufficient knowledge and skills to respond to students who self-injure will enable them to serve as liaisons for school mental health professionals, who may also require training to identify and intervene with young people who self-injure. Faulkner (2007) estimated that the school psychologist: student ratio in the Australian education system is between 1:1500 and 1:2000, suggesting that other school staff must, to a certain extent, share responsibility for identifying and intervening with adolescents who self-injure, to avoid serious physical injuries and avert potential pathways to suicide (Muehlenkamp, Walsh, & McDade, 2010).

This thesis comprises eleven chapters, including this introductory chapter, which are summarised below.

Chapter 2 introduces NSSI through a narrative *literature review* of the prevalence, correlates, and functions of NSSI. This is followed by an examination of adolescent help-seeking for NSSI, and a review of the literature on the knowledge, attitudes, and confidence of healthcare professionals and teachers regarding NSSI. Finally, the literature review will investigate prevention and intervention approaches for mental illness and suicidal behaviour in schools.

Chapter 3 provides an *extended methodology for the adolescent studies* which describes the procedure used to collect and analyse data for Chapter 4 and Chapter 5. This

chapter will describe the school-based adolescent sample used in these chapters, and the qualitative analytic method employed to analyse the data.

Chapter 4 comprises Study 1: *Adolescents' perspectives of youth non-suicidal self-injury prevention*. This study aimed to identify adolescents' views of what peers and online friends could do to help young people who self-injure, and examine differences in the perceptions of adolescents according to age, gender, and exposure to NSSI.

Chapter 5 encompasses Study 2: 'Listen to them': Adolescents' views on helping young people who self-injure. In line with Study 1, the purpose of this study was to explore what adolescents believe parents and teachers could do to help young people who engage in NSSI, and examine differences in adolescents' views according to age, gender, and history of NSSI.

Chapter 6 provides the *extended methodology for the school staff studies* which describes the procedures used to collect data for Chapter 7 to Chapter 10. This chapter will outline the pre-service teacher and school staff samples, and the quantitative and qualitative analyses used in these chapters.

Chapter 7 presents Study 3: "We're working in the dark here": Education needs of teachers and school staff regarding student self-injury. This study had three primary aims, including: 1) to validate a measure of attitudes towards NSSI with school staff; 2) examine the knowledge, attitudes, and confidence of school staff towards NSSI; and 3) explore the relationship between staff attitudes and responses to NSSI.

Chapter 8 contains Study 4: *Pre-service and in-service teachers' knowledge, attitudes* and confidence towards self-injury among pupils. The aims of this study were to explore and

compare pre-service and in-service teachers' knowledge and attitudes towards self-injury, and their confidence responding to students who self-injure.

Chapter 9 comprises Study 5: Response and training needs of school staff towards student self-injury. This study aimed to explore how pre-service teachers and school staff respond to students who self-injure, investigate their perceived confidence and effectiveness when responding to these students, and identify barriers to managing youth NSSI in schools. This study also examined the training needs of pre-service teachers and school staff regarding NSSI among students, focusing on the preferred content and delivery method of such training.

Chapter 10 comprises Study 6: Developing a policy to address non-suicidal self-injury in schools. The purpose of this study was to determine the suitability of a new policy for responding to NSSI in schools based on feedback from school staff.

Chapter 11 provides an *overall discussion* of the thesis findings and implications, outlines limitations and strengths of the research program, provides recommendations for future research and directions for school-based interventions and policies, and concludes with a summary of the thesis.

Chapter 2: Literature Review

Introduction to the Literature Review

Non-suicidal self-injury (NSSI) is a prevalent but misunderstood behaviour, in which people deliberately harm themselves without intending to die (Nock & Favazza, 2009). Since the late 1980s, NSSI has received increased public, clinical, and research interest. However, instances of NSSI have been reported for centuries (Nock, 2009a). Famous examples include Sophocles story of Oedipus Rex in 500 BC who gouged out his eyes after learning he had married and sired children by his mother (Favazza, 1996), and artist Vincent van Gogh who in 1888 famously severed his left earlobe (Messer & Fremouw, 2008). Over the past 15 years alone, research interest has moved away from NSSI in clinical settings to document NSSI in samples of high school students (Ross & Heath, 2002), university students (Whitlock, Eckenrode, et al., 2006), and active-duty military recruits (Klonsky, Oltmanns, & Turkheimer, 2003). However, despite increased awareness and attention, clear and consistent terminology and definitions for self-inflicted harm are lacking (Klonsky, Muehlenkamp, Lewis, & Walsh, 2011).

This literature review will begin with an overview of how the history of self-injurious behaviour shaped current conceptualisations of NSSI. Next, the review will address the definition of NSSI and discuss the complex relationship between NSSI and suicidal behaviour, and the importance of distinguishing between them. Third, the prevalence of NSSI among young people will be examined, followed by a review of help-seeking for the behaviour. The knowledge and confidence of healthcare professionals and school staff regarding youth NSSI, and the impact of negative attitudes towards NSSI will then be explored. Finally, this review will consider the school's role in addressing NSSI, and

emphasise challenges created by a lack of training and policies for managing NSSI in the school setting.

Description and Epidemiology of Non-Suicidal Self-Injury

History of Self-Injurious Behaviour

Culturally sanctioned behaviours and rituals that alter or destroy body tissue for healing, religious reasons, and social order can be found throughout the world and across the millennia (Favazza, 2009). From the earliest days of human history, Shamans have practiced body mutilation rituals to connect with the spiritual world, prevent diseases, and reverse misgivings of their community (Favazza, 1996). In Africa, some tribal members remove body parts to prevent ill health and treat ailments, while young women and men are circumcised to maintain social order and signify their coming of age (Favazza, 1996). Body piercing and tattooing also represent culturally and socially sanctioned body modification practices that can be found throughout the world, including Western cultures (Favazza, 1996; Nock & Favazza, 2009). Although culturally and socially sanctioned body modification behaviours differ from NSSI (Favazza, 1996), and therefore are not the focus of this thesis, historical accounts of these rituals have helped clinicians and researchers to distinguish self-injury from suicidal behaviour, and furthered understanding of NSSI.

Karl Menninger (1938) in his book *Man Against Himself* was among the first psychiatrists to distinguish what he termed self-destructive behaviour from suicidal behaviour, suggesting people harm themselves to avoid suicide and promote healing. However, it was not until the late 1960s that self-inflicted harm (then commonly referred to as wrist slashing or cutting) was more widely acknowledged in the literature as a strategy to reduce emotional tension or generate feelings (Graff & Mallin, 1967; Grunebaum & Klerman, 1967; Plener & Fegert, 2012). Later still, self-mutilating behaviour was introduced

as a symptom of Borderline Personality Disorder (BPD) in the third edition of the *Diagnostic* and Statistical Manual of Mental Disorders (DSM-III; referred to as self-mutilation;

American Psychiatric Association, 1980), where it remains today in the fifth edition (DSM-V; American Psychiatric Association, 2013). However, whereas in the third and fourth editions of the DSM the behaviour was included only as a symptom of BPD (American Psychiatric Association, 1980, 2000), the revised DSM-5 has recognised NSSI as a distinct condition for further study (American Psychiatric Association, 2013). Following publication of the DSM-III, Favazza (1987) first published Bodies Under Siege: Self-Mutilation in Culture and Psychiatry, and in doing so presented a classification system for understanding what he termed self-mutilation to describe a range of self-harming behaviours.

Since these texts, self-injurious behaviour has gained increasing recognition among clinicians and researchers as a clinically distinct behaviour that is separate from suicidal behaviour (Favazza, 1998). In response to this increasing interest, several professional associations have been established to enhance understanding, prevention, and treatment of NSSI. Established more than 20 years ago, *Self-Abuse Finally Ends Alternatives* (S.A.F.E. Alternatives; http://www.selfinjury.com/) was one of the first organisations to address NSSI, and has since developed several treatment programs and resources for consumers, parents, schools, and healthcare professionals. The *International Society for the Study of Self-injury* (ISSS; http://itriples.org/) was established in 2006 during a meeting of researchers and clinicians at Cornell University. Since then, annual ISSS meetings are held for researchers and clinicians with a focus on advancing understanding, treatment, and prevention of NSSI. Similarly, in 2006, the *Interdisciplinary National Self-Injury in Youth Network Canada* (INSYNC; http://www.insync-group.ca/) was established, bringing together NSSI researchers across Canada (Klonsky et al., 2011). In Australia, the national peak body for suicide prevention, intervention, and postvention (*Suicide Prevention Australia*; SPA;

http://suicidepreventionaust.org/) does not use the term NSSI, but has distinguished self-harm from suicidal behaviour in recent publications (e.g., Suicide Prevention Australia, 2010b), which together with international organisations, signifies a movement towards a unified understanding of NSSI among clinicians and researchers.

Classification and Definition of Self-Injurious Behaviour

To further advance understanding, treatment, and prevention of NSSI, researchers and clinicians require clear and consistent terminology and definitions (Muehlenkamp, 2005). As is apparent in the historical overview above, several terms have been used in the literature to describe NSSI, including deliberate self-harm (DSH), self-abuse, parasuicide, wrist cutting, self-inflicted violence, self-cutting, and self-mutilation (Klonsky et al., 2011; Nock & Favazza, 2009). NSSI and DSH are the two most common terms used, and despite being used interchangeably, these terms often describe behaviours that differ in method, motivation, and severity, and have different meaning depending on the source (Messer & Fremouw, 2008). For example, although NSSI is explicitly non-suicidal in intent, in the United Kingdom (UK) DSH refers to suicidal and non-suicidal self-injury, while in the United States (US) DSH and NSSI both describe self-injury without suicidal intent (Jacobson & Gould, 2007). In addition, although historically self-mutilation was used to describe behaviours similar to NSSI (Klonsky et al., 2011), the term NSSI is increasingly preferred among researchers, clinicians, and consumers based on negative connotations associated with the term mutilation (Nock & Favazza, 2009).

In his book, Favazza (1996) classified the behaviour he called self-mutilation into three categories, including: *major self-mutilation* which includes severe and infrequent tissue damage, such as eye enucleation and self-amputation, often accompanied by psychosis; *stereotypic self-mutilation* which involves repetitive and superficial tissue damage, such as

head banging, typically associated with developmental disabilities and neuropsychiatric disorders; and finally, *superficial to moderate self-mutilation* which consists of low-lethality tissue damage to regulate emotions and reduce tension. This last category is further subdivided into three types, including: *compulsive type* which involves repetitive and ritualistic behaviour (e.g., trichotillomania); *episodic type* which comprises occasional tissue damage, including cutting, burning, and self-hitting; and *repetitive type* which includes recurrent preoccupation with and engagement in behaviours such as cutting, burning, and self-hitting. Increasingly researchers have focused on episodic and repetitive forms of self-injury in the community, which are similar to today's conceptualisation of NSSI.

For the purposes of this thesis, NSSI is defined as the direct and deliberate destruction of one's own body tissue in the absence of suicidal intent, and for purposes not culturally or socially sanctioned (Nock & Favazza, 2009). NSSI is distinguished from indirect self-injurious behaviour resulting in negative health outcomes through unintentional or gradual tissue damage, such as smoking cigarettes, substance abuse, overdosing on medication, disordered eating, and other risky behaviours, including unsafe sex and dangerous driving (Jacobson & Gould, 2008; Nock & Favazza, 2009). In contrast, NSSI is direct in that the resulting tissue damage is intentional and immediate. For example, cutting one's own skin with a razor is direct NSSI because it causes immediate skin damage, while alcohol and drug abuse rarely lead to immediate tissue damage and involve chemical processes that are distinct from NSSI (Nock & Favazza, 2009). In this literature review, the terms NSSI and self-injury will be used interchangeably to describe intentional acts to injure one's own body without conscious suicidal intent. Despite important conceptual and etiological differences between NSSI and suicidality, studies on DSH (also referred to as self-harm) will also be reviewed as these findings offer important implications for understanding, preventing, and treating NSSI,

particularly in the school setting. Where studies focus on DSH rather than NSSI, this will be noted in the thesis.

The Relationship Between Non-Suicidal Self-Injury and Suicidality

Despite difficulties researchers and clinicians face in distinguishing NSSI from suicidal behaviour when the intention of the behaviour is ambiguous, this distinction has significant implications for policy, treatment, and research (Gratz, 2003; Klonsky et al., 2011; McAllister, 2003; Messer & Fremouw, 2008). For instance, assuming NSSI is synonymous with suicidal behaviour in clinical settings may confound patient assessments and case formulations, leading to inappropriate treatment and compromising patients' intentions to seek help for NSSI in future (Klonsky et al., 2011; Shaffer & Jacobson, 2008). In research, delineation between NSSI and suicidal behaviour is essential when establishing the prevalence of NSSI, and developing theory on the nature and functions of the behaviour (Gratz, 2001; Klonsky et al., 2011; Zila & Kiselica, 2001).

In a review of the literature, Muehlenkamp (2005) found differences in intent, severity, frequency, methods, reactions of others, consequences, and prevalence clearly differentiate NSSI from suicidal behaviour. For example, people who attempt suicide tend to use highly lethal means with the intention of ending their own life, while those who engage in NSSI typically use multiple low-lethality methods to alleviate negative emotions and feel better (Lloyd-Richardson, 2008; Muehlenkamp, 2005; Muehlenkamp & Kerr, 2010; Nock, Joiner, Gordon, Lloyd-Richardson, & Prinstein, 2006). Intent is the most clinically significant distinction between NSSI and suicidal behaviour (Muehlenkamp & Kerr, 2010), and differentiating between these two behaviours is of the upmost importance when examining the functions and correlates of NSSI, to successfully identify and intervene with those who self-injure (Messer & Fremouw, 2008).

Further complicating delineation between NSSI and suicidal behaviour are studies suggesting people who self-injure are more likely to report suicidal ideation and attempt suicide than those who do not self-injure (Conner, Langley, Tomaszewski, & Conwell, 2003; Laye-Gindhu & Schonert-Reichl, 2005; G. Martin et al., 2010; Nock et al., 2006; D. Owens, Horrocks, & House, 2002; Whitlock et al., 2013; Zahl & Hawton, 2004), particularly when NSSI is recurrent (Nock et al., 2006; Zahl & Hawton, 2004). Whitlock et al. (2013) found college students who self-injure are nearly three times more likely to consider or attempt suicide than those with no history of NSSI. In addition, Nock et al. (2006) suggested 70% of adolescent inpatients who self-injure attempt suicide at least once, while 55% attempt suicide more than once. In contrast, Nada-Raja, Skegg, Langley, Morrison, and Sowerby (2004) found less than 10% of community-based young adults who self-injure express suicidal intent, and several researchers have found people self-injure as a deliberate means to alleviate distress without resorting to suicide (i.e., anti-suicide; see Klonsky, 2007a). In the community, 41% of adolescents who self-injure do so to avoid thoughts of suicide and/or attempting suicide (Laye-Gindhu & Schonert-Reichl, 2005). The relationship between NSSI and suicidal behaviour reinforces the importance of examining prevention and early intervention efforts for youth NSSI in greater detail.

From a clinical perspective, the distinction between NSSI and suicidal behaviour is all the more difficult when responding to drug overdoses and self-poisonings. Although overdosing and self-poisoning could be considered NSSI in the absence of suicidal intent, researchers typically exclude overdosing and self-poisoning from definitions of NSSI because the extent of suicidality and lethality of these behaviours is difficult to predict (Klonsky et al., 2011). However, research examining DSH tends to include overdosing and self-poisoning since, by definition (at least in the UK), DSH does not differentiate between suicidal and non-suicidal self-injury, but rather focuses on any form of non-fatal self-harm (Rodham &

Hawton, 2009). The confusion about what *does* and *does not* constitute NSSI makes it difficult to compare results across studies and hinders communication among researchers and clinicians (Nock & Favazza, 2009). The lack of consistent terminology also has the potential to confuse or mislead school staff and community services, impairing development of effective school- and community-based prevention and early intervention initiatives to address NSSI.

Functions of Non-Suicidal Self-Injury

Understanding the functions maintaining NSSI is also essential when developing clinical interventions and improving treatments for NSSI. Klonsky (2007a) reported that the most common motivation for NSSI is emotion regulation, followed by self-punishment. Klonsky (2007a) specified that acute negative affect precedes NSSI and after self-injuring people experience a sense of relief and decreased negative affect (similar to the automatic negative reinforcement [ANR] function of adolescent self-injury; see Nock & Prinstein, 2004, 2005). Between 45 and 80% of community-based adolescents who self-injure do so to overcome negative emotions and reduce tension (Baetens, Claes, Muehlenkamp, Grietens, & Onghena, 2011; Laye-Gindhu & Schonert-Reichl, 2005; G. Martin et al., 2010). Other reported motivations include to alleviate periods of depersonalisation and dissociation, communicate with and influence others, to assert autonomy and distinguish between oneself and others, generate excitement and exhilaration, and, as mentioned before, to replace and avoid suicide ideation (Klonsky, 2007a).

To communicate with and influence others is one of the most frequently debated functions of NSSI in the literature. Approximately six to 41% of community-based adolescents who self-injure report wanting to elicit attention from significant others and authority figures (Baetens et al., 2011; Laye-Gindhu & Schonert-Reichl, 2005; G. Martin et

al., 2010; Nixon, Cloutier, & Aggarwal, 2002). However, Laye-Gindhu and Schonert-Reichl (2005) found 41% of adolescents who self-injure engage in the behaviour to send a message to others about their inner pain, suggesting adolescents self-injure to externalise their internal distress, rather than to manipulate others. Furthermore, while communicating with and influencing others is a common motivation for NSSI in clinical settings (e.g., 61% of women with BPD; Brown, Comtois, & Linehan, 2002), this function is less frequently cited in community samples relative to other functions (Nock & Prinstein, 2004, 2005). Finally, outside of clinical environments, people who self-injure often do so in private, concealing the behaviour from others and avoiding professional help (Evans et al., 2005; Fortune et al., 2008b; Whitlock, Eckenrode, et al., 2006).

The Nature and Extent of Non-Suicidal Self-Injury

In addition to cutting, common methods of NSSI include skin scratching, pinching, biting, and burning, interfering with wounds, self-hitting, punching, and slapping, and hitting a part of the body on a hard surface (Favazza & Conterio, 1989; Klonsky, 2007b; Laye-Gindhu & Schonert-Reichl, 2005; Lloyd-Richardson, Perrine, Dierker, & Kelley, 2007; Muehlenkamp & Gutierrez, 2004; Ross & Heath, 2002). Cutting and scratching are the most common forms of NSSI, used by 23 to 80% of people who self-injure (Briere & Gil, 1998; Hasking et al., 2010; Herpertz, 1995; Laye-Gindhu & Schonert-Reichl, 2005; G. Martin et al., 2010; Ross & Heath, 2002), followed by hitting and banging (28-45%), and burning (8-35%; Briere & Gil, 1998; Hasking et al., 2010; Herpertz, 1995; G. Martin et al., 2010; Ross & Heath, 2002). Although people who self-injure tend to use more than one method (Favazza & Conterio, 1989; Herpertz, 1995; Laye-Gindhu & Schonert-Reichl, 2005; Ross & Heath, 2002; Whitlock, Eckenrode, et al., 2006), the frequency of NSSI differs between individuals. For example, Ross and Heath (2002) found 13% of adolescents who self-injure engage in NSSI

daily, while 28% self-injure weekly, 20% self-injure monthly, and 18% engage in NSSI once in their lifetime.

Although some researchers have documented that NSSI is more common among females than males (Laye-Gindhu & Schonert-Reichl, 2005; G. Martin et al., 2010; Muehlenkamp & Gutierrez, 2007; Ross & Heath, 2002; Whitlock, Eckenrode, et al., 2006), others have found no gender difference in the prevalence of NSSI (Baetens et al., 2011; Briere & Gil, 1998; Gratz, 2001; Gratz, Conrad, & Roemer, 2002; Heath, Toste, Nedecheva, & Charlebois, 2008; Hilt, Nock, Lloyd-Richardson, & Prinstein, 2008; Klonsky et al., 2003; Lloyd-Richardson et al., 2007; Muehlenkamp et al., 2012; Muehlenkamp & Gutierrez, 2004; Swannell et al., 2014). The difference in methods used by females and males, high visibility of wounds from cutting, and inclusion of NSSI as a symptom of BPD (which is more prevalent among women than men; Simmons, 1992; Widiger, 1998) may explain why NSSI has traditionally been seen as an issue exclusively affecting females.

Reported differences in the prevalence of NSSI between females and males could also be attributed to findings suggesting females are more willing than males to seek help for self-harm (Evans et al., 2005), and also start self-harming at an earlier age than males (Young, Van Beinum, Sweeting, & West, 2007), resulting in greater opportunities for intervention. With these factors taken into account, there is growing consensus that there is no gender difference in the prevalence of NSSI, but there are gender differences in the primary methods used to self-injure. Specifically, females are more likely than males to self-injure by cutting and scratching, while males are more likely to engage in self-battery (including self-hitting, punching, and slapping; Laye-Gindhu & Schonert-Reichl, 2005; Whitlock, Eckenrode, et al., 2006).

The process of establishing the prevalence of NSSI is further complicated by differences between studies in the methods used to collect data, and in the context and characteristics of samples (Messer & Fremouw, 2008; Rodham & Hawton, 2009; Stanford & Jones, 2010; Welch, 2001). Although earlier research examined self-injury in clinical settings, increasing evidence suggests the majority of people who self-injure do not seek professional help and even fewer are admitted to hospital (Hawton, Harriss, & Rodham, 2010; Hawton & James, 2006; Hawton, Rodham, & Evans, 2006; Hawton, Rodham, Evans, & Weatherall, 2002; Heath et al., 2006; Rodham, Hawton, & Evans, 2004; Ystgaard et al., 2009). In Australia, Pearce and Martin (1993) found only 30% of adolescents present to hospital following an episode of DSH. Likewise, in the UK, approximately 70% of adolescents presenting to hospital following DSH reported previous incidents of self-harm that had not resulted in hospital presentation (Hawton, Fagg, & Simkin, 1996). On the other hand, community-based adolescents and young adults who engage in NSSI are much less likely than those who engage in DSH to seek medical attention (5.7-6.5%; Hasking et al., 2010; Whitlock, Eckenrode, et al., 2006), potentially due to the severity and lethality of DSH relative to NSSI, and inclusion of self-poisoning and overdosing in the definition of DSH. Given that few adolescents who self-injure receive intervention from clinical services, researchers could further explore the prevalence of and help-seeking for NSSI among community-based youth.

A recent meta-analysis of the prevalence of NSSI in non-clinical samples found rates are highest among young adults aged 18 to 24 years (21.3%) than among adults aged 25 years and older (3.9%; Swannell et al., 2014). High rates of NSSI are also documented in children and adolescents, with research finding early- to mid- adolescence (between 12 and 14 years of age) is a critical period for the onset of NSSI (Jacobson & Gould, 2007; Laye-Gindhu & Schonert-Reichl, 2005; Muehlenkamp & Gutierrez, 2004, 2007; Nixon, Cloutier, & Jansson,

2008; Ross & Heath, 2002). Lifetime prevalence of NSSI among adolescents in the community ranges from 14 to 23% (Laye-Gindhu & Schonert-Reichl, 2005; Muehlenkamp & Gutierrez, 2004, 2007; Nixon et al., 2008; Ross & Heath, 2002), however, where 12-month prevalence has been assessed, this reportedly ranges from 7 to 46% (Hasking et al., 2010; Lloyd-Richardson et al., 2007; Muehlenkamp & Gutierrez, 2004, 2007; Taliaferro, Muehlenkamp, Borowsky, McMorris, & Kugler, 2012). An epidemiological study of Australians aged 10 to 100 years old (the Australian National Epidemiological Study of Self-Injury [ANESSI]), G. Martin et al. (2010) found approximately 10% of children and adolescents aged 10 to 17 years had engaged in NSSI in their lifetime, with results showing a 12-month prevalence of about 5%. Two recent meta-analyses were consistent in reporting rates of NSSI among adolescents between 17 and 18% (Muehlenkamp et al., 2012; Swannell et al., 2014).

Together, the age of onset and high prevalence of self-injury among adolescents suggests schools are an ideal setting for prevention and early intervention programs (D'Onofrio, 2007; Lieberman, Toste, & Heath, 2009; Miller & Brock, 2010). Furthermore, risk factors associated with self-injurious behaviour, such as poor academic performance (G. Martin et al., 2005), problems with schoolwork (Hawton et al., 2003), lack of social connectedness (Rotolone & Martin, 2012), being bullied (Hay & Meldrum, 2010), low self-esteem (Hawton et al., 2002), and problems in relationships with family members and friends (Baetens et al., 2011; Hawton et al., 2003; Hawton & Harriss, 2008) suggest teachers and other school staff are in a prime position to recognise early warning signs of NSSI and intervene with young people who self-injure. However, providing appropriate intervention and referral in schools may depend on whether students are willing to access help for NSSI in the school setting (Heath, Baxter, Toste, & McLouth, 2010).

Summary

In summary, there has been an expansion of public, clinical, and research interest in NSSI, defined as the deliberate destruction of body tissue without suicidal intent, and for purposes not culturally or socially sanctioned. NSSI typically begins in adolescence between the ages of 12 and 14 years, and is a significant risk factor for further self-injury and suicide. Although NSSI is highly prevalent among adolescents, young people who self-injure are reluctant to seek help from adults and professionals. The next section of this literature review will explore youth help-seeking for NSSI, and discuss research on the knowledge, attitudes, and confidence of healthcare professionals and school staff regarding NSSI. While not a primary aim of this thesis, understanding help-seeking among adolescents for NSSI alongside the perceptions of teachers may facilitate future help-seeking and supportive responses for NSSI in schools.

Help-Seeking and Attitudes Towards Non-Suicidal Self-Injury

Help-Seeking for Non-Suicidal Self-Injury

Over the past 10 years, research has found adolescents who engage in DSH (including suicidal behaviour) are more likely to seek help from friends than family, followed by healthcare professionals and teachers (De Leo & Heller, 2004; Evans et al., 2005; Fortune et al., 2008b; Goodwin, Mocarski, Marusic, & Beautrais, 2013; Rossow & Wichstrom, 2010; Ystgaard et al., 2009), consistent with earlier, general help-seeking literature (e.g., Rickwood & Braithwaite, 1994; Sheffield, Fiorenza, & Sofronoff, 2004). Specifically, Fortune et al. (2008b) reported that adolescents were almost four times more likely to seek help from friends than family. Help-seeking from a psychologist or psychiatrist was mentioned by less than one in ten adolescents who self-harm (Fortune et al., 2008b). Adolescents with friends who engage in self-harm or with a history of DSH are also more willing than those not

exposed to self-harm to seek help from peers, and more reluctant to talk to parents and teachers (Evans et al., 2005; Fortune et al., 2008b). Similarly, Baetens et al. (2011) reported that less than a quarter of Flemish adolescents who engage in NSSI receive help from mental health professionals (17%) or emergency services (4%).

In contrast, Nixon et al. (2008) examined help-seeking for NSSI (referred to as non-suicidal self-harm) among Canadian adolescents and young adults aged 14 to 21 years, and found of those with a history of NSSI, 56% sought help from a friend, followed by a psychiatrist or psychologist (54%), family member (48%), other mental health professional (32%), family doctor (30%), other non-specified source (28%), and telephone helpline (18%). The inconsistent rate of professional help-seeking between this study and others may be the result of differences between non-suicidal self-harm and DSH, with research suggesting suicidal adolescents are more reluctant than peers who are not suicidal to seek professional help (Carlton & Deane, 2000; Deane, Wilson, & Ciarrochi, 2001; Rickwood, Deane, & Wilson, 2007).

However, this may not fully explain the observed difference given that Nixon et al. (2008) included behaviours commonly attributed to DSH, such as overdosing and self-poisoning, when assessing the prevalence of non-suicidal self-harm among young people. The discrepancy may also reflect significant increases in the proportion of adolescents seeking professional help for DSH over time (Rossow & Wichstrom, 2010), potentially due to increased media attention and greater service accessibility, which have reduced help-seeking barriers for young people who self-harm. Finally, studies investigating receipt of help may underestimate help-seeking behaviour; young people who self-injure may have attempted to seek help without finding a supportive response, and so answer negatively to questions on receipt of help for NSSI (Michelmore & Hindley, 2012).

Consistent with research suggesting adolescents who self-harm are unlikely to seek help from teachers, Heath et al. (2010) found only about 13% of students who engage in NSSI would access support in school. However, younger students were more willing than older students to access a school-based support program for NSSI, suggesting developmental differences throughout adolescence may influence young people's willingness to seek help from adults for NSSI. Specifically, developmental theory and research indicates that young people are increasingly striving for autonomy and identity formation in adolescence (Christie & Viner, 2005), which could explain why older adolescents are more reluctant than younger adolescents to seek help from teachers. It is also possible that older adolescents recognise the relatively self-limiting nature of NSSI, reducing their willingness to seek help. A related study found older adolescents who self-harm are more likely to seek help than younger adolescents for the behaviour (Sen, 2004). However, this finding was based on a dichotomous item of help-seeking (from anyone) for DSH, and it is unknown whether adolescents' perceptions of help-seeking for NSSI vary according to the source of support.

Gender might also differentiate perceptions of help for NSSI, with research suggesting females are more likely than males to perceive the seriousness of self-harm, recognise their need for help (Fortune et al., 2008b), and seek help from friends, family, and mental health professionals following DSH (Evans et al., 2005; Nada-Raja, Morrison, & Skegg, 2003; Rossow & Wichstrom, 2010; Sen, 2004; Ystgaard et al., 2009). In contrast, other studies have found females and males are equally likely to seek help for DSH (De Leo & Heller, 2004), and no difference in the sources of help approached by females and males who self-harm (Fortune et al., 2008b). From this research, and based on previous models of help-seeking behaviour (e.g., C. Murray, 2005), Fortune et al. (2008b) described that help-seeking among young people who self-harm is influenced by demographic factors, such as gender and age, as well as adolescents' perceptions of what others can do to help them

overcome the behaviour. Together, these findings suggest adolescents' views of what parents, teachers, and peers could do to help young people who engage in NSSI may be influenced by their age, gender, exposure to peers who self-injure, and personal history of NSSI.

Barriers to Help-Seeking for Non-Suicidal Self-injury

While it is clear that young people resist seeking professional help for NSSI, few studies have explored factors influencing adolescents' perceptions of help for NSSI and the potential barriers to help-seeking. In the UK, children and adolescents who self-harm fail to seek help for the behaviour because they are unsure who to seek help from and how to access services, fear ridicule and criticism, and plan to manage their problems alone (Mental Health Foundation, 2006). Fortune et al. (2008b) also found the primary reasons adolescents gave for resisting seeking help for self-harm included the view that DSH is not a serious problem and they should be able to cope alone, the perception that others would try to prevent them from engaging in self-harm, and not knowing how to access help for DSH. Females were more likely than males to perceive the seriousness of self-harm, and to feel ashamed and fear stigma following an episode of DSH. Adolescents with friends who self-harm were also more concerned, compared to youth not exposed to peer DSH, that others would not understand or take the behaviour seriously.

Similarly, Nada-Raja et al. (2003) examined intentions to seek help for DSH among young adults in New Zealand and found those who self-harm felt they could manage their own problems without seeking help from others, feared stigma and embarrassment, and lacked time, finances, and knowledge of available services to access appropriate help for DSH. In contrast to the findings of Fortune et al. (2008b), males were more likely than females to fear stigma associated with self-harm. This contradiction could be attributed to the age difference between the two samples, suggesting older males are more likely than younger

males to fear stigma associated with self-injury, while females' fear surrounding stigma for self-injury may lessen with age. Overall, these attitudinal and practical barriers to help-seeking for self-harm might explain why adolescents who self-injure are reluctant to seek help from parents and teachers, and why many others do not access mental health services. However, these studies have not addressed how parents, teachers, and peers could be utilised to help young people who self-injure, and whether adolescents' perceptions of how parents, teachers, and peers could help young people who self-injure differ according to age, gender, and exposure to NSSI.

Contagion of Non-Suicidal Self-Injury

Although reliance on friends for social support and identity formation instead of parents and other adults is developmentally appropriate in adolescence (Christie & Viner, 2005), having friends who self-injure is related to self-injury among peers. For several years researchers have identified a "contagion effect" in clinical settings, and documented that one patient's self-injury increases the chances that other patients will also self-injure, even among patients without a history of NSSI (Prinstein et al., 2010; Rosen & Walsh, 1989; Taiminen, Kallio-Soukainen, Nokso-Koivisto, Kaljonen, & Helenius, 1998; Walsh & Rosen, 1985). In the community, engagement in NSSI has also been associated with peer engagement in NSSI (Hasking, Andrews, & Martin, 2013; Muehlenkamp, Hoff, Licht, Azure, & Hasenzahl, 2008; Prinstein et al., 2010). In terms of direct peer influence on self-injury, studies have indicated that over a third of adolescents and young adults initially get the idea to self-injure from a friend or someone they know who has self-injured. However, others learn about NSSI through television, movies, and the Internet, or are unsure where the initial idea to self-injure came from (Deliberto & Nock, 2008; Heath, Ross, Toste, Charlebois, & Nedecheva, 2009).

youth engagement in NSSI highlights the importance of evaluating the views of peers in terms of prevention and early intervention approaches for NSSI.

Online Help-Seeking for Non-Suicidal Self-Injury

Internet use is a daily activity for many Australian adolescents. In the 2012-2013 financial year 83% of Australian households had Internet access, an increase from 79% in 2010-2011 (Australian Bureau of Statistics, 2014b). Social networking is one of the most popular Internet activities among adolescents, with 48% of 12 to 14 year olds (Australian Bureau of Statistics, 2011), and 88% of 15 to 17 year olds (Australian Bureau of Statistics, 2014b) using social media websites (e.g., Facebook) to communicate with existing friends and family members, meet new people and form online friendships, to disclose and discuss personal problems, and access mental health information (Burns, Davenport, Durkin, Luscombe, & Hickie, 2010; Gross, Juvonen, & Gable, 2002; McKenna, Green, & Gleason, 2002; Valkenburg & Peter, 2007, 2009). For instance, Burns et al. (2010) observed that one in five Australian adolescents aged 12 to 17 years access the Internet to search for mental health information, while another Australian study identified the Internet as one of the top five places youth turn to for advice and support (Mission Australia, 2011). Mitchell and Ybarra (2007) also found adolescents who self-injure use the Internet more often and for different reasons than those who do not self-injure, raising concerns for researchers and clinicians about the psychological benefits and safety risks associated with online helpseeking for NSSI (Duggan, Heath, Lewis, et al., 2011).

The Internet and online discussion forums for self-injury can increase access to cost-effective and anonymous information, support, and advice, facilitate communication and relationships with people who have shared experiences, and reduce fears of stigma attributed to self-injury (Barker & Fortune, 2008; Duggan, Heath, Lewis, et al., 2011; G. M. Johnson,

Zastawny, & Kulpa, 2010; C. D. Murray & Fox, 2006; Prasad & Owens, 2001; Swannell et al., 2010; Whitlock, Lader, & Conterio, 2007; Whitlock, Powers, & Eckenrode, 2006), all of which have the potential to reduce the frequency and severity of the behaviour among people who self-injure (C. D. Murray & Fox, 2006). Conversely, researchers suggest online discussion of self-injury may foster reliance on online relationships at the expense of offline help-seeking, increase access to triggering, misleading, and inaccurate advice, and normalise, promote, and encourage self-injury (Barker & Fortune, 2008; Duggan, Heath, Lewis, et al., 2011; Lewis, Heath, St. Denis, & Noble, 2011; C. D. Murray & Fox, 2006; Whitlock et al., 2007; Whitlock, Powers, et al., 2006).

The merits of these websites and the secretive nature of NSSI means there are now hundreds of online message boards and discussion forums dedicated to self-injury (Duggan, Heath, Lewis, et al., 2011; Mitchell & Ybarra, 2007; C. D. Murray & Fox, 2006; Whitlock et al., 2007; Whitlock, Powers, et al., 2006). From 2005 to 2006 the number of active self-injury message boards increased from 400 to 500 (Whitlock et al., 2007; Whitlock, Powers, et al., 2006), while in 2009, over 5000 videos relating to self-injury were available on YouTube (Lewis et al., 2011). In addition, Swannell et al. (2010) found searching the term "self-injury" on the popular search engine Google produced over 2.1 million results. Although these studies highlight the prevalence and popularity of self-injury discussion forums and websites, no study has established adolescents' views of online help-seeking for NSSI, and whether adolescents' perceptions of what online friends could do to help young people who self-injure differ between those with and without a history of NSSI.

Adolescents who self-harm are, however, more likely than those who do not self-harm to use the internet and online chat rooms, share personal information online, have close online relationships, and engage in risky sexual behaviour online (Mitchell & Ybarra, 2007). This finding suggests online help-seeking among youth who self-injure may also differ from

peers who do not engage in NSSI, and help-seeking research should determine how adolescents believe peers in the digital and "real" world can support and intervene with those who self-injure. According to Suicide Prevention Australia (SPA; 2010a), youth involvement, especially from those with lived experiences of suicidal behaviour, is crucial to inform programs, provide safe environments for at-risk youth, and facilitate help-seeking. This information could inform development of education programs which may engage young people in a process of responding to and referring peers and online friends who self-injure, which, in turn, might increase adolescent help-seeking from parents and teachers for NSSI.

Perceptions of Help for Non-Suicidal Self-Injury

To date, no study has explored adolescents' views of what peers, online friends, parents, and teachers could do to help adolescents who engage in NSSI, with the majority of studies focusing on strategies to *prevent* DSH and suicidal behaviour (e.g., Fortune et al., 2008a). Fortune et al. (2008a) noted that adolescents in the UK endorsed increased access to school-based support and education for parents, teachers, and peers regarding DSH, but also observed reluctance to talk to family members and professionals about self-harm. This differs from Heath et al.'s (2010) finding that adolescents who self-injure would be unwilling to access a support program for NSSI if available at their school. The contradictory findings might reflect differences in the views of a general sample of school-based adolescents (Fortune et al., 2008a) and adolescents who self-injure (Heath et al., 2010) who may have encountered a lack of knowledge or negative attitudes among adults when previously seeking support (see Evans et al., 2005). In related work, Rissanen, Kylmä, and Laukkanen (2009a) found adolescents who self-harm believe that peers, parents, and teachers need to be educated about the behaviour and how to access professional services, in order to help young people. These findings indicate that adolescents are concerned about judgemental attitudes and

inadequate knowledge of parents and teachers regarding self-injury, which may discourage them from accessing help for the behaviour.

It follows that to increase service use among adolescents, parents and teachers need training and advice on NSSI to respond efficiently, and ensure that appropriate professional care is provided. Arguably, friends can also play a role in facilitating adult support on behalf of peers who confide in them. Although a longitudinal study of young adults in New Zealand found seeking help from friends and family for self-harm increased help-seeking from health services (Nada-Raja et al., 2003), another study suggested that peers are poorly equipped to support suicidal adolescents, and may discourage them from seeking professional help (Gould et al., 2004). More recently, Roberts-Dobie and Donatelle (2007) found peers (67%), and classroom teachers and coaches (65%) are the primary sources for referral to school counsellors, highlighting the need for school staff and peers to be educated about and sensitised to warning signs that may signal NSSI. Supporting this, school staff are often the first to identify self-harm in youth and encourage professional help-seeking (Oldershaw et al., 2008).

Attitudes and Knowledge Regarding Non-Suicidal Self-Injury

The quality of care provided to adolescents who self-injure by healthcare and education professionals may be adversely influenced by unfavourable attitudes towards NSSI, such as believing that young people who self-injure are manipulative and attention-seeking. However, while less than one in ten adolescents who self-injure receive medical attention or are admitted to hospital for the behaviour (Hasking et al., 2010; Whitlock, Eckenrode, et al., 2006), and although teachers are often the first to facilitate help-seeking (Roberts-Dobie & Donatelle, 2007), on the whole, researchers have focused on the attitudes and knowledge of healthcare professionals regarding DSH, rather than teachers and other

school staff. However, a recent study with healthcare professionals and teachers demonstrated that mental health professionals were more knowledgeable and felt more effective than teachers, while teachers held more favourable attitudes than emergency department staff towards youth self-harm (Timson, Priest, & Clark-Carter, 2012). While not the central focus of this thesis, understanding the attitudes of healthcare professionals towards self-injury provides a basis for exploring the perceptions of school staff regarding NSSI.

Healthcare Professionals' Perceptions of Non-Suicidal Self-Injury

Research suggests people who self-harm view teachers and healthcare professionals as unhelpful in response to DSH (J. Harris, 2000; Storey, Hurry, Jowitt, Owens, & House, 2005), with medical professionals and emergency services singled out as the least supportive groups (Nada-Raja et al., 2003; Warm, Murray, & Fox, 2002). In a review of service users experiences with healthcare professionals following engagement in self-harm, Taylor, Hawton, Fortune, and Kapur (2009) documented that exclusion from treatment decisions, poor communication between patients and hospital staff, inadequate psychosocial assessments and access to after-care, and a perceived lack of staff knowledge regarding self-harm can negatively impact service users' satisfaction with healthcare professionals. Similarly, McAllister et al. (2001) found Australian patients who self-harm report being ignored in emergency departments and experiencing long waiting times, and describe not being listened to and criticised by hospital staff.

Another Australian study of emergency department nurses' attitudes towards and triage care decisions for patients who self-harm observed that despite their limited training, nurses held sympathetic attitudes towards patients who engage in DSH and reported making non-discriminatory triage care decisions (McCann, Clark, McConnachie, & Harvey, 2007). However, this study used variables from the Suicide Opinion Questionnaire (SOQ; Domino,

Moore, Westlake, & Gibson, 1982) which may be inappropriate for research examining attitudes towards NSSI. Furthermore, these studies do little to explain why some professionals respond in unhelpful ways towards patients who self-injure and what might encourage helpful responses (Hadfield et al., 2009). Improving staff knowledge of self-injury and communication skills though training and policy could enhance the consistency of care provided to patients who self-injure, increasing service users' satisfaction and treatment adherence, as well as their intentions to seek help in future for NSSI.

In line with the perceptions of patients who self-injure, nurses and doctors in emergency departments and psychiatric inpatient units express strong negative reactions towards patients who self-harm, including anxiety, frustration, anger, and helplessness, and are uncertain how to respond to these patients (Crawford, Geraghty, Street, & Simonoff, 2003; Friedman et al., 2006; Gibb, Beautrais, & Surgenor, 2010; Hadfield et al., 2009; Mackay & Barrowclough, 2005; McAllister et al., 2002; McCann et al., 2007; A. R. Thompson, Powis, & Carradice, 2008; Wilstrand, Lindgren, Gilje, & Olofsson, 2007). Healthcare professionals also report a mixture of positive and negative attitudes towards patients who engage in DSH, with some viewing patients who self-harm as attention-seeking and manipulative (Friedman et al., 2006; Gibb et al., 2010; Hadfield et al., 2009; McAllister et al., 2002). In addition, nurses and doctors receive little training to help them care for patients who self-harm, and suggest they need additional training in the area (Crawford et al., 2003; Friedman et al., 2006; Gibb et al., 2010; Jeffery & Warm, 2002; Mackay & Barrowclough, 2005; McAllister et al., 2002; McCann et al., 2007; Taliaferro et al., 2013; A. R. Thompson et al., 2008).

There is also an association between demographic factors, such as gender and length of professional experience, and attitudes towards patients who engage in DSH. Specifically, older and more experienced staff tend to hold more positive attitudes towards patients who

self-harm than younger and less experienced staff (Anderson, 1997; Conlon & O'Tuathail, 2012; McCann et al., 2007; McCarthy & Gijbels, 2010; McLaughlm, 1994). Studies have also demonstrated that mental health nurses and healthcare professionals, and those with training in DSH are more positive towards patients who self-harm than nurses and healthcare professionals without training in mental health or DSH (Friedman et al., 2006; Muehlenkamp et al., 2013; Patterson, Whittington, & Bogg, 2007a; Wheatley & Austin-Payne, 2009). In contrast, Friedman et al. (2006) found attitudes of experienced emergency department staff towards patients who self-harm by laceration are more negative and less sympathetic than inexperienced staff. However, since Friedman et al. (2006) examined attitudes towards self-harm by laceration alone, findings may not be representative of attitudes towards people who engage in other forms of self-injury.

Other studies have shown that attitudes and knowledge towards DSH, and confidence when responding to patients who self-harm, are unrelated to age, gender, and years of professional experience (Anderson & Standen, 2007; Crawford et al., 2003; Gagnon & Hasking, 2012; Gibb et al., 2010; Mackay & Barrowclough, 2005; McAllister et al., 2002; Patterson et al., 2007a; Wheatley & Austin-Payne, 2009), but that being female and feeling more confident to address NSSI are related to how healthcare professionals respond to at-risk youth (Taliaferro et al., 2013). Training can also enhance how healthcare professionals address youth self-harm (Ougrin, Zundel, Ng, Habel, & Latif, 2013), and improve their perceived knowledge and confidence in response to patients who self-injure (Kool, van Meijel, Koekkoek, van der Bijl, & Kerkhof, 2014; McAllister, Moyle, Billett, & Zimmer-Gembeck, 2009; Muehlenkamp et al., 2013).

However, the contradictions regarding relationships between demographic factors and perceptions of self-injury could be attributed to differences between samples, with studies that combined nurses with other healthcare professionals tending to find no correlation

between age, length of professional experience, and attitudes (Crawford et al., 2003; Gibb et al., 2010; Mackay & Barrowclough, 2005; Patterson et al., 2007a), although this is not a consistent finding (i.e., Anderson & Standen, 2007; McAllister et al., 2002; Wheatley & Austin-Payne, 2009). Another explanation is that studies which failed to demonstrate internal consistency of attitude measures generally found no association between age, length of professional experience, and attitudes (Anderson & Standen, 2007; Crawford et al., 2003; Mackay & Barrowclough, 2005; Wheatley & Austin-Payne, 2009), however, this is also true of standardised measures (i.e., Gibb et al., 2010; McAllister et al., 2002; Patterson et al., 2007a).

Although the way attitudes are conceptualised across studies can vary considerably, positive attitudes towards self-harm are typically demonstrated through rejection of myth-based statements about DSH, such as believing that patients who self-harm are attention-seeking or manipulative (McCann et al., 2007). Other studies have operationalised positive attitudes among healthcare professionals on scales that reflect empathy towards those who self-harm and rejection of myths about DSH (McCarthy & Gijbels, 2010). However, as previously mentioned, few studies used standardised measures when assessing attitudes of healthcare professionals towards DSH.

In terms of knowledge towards self-harm, medical professionals and psychiatrists tend to be less knowledgeable about self-harm than psychologists and social workers (Jeffery & Warm, 2002). Crawford et al. (2003) found psychiatric doctors had greater knowledge of DSH than non-psychiatric doctors and nurses, but documented that knowledge was unrelated to confidence and attitudes. Another study suggested psychologists experienced with clients who self-harm are more knowledgeable and confident than those without such experience (Gagnon & Hasking, 2012), while knowledge about DSH was unrelated to attitudes towards the behaviour. However, consistent with research involving school staff (see Best, 2005,

2006), failure of participants to agree on an operational definition of DSH limits generalisability of the findings.

Together, research suggests healthcare professionals with training in self-harm and mental health are more knowledgeable and hold more positive attitudes towards patients who engage in DSH than professionals without training in this area. However, negative attitudes of emergency department staff towards patients who self-harm are emulated in patients' negative perceptions of the care they receive from staff following engagement in DSH (Taylor et al., 2009). Attitudes towards NSSI may, to some extent, be influenced by knowledge about self-injury, gained through professional experience and education, suggesting a benefit in training healthcare professionals. This is particularly true since attitudes towards suicidal behaviour (the focus of previous research) tend to be more empathetic than attitudes towards NSSI (Muehlenkamp, 2005). Whether similar deficits in knowledge and negative attitudes among school staff are related to how NSSI is addressed in the school context remains to be seen.

School Staff Perceptions of Non-Suicidal Self-Injury

Few studies have evaluated teachers' and other school staff attitudes towards young people who self-injure, particularly in Australia. The majority of research in this area has examined teachers' knowledge of and attitudes towards youth DSH, and more recently NSSI, in the UK, US, and Canada, and the factors contributing to these perceptions and understandings. Furthermore, although school counsellors are most likely to intervene with students who self-injure (Roberts-Dobie & Donatelle, 2007), few studies have established how school mental health professionals view and respond to students who engage in NSSI. Inadequate training means that school counsellors may be unprepared when intervening with students who self-injure, and unable to educate and develop policies for teachers and other

school staff regarding youth NSSI (Duggan, Heath, Toste, et al., 2011). Likewise, lack of knowledge and negative attitudes among school leaders, such as school principals and year level coordinators (i.e., school staff who are responsible for all matters directly related to a year level) may impede implementation of training programs and school policies regarding youth NSSI (McAllister et al., 2010).

Similar to healthcare professionals, teachers and other school staff express negative emotions, lack training and confidence in responding to students who self-injure, and report a need for additional training and school policies regarding NSSI (Best, 2005, 2006; Carlson et al., 2005; Cooke & James, 2009; Heath et al., 2006; Heath et al., 2011; McAllister et al., 2010; Robinson et al., 2008; Simm, Roen, & Daiches, 2008, 2010). In the UK, Best (2005, 2006) conducted a qualitative study to investigate the knowledge and attitudes of school staff (including teachers, school nurses, and counsellors) towards students who self-harm. He observed that school staff are uncertain of their own and colleagues' knowledge about DSH, and react with shock, anxiety, repulsion, frustration, alarm, and panic towards students who engage in DSH. Best (2005, 2006) also observed that staff who are experienced with students who self-harm are more confident when responding to these students than staff without such experience. However, similar to research with healthcare professionals, Best (2005, 2006) examined attitudes of school staff towards self-poisoning and overdosing, which are typically excluded from the definition of NSSI, and therefore findings may not reflect attitudes towards NSSI.

Another qualitative study with UK primary school teachers and other school staff experienced with children who engage in DSH by Simm et al. (2008, 2010) found that staff express fear, shock, anxiety, and sadness towards students who self-harm, are unsure what behaviours constitute DSH, and question whether colleagues have adequate knowledge, confidence, and time to identify and respond to students who engage in the behaviour.

Similar to Best's (2005, 2006) findings, teachers' attitudes towards DSH and their ability to respond appropriately to students who self-harm were positively associated with previous training and experience in the area of DSH. However, Simm et al. (2008, 2010) focused on primary school teachers exposed to children who self-harm, and results may not be representative of the views of secondary school teachers and staff. Nevertheless, given that NSSI is more prevalent among adolescents than children (Preyde et al., 2012), it is likely that secondary school teachers have more experience with young people who self-injure than their primary school counterparts.

Similarly, in the US, Carlson et al. (2005) found teachers experienced with students who engage in self-cutting are more knowledgeable about self-cutting and confident responding to students who engage in this behaviour, than teachers without such experience. In line with healthcare professionals, findings indicate that experience with students who engage in NSSI is important for teachers to gain knowledge about NSSI and to increase their confidence when intervening with students who self-injure. Carlson et al. (2005) also found that although the majority of teachers had intervened with students who engage in self-cutting, most recognised that they would benefit from additional training to respond to these students.

Finally, in Canada, Heath et al. (2006) found that the attitudes and perceived knowledge of teachers towards students who self-injure are mixed, with older and more experienced teachers reporting greater self-perceived knowledge of NSSI than younger and less experienced teachers. A third also indicated that students who engage in NSSI are manipulative and attention-seeking, which may impact on how responsive these teachers are when responding to students who self-injure. Males also had higher self-perceived knowledge regarding NSSI than females.

Later, Heath et al. (2011) found less than half their sample of Canadian teachers were knowledgeable about NSSI and confident when responding to students who self-injure, while females and teachers with less years of professional experience were more likely than males and teachers with more years of experience to hold positive attitudes. Consistent with previous work (Carlson et al., 2005; Heath et al., 2006), teachers underestimated the prevalence of NSSI in high schools, and no correlation was found between age, gender, length of teaching experience, actual knowledge of self-injury, and confidence when responding to students who self-injure (Heath et al., 2011).

NSSI and hold positive attitudes towards students who engage in this behaviour, less experienced teachers hold more positive attitudes. It follows then that pre-service teachers (i.e., teacher education students undertaking a degree to become a qualified teacher) with limited professional experience in the education sector may view students who self-injure more positively than experienced teachers. However, based on research with healthcare professionals (e.g., Anderson, 1997; McCann et al., 2007; McCarthy & Gijbels, 2010; McLaughlm, 1994), and given the high level of exposure teachers have with students who self-injure (69% experienced with students who self-cut; Carlson et al., 2005), the opposite may be true. No study has investigated the beliefs of pre-service teachers towards NSSI. However, a study with heath and non-healthcare (i.e., physics) university students found that greater familiarity with self-harm and being female was associated with a greater willingness to help and empathy towards adolescents who self-harm (Law, Rostill-Brookes, & Goodman, 2009).

While years of experience in the teaching profession may not reflect years of experience with young people who self-injure, it is possible that the increased media attention attributed to self-injury in the last decade has resulted in greater exposure of staff to

adolescents who self-injure, increasingly their likelihood of participating in training programs to improve their knowledge, attitudes, and skills in response to these students (Gagnon & Hasking, 2012). Conversely, it is possible that inadequate training among pre-service teachers regarding youth NSSI could contribute to the high rate of attrition among Australian teachers in their first few years of teaching (Buchanan, Prescott, Schuck, Aubusson, & Burke, 2013).

Furthermore, to date, only three studies have explored the knowledge and attitudes of Australian school staff towards adolescents who self-injure. As part of a larger study, Wishart (2004) found teachers and school counsellors expressed concern, frustration, anxiety, and a general lack of understanding towards youth self-harm. Robinson et al. (2008) surveyed welfare staff in Australian schools and identified psychologists and those with previous training in the area of DSH as having greater confidence and skills when responding to students who self-harm, than school nurses, welfare coordinators (i.e., teachers with an additional counselling role), and staff without self-harm training. Therefore, consistent with healthcare professionals, school-based mental health professionals with training in NSSI may be more confident in responding to students who self-injure than those without such training. The third Australian study with school nurses by McAllister et al. (2010) found nurses identified a lack of knowledge among teaching staff and expressed a personal lack of confidence when responding to students who self-injure.

Although formal mental health training, and experience and education in NSSI have been associated with positive attitudes towards NSSI, and greater knowledge and confidence when responding to people who self-injure, research has found school counsellors have inadequate knowledge and confidence regarding NSSI, and need training to intervene with students who self-injure (Duggan, Heath, Toste, et al., 2011; G. E. Harris & Jeffery, 2010; Kibler, 2009; Roberts-Dobie & Donatelle, 2007; Wheeler, Bowl, & Reeves, 2004). For example, Duggan, Heath, Toste, et al. (2011) found that although the majority of Canadian

and American school counsellors had worked with students who self-injure, many reported limited knowledge of NSSI, and a lack of formal training and school policies addressing youth NSSI. Similarly, Wheeler et al. (2004) found that although school counsellors in the UK are trained to identify and treat a variety of internalising and externalising disorders in adolescence, such as depression and anxiety, similar training is lacking with respect to NSSI.

Using an un-standardised measure of knowledge, confidence, and experience, Roberts-Dobie and Donatelle (2007) also examined the knowledge and training needs of school counsellors in the US, and found that the majority identified themselves as only moderately or not very knowledgeable about NSSI, with knowledge related to experience with and confidence in responding to students who engage in NSSI. Counsellors also identified a lack of staff training and school policies for NSSI. Specifically, over half (55%) reported working in a school without a policy addressing NSSI, slightly less than findings of Duggan, Heath, Toste, et al. (2011), that 63% of school counsellors in the US and Canada suggest they lack policies for managing NSSI in the school setting.

However, in most studies the relationship between knowledge and practice was not investigated, and further research is needed to establish whether staff attitudes towards NSSI are associated with how they respond to students who engage in the behaviour. The above cited studies also did not evaluate the impact of previous training on responses to students who self-injure. Similar to findings with Australian school nurses (McAllister et al., 2010), school counsellors in the US have indicated that resources and education programs for staff and students are needed to enhance how adolescents who self-injure are dealt with in the school setting (Roberts-Dobie & Donatelle, 2007). However, further information is needed regarding the knowledge and training needs of school staff before training programs and policies addressing youth NSSI can be developed.

Although some teachers may believe that responding to the mental health concerns of students does not fall within their responsibilities, the National Institute for Health and Clinical Excellence (2004) has recommended that "clinical and non-clinical staff who have contact with people who self-harm in any setting should be provided with appropriate training to equip them to understand and care for people who have self-harmed" (p. 4). Further, with research clearly demonstrating that emotional problems can negatively affect lifelong learning, and poor learning outcomes can influence development of emotional problems, social and emotional learning clearly falls within the remit of school staff (Zins, Bloodworth, Weissberg, & Walberg, 2007). Therefore, to ensure that optimal care is provided to young people who self-injure, teachers and other school staff require empathic attitudes, knowledge regarding self-injury, and confidence to respond to adolescents who self-injure, skills which could be fostered through delivery of training programs and school policies regarding youth NSSI.

Summary

To summarise, adolescents who self-injure typically seek help from peers rather than parents and teachers, or disclose their behaviour online, with few adolescents seeking professional help for the behaviour. Teachers and other school staff are increasingly likely to identify adolescents who self-injure and refer them for treatment. However, school staff hold a mixture of positive and negative attitudes towards NSSI, and lack knowledge and confidence when responding to students who self-injure. Teachers and other school staff have also identified a lack of training and school policies for addressing youth NSSI. The next section of this literature review will explore existing school-based prevention and early intervention programs designed to educate school staff about self-injury, and encourage adolescents who self-injure to seek help from adults and professionals.

Prevention and Early Intervention for Non-Suicidal Self-Injury in Schools

Prevention and Early Intervention Models

Traditionally, prevention approaches for disorders and illnesses in the public health sector have been classified into three types: universal, selective, and indicated prevention (Gordon, 1983; Mrazek & Haggerty, 1994). Universal programs target whole populations to reduce risk factors and enhance protective factors across an entire community. Selective programs target select groups of people who are not necessarily exhibiting clinically significant symptoms of mental health problems, but are at heightened risk of developing later problems. Finally, indicated programs target people who are experiencing symptoms of psychological ill-health (Mrazek & Haggerty, 1994; Robinson et al., 2013).

This model has been incorporated into the National Institute of Mental Health (NIMH) prevention framework (Mrazek & Haggerty, 1994) to include a spectrum of prevention and early intervention strategies for mental disorders, from prevention, through to treatment and maintenance. The model has also been incorporated into Australia's National Suicide Prevention Strategy (i.e., Living is for Everyone [LIFE] model; Commonwealth of Australia, 2008) to provide a range of prevention approaches for suicide and suicidal behaviour. However, Mrazek and Haggerty's (1994) model and the LIFE framework (Commonwealth of Australia, 2008) were not designed specifically for use in prevention of NSSI, and standard evidence-based prevention, treatment, and after-care practices for NSSI in adolescence are lacking (Washburn et al., 2012).

Universal programs for mental health problems and suicidal behaviour in schools are incorporated into existing health promotion activities and curricula to improve the health and wellbeing of all students without subjecting at-risk students to stigma (King, 2001a; Neil & Christensen, 2007; Robinson et al., 2013; Sawyer et al., 2010). In contrast, selective programs

are provided to students at risk of developing mental health problems or attempting suicide (Neil & Christensen, 2007; Robinson et al., 2013; Sawyer et al., 2010).

As a selective, or potentially universal prevention strategy, gatekeeper training programs for teachers and other school staff seek to improve staff knowledge and confidence to identify and refer high risk students to appropriate services (Gould & Kramer, 2001; Isaac et al., 2009; Robinson et al., 2013; Sawyer et al., 2010; Wyman et al., 2008). Broadly speaking, gatekeepers are people who have primary contact with high risk groups or individuals, and, as a result of that contact, are in a position to assist at-risk individuals and facilitate access to mental health resources and services (Isaac et al., 2009). Screening programs to identify at-risk students who otherwise may not have sought help represent another school-based selective approach. However, unlike gatekeeper training programs targeting school staff, screening programs may stigmatise some students and overburden mental health services due to false positives (Robinson et al., 2013).

Indicated interventions in schools are delivered to students with early or mild symptoms of mental health problems, or with a history of suicidal behaviour (Neil & Christensen, 2007; Robinson et al., 2013). However, there is limited evidence regarding whether schools are the most appropriate setting to deliver indicated interventions for high risk adolescents. Further, both selective and indicated programs require that school staff are aware of risk factors and warning signs associated with mental health problems and suicidal behaviour, and able to accurately identify students at risk (Robinson et al., 2013).

In a systematic review of school-based interventions aimed at preventing, treating, and responding to suicide-related behaviours (including suicide, suicide attempts, DSH, and suicidal ideation) in young people, Robinson et al. (2013) found gatekeeper training and screening programs are the most promising interventions for prevention of suicidal behaviour

in schools. Specifically, gatekeeper training programs for school staff were found to improve staff knowledge, attitudes, and confidence towards and responses to suicidal students.

However, since this review focused on DSH and other suicidal behaviours, it is difficult to interpret the effectiveness of these interventions with regard to NSSI. Universal suicide-prevention programs were also shown to increase students' knowledge of suicide risk factors and warning signs, improve their attitudes towards suicidal peers, increase students' intentions to seek help for suicidal behaviour, and reduce suicide-related outcomes among adolescents. Despite the limited number of studies, particularly RCTs, indicated interventions in schools were also found to reduce suicide-related behaviours among at-risk students (Robinson et al., 2013).

Three recent RCTs examined whether school-based universal interventions could prevent youth suicide and improve treatment of suicidal adolescents in schools. Wyman et al. (2010) examined the effectiveness of the Sources of Strength suicide prevention program among peer leaders (i.e., students who promote and facilitate peer health in schools), and found training improved young people's positive coping, connectedness to adults, supportive behaviours with friends, and intentions to seek help from adults for suicide, even among students with a history of suicidal ideation. Likewise, two outcome evaluations of the Signs of Suicide (SOS) prevention initiative for students found the program reduced rates of suicide attempts, and improved student knowledge and attitudes towards depression and suicide following the intervention (Aseltine & DeMartino, 2004; Aseltine, James, Schilling, & Glanovsky, 2007).

Education programs for NSSI have also been shown to enhance intentions of adolescents to seek help for NSSI (Muehlenkamp et al., 2010), and have been rated favourably by teachers and other school staff (McAllister et al., 2010; Muehlenkamp et al., 2010). In addition, Wyman et al. (2008) conducted a RCT of the Question, Persuade, Refer

(QPR) suicide gatekeeper training program for school staff, and found training enhanced staff knowledge and confidence to respond to suicidal students, but referral behaviours and questioning of students about suicide increased more among staff already communicating with students about suicide and their mental health concerns.

Gatekeeper Model for Suicide Prevention in Schools

Wyman et al. (2008) proposed that school-based gatekeeper training programs aimed at improving timely recognition and referral of suicidal students can be divided into two distinct models: the gatekeeper surveillance and gatekeeper communication models. The surveillance model suggests that prevention programs designed to enhance school staff knowledge of suicide risk factors and warning signs, and improve their attitudes towards suicide-related behaviours, can prepare most staff to identify and refer suicidal students to appropriate services, and thus decrease rates of youth suicide. The gatekeeper communication model posits that training to improve the knowledge, confidence, and attitudes of school staff towards suicidal behaviour will only be effective for subgroups of staff already communicating with at-risk students, and that students' own attitudes and help-seeking behaviour will influence whether staff become aware of suicidal students, and therefore, are able to prevent youth suicide. Wyman's (2008) model appears to be consistent with historical classifications of gatekeepers, which define gatekeepers as either designated, including professionals who are already trained to help at-risk groups (e.g., social workers and psychologists), or emergent, including professionals and community members who may not be formally trained to intervene with high risk individuals, but emerge as potential gatekeepers based on their proximity to at-risk groups (e.g., teachers and community leaders; Isaac et al., 2009).

Findings of Wyman's (2008) study are congruent with the communication model, suggesting that increased knowledge and confidence are insufficient to increase suicide identification behaviours among school staff. Specifically, Wyman et al. (2008) proposed that skills training for staff who serve as "natural-gatekeepers" and interventions to modify help-seeking behaviour among students are necessary to supplement universal gatekeeper training programs for all school staff. Yet it is possible that knowledge of suicide warning signs may be ineffective if staff hold negative attitudes, such as believing that students who self-injure are attention-seeking. It is unclear whether teachers and other school staff in Australia have sufficient knowledge about youth NSSI, hold empathic attitudes towards students who self-injure, or consider themselves to be adequately informed about NSSI to enable them to undertake this gatekeeper role effectively.

In Australia, Robinson et al. (2008) employed a prospective design to evaluate whether a training program improved school mental health professionals' knowledge about DSH, and confidence when responding to students who self-harm. Despite already demonstrating high knowledge and confidence, significant and sustained improvements on these variables were observed following training. That research has demonstrated gains in the knowledge and confidence of school staff towards NSSI following training underscores the important relationship between up skilling school staff and responses to NSSI in schools. However, the lack of evidence-based prevention or early intervention programs for NSSI in schools suggests further research is needed to identify the training and policy needs of teachers and other school staff regarding youth NSSI, and identify factors that may be related to staff knowledge, attitudes, and responses to students who self-injure in the school environment. Input from all stakeholders, including school staff and students, is also needed to identify where knowledge needs to be increased, what attitudes need to be changed, and

the level of desire among staff and students for training programs and policies to learn about the behaviour, intervene early, and facilitate help-seeking among adolescents.

Theoretical Models of Behaviour

Social Cognitive Theory supports the gatekeeper communication model (see Wyman et al., 2008) suggesting that people who have related experience will more successfully perform target behaviours than those without such experience (Bandura, 1989). According to Social Cognitive Theory (Bandura, 1989), teachers' perceived self-efficacy, or confidence in their ability to produce a desired outcome, may influence their behaviour in response to students who self-injure. The Theory of Planned Behaviour (TPB; Ajzen, 1991) would also assert that teachers' beliefs about and attitudes towards NSSI, and their confidence in responding to students who self-injure, could be related to how they intend to act with students who self-injure, which, in turn, may affect their behaviour when responding to these students. School staff have also argued that training to improve staff knowledge about NSSI could break down myths associated with the behaviour and tackle avoidance of the issue in school settings (McAllister et al., 2010). Therefore, understanding the belief structure of teachers and other school staff may inform the development of interventions to improve staff attitudes towards and practices when responding to students who self-injure.

However, while theories suggest that both confidence and attitudes are important determinants of behaviour, few studies have explored the relationship between teachers' confidence in addressing NSSI and attitudes towards the behaviour (Heath et al., 2011). Recently, when investigating the relationship between the knowledge, attitudes, and confidence of teachers in this area, Heath et al. (2011) found positive attitudes among teachers towards students who self-injure were related to greater self-perceived knowledge about NSSI and confidence when communicating with students who self-injure. Similarly,

knowledge has been found to enhance healthcare professionals perceived confidence and reduce negative attitudes towards patients who self-harm (Egan, Sarma, & O'Neill, 2012). However, no study has examined the relationships between attitudes, confidence, and the self-reported response of school staff towards students who self-injure. Consistent with theoretical models of behaviour (i.e., TPB), it is possible that staff attitudes and confidence regarding NSSI may be related to how school staff respond to self-injury in schools.

Summary

In summary, prevention and early intervention programs for DSH and suicide can have a positive impact on the knowledge and confidence of school staff in response to these behaviours, and improve help-seeking norms among self-injuring and suicidal students. Therefore, universal and selective interventions providing education to staff and students about NSSI could increase help-seeking among adolescents, and increase the confidence and skills of school staff in response to students who self-injure. However, the perceptions of school staff and students are essential to successful implementation of school-based prevention programs, and should be identified before implementing education programs and policies for self-injury in schools. Participation in training programs to increase staff confidence and improve attitudes may be related to staff behaviour in response students who self-injure, in accordance with models of behaviour change. Although the aim of this thesis was not to empirically test established models of behaviour, or to conduct an in-depth exploration of help-seeking among adolescents for NSSI, prior work in these areas informed the aims of this thesis, as defined below.

Summary of the Literature Review and Aims of the Thesis

Although NSSI is highly prevalent among adolescents (Muehlenkamp et al., 2012; Swannell et al., 2014), and is a significant predictor of future suicidal behaviour (Whitlock et al., 2013), young people who self-injure tend to hide the behaviour from adults and do not seek professional help (Fortune et al., 2008b). Instead, adolescents who self-injure seek help from peers and online friends for the behaviour (Fortune et al., 2008b; Mitchell & Ybarra, 2007), although it is unclear what support peers and online friends can offer young people who self-injure. To date, few studies have examined adolescent help-seeking for NSSI, including their views of what could be done to help adolescents who engage in the behaviour. Theoretical literature suggests that the attitudes of adolescents towards seeking help and teachers' perceptions of youth NSSI are important determinants of appropriate help-giving by teachers and other school staff for adolescents at risk of suicide (e.g., Ajzen, 1991; Wyman et al., 2008).

According to empirical literature, adolescents who self-harm can also be reluctant to seek help due to stigma associated with the behaviour (Fortune et al., 2008b), with help-seeking among adolescents influenced by their gender (Evans et al., 2005; Fortune et al., 2008b), age (Heath et al., 2010), exposure to friends who self-harm (Fortune et al., 2008b), and a personal history of self-harm thoughts and behaviour (Evans et al., 2005).

Consequently, the first aim of this thesis was to establish what adolescents believe peers, online friends, parents, and teachers could do to help young people who self-injure.

Specifically, the first and second studies of this thesis sought to establish adolescents' perspectives of how peers and online friends, and parents and teachers, respectively, could help young people who self-injure, and examine differences in adolescents' views according to age, gender, peer lifetime history of NSSI, and a personal history of NSSI thoughts and behaviour.

Given the potential for self-injury to impact on social relationships (Baetens et al., 2011) and academic performance (G. Martin et al., 2005), teachers and other school staff are in a prime position and also among the first to identify and access professional support for

adolescents who self-injure (Oldershaw et al., 2008; Roberts-Dobie & Donatelle, 2007), thereby preventing escalation of the behaviour and suicide among high risk youth. However, teachers and other school staff lack knowledge about NSSI and confidence to intervene with adolescents who self-injure (Heath et al., 2006; Heath et al., 2011), and are unsure how to respond to these youth due to a lack of training and school policies addressing youth NSSI (Carlson et al., 2005; McAllister et al., 2010).

Consequently, over the past 10 years, resources and training programs have been developed for teachers and other school staff with the view of improving prevention, identification, and early intervention of NSSI in schools (e.g., Jacobs, Walsh, McDade, & Pigeon, 2009; S.A.F.E. Alternatives, 2008). Research has also demonstrated significant improvements in the knowledge and confidence of school staff regarding DSH following participation in such programs (Robinson et al., 2008). However, no study has specifically focused on the knowledge, attitudes, and confidence of pre-service teachers and school staff working in Australian secondary schools, and thus little is known about their concerns and training needs, and how skilled teachers and other school staff feel when responding to students who self-injure.

Before effective education programs and guidelines for best practice can be provided to teachers and other school staff, research first needs to establish the attitudes, confidence, level of knowledge, and training needs of school staff, and responses perceived to be most effective when managing NSSI in the school setting. Therefore, the second, third, and fourth aims of this thesis were to: a) investigate the knowledge, attitudes, and confidence of preservice teachers and school staff regarding NSSI; b) to evaluate how teachers and other school staff currently respond to adolescents who self-injure, the perceived efficacy of these responses, and barriers to responding; and c) to establish the training needs of pre-service teachers and school staff. Examining the knowledge, responses, and training needs of current

and future teachers, and other school staff, is a critical first step to establish the level of training required by staff in the Australian education system.

Although findings are mixed, several studies have also found that professionals with experience and training in mental health and self-harm are more knowledgeable, hold more positive attitudes, and are more confident in their ability to respond to people who self-injure than those without such experience or specialist training (e.g., Gagnon & Hasking, 2012; Jeffery & Warm, 2002; Patterson et al., 2007a), and that those with specialist training are rated by patients as providing the most satisfactory care (Warm et al., 2002). Research in this area also needs to explore variables related to the knowledge, attitudes, and confidence of teachers and other school staff towards youth NSSI, and to identify school professionals most in need of training. In particular, evaluation of the knowledge and training needs of preservice teachers, alongside in-service teachers and other school staff, may inform the development of resources and training initiatives which are specifically directed towards the needs of school staff and pre-service teachers. However, no study has examined the knowledge and training needs of pre-service teachers regarding youth NSSI.

Understanding the knowledge, responses, and training needs of pre-service teachers and school staff towards youth NSSI may also help to inform the development of targeted school policies and response protocols, which are currently lacking in schools (McAllister et al., 2010; Roberts-Dobie & Donatelle, 2007). Therefore the fifth and final aim of this thesis was to evaluate a new policy for addressing NSSI in schools, including an evaluation of the acceptability of the policy in its current form, challenges to implementing the policy in schools, and the need for a school policy addressing youth NSSI. Together, evaluating the training and school policy needs of school staff, along with the views of adolescents regarding help for youth who self-injure, is likely to inform development of targeted education programs and policies to increase detection and early intervention of youth NSSI in

schools, and enhance help-seeking among adolescents, thus improving wellbeing among youth, and decreasing incidents of NSSI and future suicide risk.

To summarise, the aims of this thesis were to: 1) examine what adolescents believe peers, online friends, parents, and teachers could do to help young people who self-injure; 2) determine the knowledge and attitudes of school staff and pre-service teachers towards youth NSSI, and their confidence responding to adolescents who self-injure; 3) determine how school staff currently respond to students who self-injure, how effective they believe these responses to be, and perceived barriers to responding to students who self-injure in schools; 4) examine the training needs of pre-service teachers and school staff towards youth NSSI; and 5) develop and evaluate a policy for responding to students who self-injure in schools.

Chapter 3: Extended Methodology for the Adolescent Studies

Introduction to the Extended Methodology for the Adolescent Studies

This chapter will outline the methods used to collect and analyse data included in Chapter 4 and Chapter 5. Specifically, this chapter will describe the school-based adolescent sample surveyed and explain the qualitative method used to analyse data for these chapters.

Method for the Adolescent Studies

Australian Education System

Schools in Australia are classified by level of education taught (i.e., primary, secondary, combined, or special needs) and as government or non-government, with non-government schools categorised as Catholic or Independent. In 2011, when data collection from schools was completed, 65.2% of students in Australia attended Government schools, 20.5% of students attended Catholic schools, and 14.3% attended Independent schools (Australian Bureau of Statistics, 2012b). Government schools (also known as public or state schools) are overseen and funded primarily by the Australian federal, and each respective state or territory government, usually with a voluntary contribution fee charged to parents. Catholic schools are governed by a respective state or territory Archdiocese or local Diocese of the Catholic Church and charge tuition fees to parents in addition to receiving government funding. Independent schools (including schools of non-Catholic religious denomination and non-denominational schools) have independent governance and charge tuition fees to parents in addition to government funding (Australian Bureau of Statistics, 2013).

At the time of data collection, the structure of primary and secondary schooling in Australia varied between the states and territories. The age of compulsory school attendance, under state and territory legislation is five to 17 years in Tasmania, and six to 17 years for all other Australian states and territories (Australian Curriculum, Assessment and Reporting Authority, 2013). In New South Wales, Victoria, Tasmania, the Northern Territory, and the Australian Capital Territory, primary school consists of a preliminary year followed by grade levels one to six. Secondary school comprises grade levels seven to 12. In Queensland, South Australia, and Western Australia, primary education consists of a preliminary year followed by grade levels one to seven, and secondary education includes grade levels eight to 12 (Australian Bureau of Statistics, 2013).

Participants

Data were collected as part of the Helping to Enhance Adolescent Living (H.E.A.L.ing) project, a prospective study of Australian adolescents aged 12 to 18 years. Two thousand, six hundred and thirty seven students (aged 12-18 years; M = 13.93, SD = 1.00) were recruited from 41 secondary schools (23 Catholic and 18 Independent) in four states and one territory of Australia, including 25 in Queensland, seven in South Australia, five in Victoria, two in New South Wales, and two in the Northern Territory. Twenty two schools (53.6%) were located in metropolitan areas and 19 in regional areas (46.4%), relatively higher than Australia's geographical distribution (36.0% regional; Australian Bureau of Statistics, 2012c). Attempts were made to contact schools representative of Australia's geographical spread; however, time and financial constraints restricted access to schools in remote areas.

¹ A national curriculum which standardises school years across states was introduced in 2013 and will be implemented in all states by 2015.

Given the over-representation of schools in Queensland, students in grade eight (37.6%) were also over-represented relative to students in grade seven (3.7%) based on national data from non-government schools (17.8%) grade seven; 28.4% grade eight; Australian Bureau of Statistics, 2013). The majority of students were in their first (29.9%); including students in grade 7 or 8), second (33.9%); including students in grade 8 or 9), or third (29.5%); including students in grade 9 or 10) year of secondary school at the first data collection point. Most adolescents were born in Australia (89.3%), and 2.3% identified as Aboriginal, Torres Strait Islander, or both, similar to national estimates (86.3%) born in Australia; 2.1% Indigenous; Australian Bureau of Statistics, 2012a). The sample was also skewed towards female students (67.8%), n = 1789 due to participation of several female-only schools (50.3%) female; Australian Bureau of Statistics, 2012b).

In addition, while students were surveyed at three time points, conducted one year apart (12 and 24 month follow ups), data in Chapter 4 and Chapter 5 were drawn from the first year. Consequently, the sampling procedure and response rate for the first year only will be described. The questionnaire for adolescents (Appendix A) also comprised multiple questionnaires that were not used in Chapter 4 and Chapter 5, and therefore, will not be described.

Materials

Demographic Questions

Demographic variables included in Chapter 4 and Chapter 5 were age, gender, country of birth, indigenous status, and year level at school.

Self-Harm Behaviour Questionnaire (SHBQ)

The SHBQ (Gutierrez, Osman, Barrios, & Kopper, 2001) is a self-report measure with four distinct sections designed to assess NSSI, suicide attempts, suicide threats, and suicidal ideation. Only the NSSI section of the questionnaire was used (i.e., Part A). Students were asked to indicate if they had ever hurt themselves on purpose without suicidal intent (yes or no), and to describe the nature, frequency (*once - 4 or more times*), recency, and severity (*not at all serious - life-threatening*) of the behaviour. Although researchers have coded and summed responses to yield a total NSSI score (e.g., Andrews, Martin, & Hasking, 2012), for the current study this measure was used to provide a dichotomous categorisation of whether students had ever hurt themselves on purpose (yes or no). Students were also asked to indicate whether they had ever told anyone about the behaviour (yes or no), and given space to list to whom they had disclosed the behaviour (e.g., friend, parent, or teacher). In addition, students were asked if they had ever thought about NSSI, but never engaged in the behaviour, and if any of their friends had ever engaged in NSSI.

Open-Ended Questions

Four open-ended questions were asked, including: 1) "What do you think *teachers* could do to help young people who hurt themselves on purpose"; 2) "What do you think *parents* could do to help young people who hurt themselves on purpose"; 3) "What do you think *people your age* could do to help young people who hurt themselves on purpose"; and 4) "What do you think *online friends* (e.g., Facebook) could do to help young people who hurt themselves on purpose."

Procedure

Ethical clearance was obtained from the Human Research Ethics Committees of Monash University and The University of Queensland. Approval from Catholic Education Archdioceses and local Dioceses in Queensland, South Australia, and the Northern Territory was also obtained, allowing Catholic schools in these states and territory to participate with the permission of their school principal. Independent schools did not require approval from an external governing agency to participate, provided that approval from the school principal was obtained. Approval from each respective state and territory Department of Education (to access Government schools) was denied due to concerns about the sensitive nature of the study. Although the Department of Education in Tasmania granted permission for Government schools within Tasmania to participate, school principals in Tasmania refused participation. Time and budget constraints prevented participation of schools in Western Australia and the Australian Capital Territory. Within each respective state and territory, and Catholic Education district, school principals of Catholic and Independent schools within metropolitan and regional areas were contacted.

Three hundred and forty eight school principals were phoned or sent a letter inviting their school to participate, and interested principals were sent a copy of the project materials, including the questionnaire, and invited to meet with the researchers to discuss the project. Forty one school principals authorised for their school to participate (12.0%). Based on comments received from principals who did not consent, time constraints, competing school priorities and commitments, and concerns about the sensitive nature of the study prevented these schools from participating. After obtaining approval from school principals, copies of the information sheet and consent form (Appendix B) were mailed to parents and guardians of students in the first three or four years of secondary school (i.e., grade seven to 10 in Victoria, New South Wales, and the Northern Territory, and grade eight to 10 in Queensland

and South Australia), or students were asked to take a copy of these forms home to their parent or guardian.

Active written consent from parents and guardians was required for students to participate. Of the 14841 parents and guardians contacted, 4119 (27.8%) returned the consent form to their child's school to be collected by a researcher, with 3117 (75.6%) giving permission for their child to participate (21.0% of the total population). Based on comments obtained from parents and guardians, it is possible that parents and guardians concerned about their child's mental health were less likely to provide consent. Feedback provided by school principals and teachers suggested that non-consenting parents and guardians could also have forgotten to complete the consent form or may not have understood the information sheet if from a Non-English speaking background. The overall rate of parental consent is consistent with previous Australian research utilising a similar procedure (20.0%; Hasking et al., 2010).

Only students with signed parental consent, who also gave their own consent, were eligible to participate. A total of 2637 (84.6% of those with parental consent) students completed the questionnaire. Four hundred and eighty students with parental consent did not participate because they were absent from school when the questionnaire was administered (96.3%, n = 462), did not consent to participate (3.3%, n = 16), or were over 18 years of age when the questionnaire was administered (0.4%, $n = 2^2$). Reasonable attempts were made by the research team to follow-up with absentee students either by returning to the school or arranging for absent students to complete the questionnaire outside of school hours under the supervision of a researcher. If arrangements could not be made by the end of the school year these students contributed to the attrition rate.

² These students were permitted to complete the questionnaire but data were excluded from the analysis.

Students with parental consent within each school were assembled in a classroom with at least one researcher and teacher present. The researcher verbally introduced the project to students, and students were given their own version of the information sheet and consent form (Appendix B). Students were asked to read the participant information sheet and complete the participant consent form. Students were advised that participation was voluntary and they could withdraw from the study at any time without penalty. Students were also supplied with a unique code to facilitate confidentiality, but enable identification of students in the event that the researchers identified imminent risk to life. Parents and students were informed that the researchers would identify students at high risk for suicidal behaviour within one week of administering the questionnaire to the school's principal who would then respond according to school policy. Students independently completed the 40 to 50 minute questionnaire during school time. After completing the questionnaire, students were given an information pack about maintaining good mental health, and contact details of crisis hotlines and web-based mental health services they could access should they experience emotional distress in future. The researcher who administered the questionnaire was also available during and after the administration to address any concerns or questions raised by the students as a result of participating in the study.

Qualitative Analyses

Qualitative Analyses Methods

The aim of qualitative research is to describe and understand people's lived experiences and social phenomena which are not well understood and do not lend themselves to quantitative methods (Fossey, Harvey, McDermott, & Davidson, 2002). Qualitative research often involves systematic collection, ordering, and interpretation of textual data generated from interviews, focus groups, and existing documents (Kitto, Chesters, & Grbich,

2008). The strengths of qualitative research, relative to quantitative research, are that it allows people to use their own words when describing a topic, experience, or event, and therefore "gives voice" to people's lived experiences, free from the constraints imposed by questionnaires used in quantitative research (Guest, MacQueen, & Namey, 2012). However, similar to quantitative research, there is no one ideal theoretical framework or method for conducting qualitative research, and researchers must decide on a method that reflects the aims and research questions of their study (Braun & Clarke, 2006; Starks & Brown Trinidad, 2007).

Although each technique has advantages and disadvantages, some qualitative analytic methods are more suited to rich, complex narratives within smaller data sets, while others are most appropriate for short responses to open-ended questions, and for summarising key features of larger data sets (Braun & Clarke, 2006; Ryan & Bernard, 2000). Qualitative analytic methods are also generally divided into two groups: 1) those tied to, or derived from, a theoretical or epistemological perspective; and 2) those which are essentially independent of a theoretical and epistemological position (Braun & Clarke, 2006). Table 1 displays some of the most common qualitative analytic approaches for textual data, and describes the strengths and weaknesses of each method in the context of the adolescent studies in Chapter 4 and Chapter 5.

Table 1
Summary of Common Qualitative Analysis Techniques for Textual Data

Method	Aim	Advantages for the adolescent studies		Disadvantages for the adolescent studies
Interpretative	Focuses on	Questions and observations aim to draw out	•	In-depth interviews and focus groups are
phenomenological	understanding	people's lived experiences and perceptions,		ideal for collecting data, which may not be
analysis (IPA)	people's lived	which could be ideal for research exploring		appropriate for the adolescent studies due to
	experiences, beliefs,	adolescents' perceptions of help for self-		the sensitive nature of self-injury
	and perceptions,	injury	•	Most suited to rich, complex narratives and
	and the meaning of	Thematic analysis procedure is used to		interviews with small samples (unlike the
	these events and	describe, interpret, and understand the core		adolescent studies)
	experiences	essence, commonality, and structure of		
		people's lived experiences		
		• Interpretations are tied to, or stem from, a		
		particular theoretical framework, and can		
		provide a richer and more focused account		
		of the data		
Narrative analysis	Centres on people's	• Explores people's subjective experiences	•	Narratives from interviews, letters, and
	narratives about	which could help to explain adolescents'		diaries are the main sources of data, which
	particular events	perceptions of help for self-injury		do not align with the aims and research
	and experiences			questions of the adolescent studies

Grounded theory

Focuses on developing theory to explain events, experiences, and group interactions

- Seeks to develop theoretical models upon which school-based interventions for selfinjury could be based
- Claims and interpretations are supported by the data similar to thematic analysis, however, themes are not solely derived from the data, unlike thematic analysis
- Theoretical frameworks are used to anchor claims and interpretations from the analysis
- Analysis is typically thematic in nature and focuses on finding themes and creating codes in a systematic and meticulous manner

- Seeks to understand the importance and cultural meaning of people's stories, and explores continuity in narratives, which may not be feasible for the adolescent studies
- In-depth interviews and focus groups are ideal and the most common data collection methods employed, which may not be feasible for the adolescent studies
- Inappropriate for large data sets (like the adolescent data) due to the intensive and time-consuming nature of the analysis, which involves comparing text segments and developing theoretical models "grounded" in the data
- "Theory-driven" approach is used to provide a detailed account of only some aspects of the data which was not the aim of the adolescent studies
- Quantification is typically not used, which was required for the adolescent studies to examine group differences across themes

Discourse/	Focuses on studying	•	Seeks to understand how people use	•	Uses existing documents, participant
conversation	naturally occurring		language and what discourses shape		observation, and narratives from public
analysis	discourses ranging		identities, activities, and relationships, which		events, which was not the aim of and may
	from conversation,		could inform adolescents' perceptions of		not be appropriate for the adolescent studies
	to public events and		help for self-injury		
	existing documents	•	Used by policy makers to understand		
			discourses of social settings and contexts,		
			which may help to craft effective messages		
			for adolescents regarding help-seeking for		
			self-injury		
		•	Able to retain a sense of continuity and		
			contradiction within adolescents'		
			perceptions of help for self-injury		
Narrative analysis	Centres on people's	•	Explores people's subjective experiences	•	Narratives from interviews, letters, and
	narratives about		which could help to explain adolescents'		diaries are the main sources of data, which
	particular events		perceptions of help for self-injury		does not align with the aims and research
	and experiences	•	Able to retain a sense of continuity and		questions of the adolescent studies
			contradiction within adolescents'	•	Seeks to understand the importance and
			perceptions of help for self-injury		cultural meaning of people's stories, and
					explores continuity in narratives, which may
					not be feasible for the adolescent studies

Thematic analysis	Focuses on	•	Appropriate for open-ended questions, for	•	In-depth interviews and focus groups are the
	identifying and		summarising key features of large data sets,		most common data collection techniques
	describing themes		and highlighting similarities and differences		used, which may not be feasible in the
	and patterns in		across the data, which aligns with the aims		school setting
	people's thoughts,		and research questions of the adolescent	•	May miss some of the more nuanced
	feelings, and		studies		experiences of adolescents when describing
	behaviour regarding	•	"Data-driven" approach is used to provide a		what can be done to help young people who
	a particular		richer overall description of the data without		self-injure
	phenomena		trying to fit the data into an existing	•	Does not involve in-depth grounded-theory
			framework, which was desired for the		analysis. However, involves interpretation of
			adolescent studies. However, this approach		the data by relating themes and claims to
			can require researchers to decide on aspects		existing literature
			of the data to focus on	•	Unable to retain a sense of continuity and
		•	Allows for quantification of the data to		contradiction across adolescents'
			determine the frequency of themes and		perceptions of help for self-injury
			compare groups based on the themes (as was		
			the aim of the adolescents studies)		

Note. The information presented in this table is based on the literature reviewed (i.e., Braun & Clarke, 2006; Guest et al., 2012; Holloway & Todres, 2003; Ryan & Bernard, 2000, 2003; Starks & Brown Trinidad, 2007; Strauss & Corbin, 1998).

Thematic Analysis

Thematic analysis is one of the most widely used, but poorly understood and delineated, qualitative analytic methods in psychology (Braun & Clarke, 2006; Guest et al., 2012). This form of analysis seeks to identify, describe, and interpret patterns (otherwise known as themes) within qualitative data (Braun & Clarke, 2006). Thematic analysis is different from other qualitative analysis techniques, such as IPA, narrative analysis, grounded theory, and discourse/conversation analysis in that it aims to identify themes within data which can be independent of theory and epistemology (Braun & Clarke, 2006; Guest et al., 2012). Therefore, thematic analysis can be applied across a variety of theoretical and epistemological frameworks, and is a flexible qualitative method which can provide a detailed account of qualitative data (Braun & Clarke, 2006). Although thematic analysis has limited interpretative power compared to other approaches (i.e., IPA, narrative analysis, and grounded theory), thematic analysis involves more than just mere description of the data, and requires researchers to make interpretations and claims about the data which can then be related to existing literature in the area of study (Braun & Clarke, 2006).

Although thematic analysis does not preclude development of theory, the central aim of thematic analysis is to improve understanding of how people might think, feel, and behave in a particular context (Braun & Clarke, 2006; Guest et al., 2012). In this way, thematic analysis is similar to IPA and narrative analysis, which are methods that seek to describe, interpret, and understand people's lived experiences and events (Holloway & Todres, 2003; Starks & Brown Trinidad, 2007), and dissimilar from grounded theory which aims to develop theoretical models (Strauss & Corbin, 1998). Although thematic analysis and grounded theory aim to make claims and interpretations which are supported by the data, grounded theory also draws themes from previous literature and research, unlike thematic analysis (Guest et al., 2012). However, the "theory-driven" approach of grounded theory tends to

provide a detailed account of only some aspects of the data, while the "data-driven" approach of thematic analysis can provide a richer overall description of the entire data set (Braun & Clarke, 2006; Ryan & Bernard, 2003).

Thematic analysis is also best suited to describing key features of larger data sets generated from open-ended questions, while IPA, narrative analysis, and grounded theory are more suitable for smaller data sets generated from interviews, focus groups, and participant observation (Guest et al., 2012; Holloway & Todres, 2003). However, these data collection techniques may be inappropriate for collecting data on sensitive issues, such as self-injury, in schools, particularly in light of Australian research suggesting that acceptability of school-based programs to educate students about NSSI hinges on the support of education departments, principals, teachers, and parents (McAllister et al., 2010). Quantification is another distinction between thematic analysis and other qualitative methods, such as IPA and grounded theory, in which numerical codes are sometimes ascribed to the themes so that the frequency of each theme and differences across groups according to these themes can be calculated (Guest et al., 2012; Strauss & Corbin, 1998). After assigning numerical codes to the data some researchers also decide to calculate the inter-rater reliability of themes to determine the accuracy of each theme derived through thematic analysis (Guest et al., 2012).

Although there are several advantages of thematic analysis, particularly in relation to the aims of the adolescent studies included here, this approach has some limitations. For instance, the interpretative power of thematic analysis is limited compared to methods stemming from a theoretical or epistemological perspective, such as IPA, grounded theory, and discourse/conversation analysis (Braun & Clarke, 2006; Guest et al., 2012). Unlike narrative and discourse/conversation analysis, thematic analysis is also unable to retain a sense of continuity, contradiction, and language used within narratives and documents, which can reveal more about the context and meaning of the data (Braun & Clarke, 2006).

Upon consideration of the strengths and limitations of each qualitative approach, thematic analysis was determined to be the most appropriate technique to address the research questions of Chapter 4 and Chapter 5, which were to understand adolescents' views of what peers and online friends, and parents and teachers could do to help young people who self-injure, and explore how adolescents' perspectives vary according to age, gender, and exposure to NSSI. The use of thematic analysis in similar studies (e.g., Fortune et al., 2008a; Rodham, Gavin, Lewis, St Dennis, & Bandalli, 2013) also suggests that thematic analysis was an appropriate approach to improve understanding of adolescents' perceptions of help for NSSI. Braun and Clarke's (2006) systematic six phase approach for conducting thematic analysis was used to analyse the qualitative data (see Table 2).

Phases of Thematic Analysis

Similar to other qualitative analysis techniques, the first step of thematic analysis is to become familiar with the data by reading and re-reading the entire data set, and taking note of key ideas, trends, and perspectives. Following data familiarisation, the next phase involves developing an initial set of codes to represent the ideas, patterns, and topics within the data. At this stage, codes are developed for as many potential themes as possible to ensure that potential themes were not prematurely excluded from further analyses. In the third step, related codes are sorted and collated into overarching themes and subthemes. Although there are no clear guidelines on what may constitute a theme, Braun and Clarke (2006) define themes as capturing important ideas and concepts in relation to the research questions, which can also be distinguished from other themes in the data.

This process continues into stage four where themes are reviewed against the data set, and refined to ensure that they form a coherent pattern and represent the data accurately.

Numerical indicators can also be developed to represent the themes, which are then linked to

the data set to calculate the frequency with which each theme was reflected in participants' responses, to compare groups based on these frequencies, and determine the reliability and validity of the analysis across researchers and coders (i.e., inter-rater reliability; Braun & Clarke, 2006; Guest et al., 2012; Kitto et al., 2008; Sandelowski, 2001). During this stage, visual representations of the data, such as mind maps, may also be used to help combine codes of a similar meaning and relevance into themes. Each theme is then defined and named in the next phase to ensure that themes can be distinguished from each other, with themes then combined, refined, separated, or discarded, where necessary. Finally, the sixth step involves producing a scholarly report of the analysis. Extracts from each theme are then used in these reports to illustrate their meaning (Braun & Clarke, 2006).

Quantitative Analyses

Chi-Square Tests of Independence

The primary focus of the adolescent studies was on qualitative analysis, however, a series of 2x2 Pearson's chi-square analyses were conducted to compare group frequencies according to whether adolescents endorsed themes derived from participants' responses to the open-ended questions. Where analysis of variance (ANOVA) examines the relationship between a categorical variable (the IV) and a continuous variable (the DV), and correlation explores the relationship between two continuous variables (or a continuous variable and a dichotomous variable), chi-square test of independence is used to examine the relationship between two categorical variables, with two or more groups (Tabachnick & Fidell, 2007). Given the categorical nature of the data (i.e., male vs. female), differences across groups according to whether the themes were endorsed by participants (i.e., endorsed vs. not endorsed) were calculated using chi-square tests of independence.

Table 2

Phases of Thematic Analysis

Phase	Title	Description of the process
1	Familiarise yourself with the data	Transcribe data (if necessary). Read and re-read
		the data, and note any ideas
2	Generate initial codes	Code interesting features of the entire data set
		and collate data relevant to each code
3	Search for themes	Collate codes into possible themes and
		assemble all data into relevant themes
4	Review the themes	Cross-check if themes work in relation to coded
		extracts at phase 1 and across the entire data set
		(phase 2), and generate a mind map of the
		analysis
5	Define and name the themes	Refine the specifics of each theme and the story
		of the analysis, and generate clear definitions
		and names for the themes
6	Produce a report	Select vivid and compelling extracts from the
		data and analyse these extracts in relation to the
		research question and literature to produce a
		report of the analysis.

Note. The information presented in this table was adapted from a table presented by Braun and Clarke (2006).

Chapter 4: Adolescents' Perspectives of Youth Non-Suicidal Self-Injury Prevention Aims and Outline of the Study

This chapter presents the first of six studies included in this thesis. The aims of this study were to identify what adolescents believe peers and online friends could do to help young people who self-injure, and to examine differences in the perceptions of adolescents according to their age, gender, and exposure to NSSI. To date, most studies of adolescents' views towards prevention of youth self-injury have focused on DSH, which show that young people who self-harm tend to seek help from peers, rather than parents and teachers (Fortune et al., 2008b). Adolescents who self-injure are reluctant to seek help from adults due to fears of stigma attributed to DSH (Fortune et al., 2008b) and believe that peers are pivotal in prevention of youth self-harm (Fortune et al., 2008a). Furthermore, research has shown that young people who self-injure frequently seek online help for the behaviour (Whitlock, Powers, et al., 2006), and disclose personal problems online more often than adolescents without such a history (Mitchell & Ybarra, 2007).

Although help-seeking among adolescents for self-harm has been associated with their age (Heath et al., 2010), gender (Evans et al., 2005; Fortune et al., 2008b), exposure to friends who self-harm (Fortune et al., 2008b), and lifetime history of DSH (Evans et al., 2005), no prior study has explored the relationship between these variables and adolescents' views regarding what could be done to help youth who self-injure. Therefore, the aims of this study were to explore what adolescents believe peers and online friends could do to help young people who self-injure, using the procedure for thematic analysis described in Chapter 3 (Table 2), and to examine how adolescents' views vary in relation to their age, gender, exposure to peer NSSI, and lifetime history of NSSI thoughts and behaviour. By achieving these aims, this study adds to the limited literature on youth perceptions of help for NSSI, and

may inform the development of school-based prevention and early intervention programs, and clinical interventions for adolescents addressing appropriate peer and online help-seeking for NSSI.

Declaration for Thesis Chapter 4

Monash University

In the case of Chapter 4, the nature and extent of my contribution to the work was the following:

Nature of contribution	Extent of contribution (%)
Study conceptualisation	60%
Data collection, data entry, and data cleaning	50%
Statistical analyses and interpretation of the results	80%
Writing the paper for publication	80%

The following co-authors contributed to the work. If co-authors are students at Monash University, the extent of their contribution in percentage terms must be stated:

Name	Nature of contribution	Extent of contribution (%)
		for student co-authors
		only
Penelope Hasking	Study conceptualisation, statistical	n/a
	assistance and interpretation, and	
	editing	
Graham Martin	Editing	n/a

The undersigned hereby certify that the above declaration correctly reflects the nature and extent of the candidate's and co-authors' contributions to this work.

Candidate's signature: Date: 09/09/2014

Main supervisor's signature: Date: 09/09/2014

Abstract

Non-suicidal self-injury (NSSI) is of increasing concern, yet many adolescents who self-injure are reluctant to seek professional help. Instead, they turn to friends for support, although it is unclear what these friends can offer. This study aimed to identify adolescents' views of how peers and online friends can help young people who self-injure, and examine differences according to age, gender, and exposure to NSSI. Students (n = 2637; aged 12-18 years) from 41 schools completed questions asking them to describe what peers and online friends could do to help young people who self-injure. Thematic analysis identified seven strategies, including communication about NSSI with peers and online friends, referral to adults and health professionals, greater public awareness of NSSI, and reduced peer stigma and bullying. Endorsement of themes varied by age, gender, and experience with NSSI. Findings have implications for school prevention of NSSI.

Key words: peers support; mental health; technology.

Citation: **Berger, E.**, Hasking, P., & Martin, G. (in press). Adolescents' perspectives of youth non-suicidal self-injury prevention. *Youth and Society*. doi: 10.1177/0044118X13520561.

Introduction

Adolescence is a critical period for the onset of non-suicidal self-injury (NSSI), that is, the deliberate destruction of body tissue without suicidal intent (Nock & Favazza, 2009). NSSI includes cutting, self-hitting, and punching walls (Ross & Heath, 2002), but excludes suicidal and socially sanctioned behaviours (i.e., piercing and tattooing; Nock, 2009b). NSSI typically begins between 12 and 14 years (Jacobson & Gould, 2007), with youth prevalence approximately 10 to 23% (G. Martin et al., 2010; Muehlenkamp & Gutierrez, 2007).

Although equally prevalent in males and females (Muehlenkamp & Gutierrez, 2004), males are more likely to hit themselves and females are more likely to cut themselves (Whitlock, Eckenrode, et al., 2006). Primarily used to manage intense emotions, NSSI is associated with adverse events (e.g., bullying and childhood abuse; Nock, 2009b), and those who engage in NSSI are at elevated suicide risk (D. Owens et al., 2002), underscoring the importance of identifying strategies to prevent youth NSSI.

Relatively little is known about from whom adolescents in the community seek help for NSSI (Fortune et al., 2008b). While ideally placed to intervene, parents and teachers feel ill-equipped to respond (Heath et al., 2006). Studies have found youth who self-injure seek help from peers and online friends (Duggan, Heath, Lewis, et al., 2011; Fortune et al., 2008b), with females more likely to seek help for NSSI than males (Evans et al., 2005). However, no study has explored what adolescents believe peers and online friends can do to help, if adolescents are willing to help peers and online friends who self-injure (Muehlenkamp et al., 2010), and whether perceptions of males and females differ.

In the United Kingdom, adolescents' suggested the best ways to prevent youth selfharm (including suicidal intent) would be having someone non-judgemental to talk to, education for teachers, parents, and peers, and access to support staff in schools. Adolescents with a history of self-harm were less likely to mention talking to family and professionals, and more likely to view the behaviour as hard to prevent (Fortune et al., 2008a). Recommended solutions for youth suicide focused on having crisis support services located in schools and youth centres, youth activities, and educational programs for young people (Heled & Read, 2005). These studies, however, did not investigate what peers and online friends, specifically, could do to help youth who self-injure. Responses may also vary depending on developmental stage, with older adolescents less likely to seek parental support for emotional problems than younger adolescents (Ciarrochi, Wilson, Deane, & Rickwood, 2003).

Adolescence is marked by the increased desire for autonomy and independence from parents and other adults; investment in feedback from peers' increases dramatically, parental monitoring decreases, and peers become the primary source of support, especially for girls (Prinstein, Borelli, Cheah, Simon, & Aikins, 2005). The Internet and online social networking have broadened adolescent autonomy and self-direction to an entirely new social context not mediated by adults (Bradley, 2005). Therefore, peers and online friends represent a critical resource for adolescents who self-injure, yet relatively little is known about youth experiences of support from peer and online networks.

Adolescent internet use has grown considerably in the past decade (Gowen, Deschaine, Gruttadara, & Markey, 2012), with 48% of Australian adolescents aged 12 to 14 years using social networking websites, such as Facebook (Australian Bureau of Statistics, 2011). Commonly used to make new friends and keep in touch with existing friends, adolescents who self-injure also use online social media to disclose NSSI and develop online relationships (Mitchell & Ybarra, 2007). Although online friends can help self-injuring adolescents through anonymous exchange of support, advice, and information (C. D. Murray & Fox, 2006; Prasad & Owens, 2001), these relationships may reduce offline help-seeking,

reinforce or trigger future self-injury, and increase access to misleading information (Barker & Fortune, 2008; Whitlock et al., 2007). It is therefore not unexpected that adults are increasingly concerned about the potential negative consequences of adolescents' online relationships (Christofides, Muise, & Desmarais, 2012).

The purpose of this study was to identify adolescents' views of how peers and online friends could help young people who self-injure. To our knowledge, no study has investigated adolescents' perceived role in helping those who self-injure. Therefore, we asked a school-based sample of adolescents to describe what peers and online friends could *do* to help young people who self-injure, and investigated how responses varied according to age, gender, history of NSSI, and exposure to peer NSSI. A mixed method approach was used, providing a comprehensive understanding of opportunities and challenges associated with seeking help from peers and online friends.

Method

Participants

Data were drawn from a sample of 2637 adolescents (1789 females) aged 12 to 18 years (M = 13.93, SD = 1.00), from 41 secondary schools (catering for adolescents aged 12-18 years) in metropolitan (22 schools) and regional (19 schools) areas of four Australian states and one territory. Concerns regarding the sensitive nature of the study resulted in recruitment of adolescents from Independent and Catholic schools, not Government schools. Australia has three streams of education: Government schools are funded predominately by the government; Catholic schools charge modest tuition fees in addition to receiving government funding; and Independent, non-Catholic schools, typically charge higher tuition fees in addition to receiving government funding. Therefore, Catholic and Independent

schools usually can afford facilities that Government schools cannot and cater for children from higher income families.

The sample was skewed towards females due to participation of several female-only relative to male-only schools. The majority of students were in their first (29.9%), second (33.9%), or third (29.5%) year of secondary school. Most participants were born in Australia (89.3%), and 2.3% identified as Aboriginal or Torres Strait Islander, representative of the estimated Australian indigenous population (Australian Bureau of Statistics, 2012a).

Materials

Of the total sample, 2420 adolescents responded to the question "What do you think people your age could do to help young people who hurt themselves on purpose?" and 2121 responded to the question "What do you think online friends could do to help young people who hurt themselves on purpose?"

Participants completed Part A of the Self-Harm Behaviour Questionnaire (Gutierrez et al., 2001), which assesses NSSI behaviour. Although calculation of a continuous score reflecting NSSI severity is possible, for the current study we were interested in whether adolescents had ever hurt themselves on purpose, if they had disclosed their NSSI, and to whom (e.g., friend, parent, or teacher). Participants were also asked whether any of their friends had self-injured and if they had ever thought about self-injuring without acting on these thoughts.

Procedure

This study was conducted as part of a larger study regarding how adolescents cope with emotions. After receiving ethical clearance from administrating universities and approval from Catholic Education Archdioceses, permission from school principals was

sought. Principals who consented to their schools' participation sent information about the study home with students. Both parents and participants gave written informed consent. Participants completed the questionnaire in class groups during school time and in the presence of a researcher and school staff member. Participants were advised of voluntary participation, and supplied a unique code to facilitate confidentiality. Parents and students were informed that the researchers would identify at-risk students to the school's principal, who would then respond according to school policy. On completion, participants received a mental health information pack.

Analysis

Thematic analysis is a widely used and flexible technique for analysing and reporting qualitative data (Braun & Clarke, 2006), and was recently used in a similar study (e.g., Fortune et al., 2008a). The same technique was applied to data analysis in this study. Two researchers independently analysed data to determine discrete themes. Researchers conferred on themes and combined themes with similar meaning into categories. Discrepancies were settled through discussion and categories confirmed by a third researcher. All responses were then coded according to these themes by one of the researchers who developed the initial themes, and where necessary, responses were recoded according to newly developed or merged themes established during the coding process. A researcher independent of the study then recoded 20% of the data using the final coding system to yield Kappa inter-rater agreement based on the two raters from moderate to perfect (.57 - 1.0; Landis & Koch, 1977). The poorest inter-rater score (.57) was for the theme "reduce stigma/ensure confidentiality." A series of 2x2 Pearson's chi-square analyses compared group (e.g., NSSI vs. no NSSI) frequencies according to whether participants endorsed themes (endorsed vs. not endorsed). To examine differences in frequencies by age, chi-square tests compared endorsement of subthemes by school year level.

Results

NSSI Prevalence, Method, and Help-Seeking

Two hundred and sixty three (10.0%) participants reported engaging in NSSI during their lifetime. Twenty percent (n = 552) reported thinking about self-injuring at least once in their lifetime but never engaged in the behaviour. One in three participants (29.5%, n = 768) had at least one friend with a history of NSSI.³ Females and males were equally likely to report NSSI, χ^2 (1, n = 2591) = 2.46, p = .12; however, females were more likely to have a friend who self-injured, χ^2 (1, n = 2603) = 59.12, p = .00, $\varphi = -.15$. Participants told friends (43.1%), parents (16.4%), healthcare professionals (12.9%), and/or teachers (2.3%) about engaging in NSSI.

Qualitative Analyses

Although coded independently, the same themes emerged for both peers and online friends. Therefore, data for peers and online friends are presented together, to allow comparisons between theme frequencies for peers and online friends. Responses ranged from a few words to several sentences. Where responses included multiple views (e.g., "peers should talk and listen and tell an adult"), the same response was coded into all relevant categories (e.g. "talk and listen" and "tell an adult"). Therefore, frequencies across themes exceeded the total number of participants. Identified themes were:

- 1. Talk and listen to adolescents who self-injure ("Ask how they are and talk about their problems with them"; $_{\rm K}$ = .90-.93);
- 2. *Tell an adult*, parents, and teachers to support adolescents who self-injure (e.g., "Tell an adult"; $_{\rm K}$ = .67-1.0);

³ Prevalence may include both offline and online friends.

- 3. Refer adolescents who self-injure to *formal organisations* (e.g., "Tell them to see a counsellor"; $_{\rm K}$ = .75-1.0);
- 4. Form positive *peer relationships* with adolescents who self-injure (e.g., "Befriend them"; $_{\rm K}$ = .67-1.0);
- 5. Increase community *awareness* of self-injury (e.g., "Raise awareness of the issue"; _K = .67-.81);
- 6. Reduce stigma/ensure confidentiality to support adolescents who self-injure (e.g., "Don't give them a label and judge them by it"; $_{\rm K}$ = .57-1.0); and
- 7. *Don't know/nothing* can be done to help adolescents who self-injure (e.g., "Leave them alone"; K = .87 .94).

Frequencies of responses for each theme are shown in Tables 3 and 4. The examples below represent some of the most common responses reported by multiple participants; therefore identifying characteristics of participants (e.g., age and gender) were not included with quotes.

Table 3

Frequencies of Responses by Themes According to the Question "What Do You Think Peers Could Do to Help Young People Who Hurt Themselves on Purpose"

				Ge	nder		Li	fetime	peer N	SSI	Life	time th	oughts	NSSI	Lifetime NSSI			
	Total $(n = 2420)$						Yes $(n = 731)$		No (n = 1677)		Yes $(n = 508)$		No (n = 1901)		Yes $(n = 238)$		No	
																	(<i>n</i> =	2157)
Theme	\overline{n}	%	\overline{n}	%	n	%	\overline{n}	%	n	%	\overline{n}	%	n	%	\overline{n}	%	n	%
1. Talk and listen	1779	73.5	506	66.5	1273	76.7	568	77.7	1202	71.7	377	74.2	1384	73.3	169	71.0	1591	73.8
2. Tell an adult	291	12.0	74	9.7	217	13.1	75	10.2	215	12.8	46	9.0	244	12.8	12	5.0	297	13.8
3. Formal organisations	91	3.8	21	2.7	70	4.2	27	3.7	64	3.8	10	2.0	80	4.2	5	2.1	85	3.9
4. Peer relationships	421	17.4	126	16.5	295	17.8	121	16.5	299	17.8	87	17.1	332	17.5	47	19.7	369	17.1
5. Awareness	25	1.0	8	1.1	17	1.0	8	1.1	17	1.0	5	1.0	20	1.1	2	0.8	23	1.1
6. Reducing stigma	74	3.0	9	1.2	65	3.9	39	5.3	35	2.1	22	4.3	52	2.7	17	7.1	54	2.5
and ensuring																		
confidentiality																		
7. Don't know/nothing	172	7.1	85	11.2	87	5.2	38	5.2	131	7.8	50	9.8	121	6.4	19	8.0	151	7.0

Note. NSSI = non-suicidal self-injury.

Table 4

Frequencies of Responses by Themes According to the Question "What Do You Think Online Friends Could Do to Help Young People Who Hurt Themselves on Purpose"

				Ge	nder		Li	fetime	peer N	SSI	Lifet	ime the	oughts	NSSI	Lifetime NSSI			
	Total $(n = 2121)$		M	Male		Female		Yes		No		Yes		10	Yes		No	
			(n = 673)		(n = 1448)		(n = 652)		(n = 1459)		(n = 441)		(n = 1671)		(n = 218)		(n = 1882)	
Theme	\overline{n}	%	\overline{n}	%	n	%	\overline{n}	%	n	%	\overline{n}	%	n	%	\overline{n}	%	n	%
1. Talk and listen	1067	50.3	316	47.0	751	51.9	330	50.6	734	50.3	230	52.2	834	49.9	102	46.8	955	50.7
2. Tell an adult	125	5.9	27	4.0	98	6.8	25	3.8	99	6.8	16	3.6	108	6.5	7	3.2	117	6.2
3. Formal organisations	51	2.4	7	1.0	44	3.0	12	1.8	39	2.7	5	1.1	46	2.7	3	1.4	48	2.5
4. Peer relationships	148	7.0	39	5.8	109	7.5	33	5.1	114	7.8	18	4.1	129	7.7	11	5.0	135	7.2
5. Awareness	81	3.8	18	2.7	63	4.4	24	3.7	57	3.9	14	3.2	67	4.0	8	3.7	73	3.9
6. Reducing stigma	29	1.4	1	0.1	28	1.9	10	1.5	19	1.3	6	1.4	23	1.4	6	2.7	23	1.2
and ensuring																		
confidentiality																		
7. Don't know/nothing	737	34.7	258	38.3	479	33.0	247	37.9	484	33.2	166	37.6	566	33.9	83	38.1	645	34.3

Note. NSSI = non-suicidal self-injury.

Talk and listen. "Talk and listen to them" was the most common theme regarding how peers and online friends could help young people who self-injure. Almost three quarters of respondents (73.5%) felt peers could talk to and support young people who self-injure, whereas 50.3% mentioned this response in relation to online friends.

Talk to them and make sure you listen. Talk to them and give them advice.

Participants mentioned peers have a pivotal role in helping young people who selfinjure because they have similar life experiences and therefore understand problems of young people.

We can tell them that we know how they feel because we're the same age as them and that we have our own problems too. Young people understand better so they can talk to them about their problems.

Participants also mentioned anonymity associated with online communication could motivate some young people to talk to online friends.

A lot because if they are too shy to talk at school then they can talk to their friends on Facebook.

Tell an adult. More respondents suggested peers could tell adults, such as parents, relatives or teachers (12.0%) compared with online friends (5.9%). Participants felt adults, particularly those trusted by and close to the self-injuring adolescent, could give advice or liaise with professionals on their behalf.

Tell a trustworthy adult. Tell an adult who can arrange for a professional to talk to them about it. Tell an adult who is close to them.

Participants felt peers and online friends could also notify parents and relatives of young people who self-injure, encourage young people to disclose their NSSI to parents and family, or inform teachers of the behaviour.

Make the family aware of the situation. Tell their parents. Encourage them to tell their parents. Tell a teacher and ask the best way to overcome the situation.

Formal organisations. Referral to formal services was rarely mentioned, although some thought peers (3.8%) and online friends (2.4%) could refer young people who self-injure to mental health professionals and telephone help lines.

Help them to go seek advice from a counsellor. Suggest mental health hotlines.

Peer relationships. Forming friendships and preventing bullying was mentioned by approximately 17.0% of respondents regarding how peers could help and 7.0% in relation to online friends. Participants commented that peers could tell other friends about their behaviour, while online friends could inform "real life" friends and not discuss NSSI online.

People our age could just be friends with the people. Stop bullying because that's a big part of teenagers hurting themselves. Suggest talking to real life friends for better support.

The final area in relation to peer relationships focused on extra-curricular or recreational activities, such as sports and social events. Respondents felt peers and online friends could involve young people in activities to distract them and improve their self-esteem.

Include them in activities. Get them into a sport or hobby they enjoy or are good at and help them to re-establish their self-esteem. Ask them to do something fun to take their mind off it.

Awareness. Raising awareness of NSSI was endorsed more as something online friends could do (3.8%) relative to peers (1.0%), such as creating websites and social networking pages, petitions, online support groups, and campaigns to raise funds and knowledge of NSSI.

Help raise awareness for these issues and create funds or groups that support this issue. Create a Facebook group about it, otherwise start a petition. Form a support group to help them talk about why they want to hurt themselves.

Reduce stigma/ ensure confidentiality. Respondents mentioned stigma and fears regarding confidentiality could be minimised by peers (3.0%) and online friends (1.4%). Participants felt it would be important for peers and online friends to accept young people who self-injure and not label them "attention seeking," "weird," or "selfish."

Don't call them names or stereotype them. Teenagers could judge people less.

Respondents suggested stigma was the cause of youth NSSI or could motivate young people to discuss NSSI online rather than in person.

Don't judge people as much then they won't try in the first place. The idea of being anonymous could appeal to them, then they can't be judged.

Confidentiality was a related issue identified within this theme. Some respondents felt, when helping young people who self-injure, peers and online friends should not tell adults or peers.

Don't tell an adult. Don't tell other students.

Don't know/nothing. "Don't know" and "nothing" were the final areas identified by respondents. More participants were likely to say they were unsure or felt online friends

could do nothing to help (34.7%) compared to peers (7.1%), suggesting it would be difficult for them to know how to respond.

Don't know. I don't think anyone would know what to do. Nothing – we could give advice but they would not take it.

Some respondents mentioned online friends could help young people by leaving them alone. Respondents felt it would be difficult or inappropriate to turn to online friends because comments could be misinterpreted.

Do not interfere because you really need to talk in person. People trying to deter others online or via text is not a good idea, you can't see their emotion/body language.

Quantitative Analyses

Endorsement of Themes by Age, Gender, and NSSI History. Participants in year eight (aged 13-14 years) were more likely to mention peers talk and listen to adolescents who engage in NSSI, χ^2 (4, n = 2402) = 17.16, p = .00, $\varphi = .08$, and more likely to suggest peers refer to adults, χ^2 (4, n = 2402) = 9.61, p = .04, $\varphi = .06$ and mental health professionals χ^2 (4, n = 2402) = 9.86, p = .04, $\varphi = .06$, and to mention peer friendship, χ^2 (4, n = 2402) = 10.55, p = .03, $\varphi = .07$ than older participants. Older participants in year 10 (aged 15-16 years) were more likely to suggest peers reduce stigma, χ^2 (4, n = 2402) = 12.05, p = .02, $\varphi = .07$, whereas those in year eight were more likely not to know how peers, χ^2 (4, n = 2402) = 11.58, p = .02, $\varphi = .07$, and online friends can help, χ^2 (4, n = 2107) = 10.83, p = .01, $\varphi = .07$. Year 10 students were more likely to suggest online friends can do nothing to help, χ^2 (4, n = 2107) = 12.47, p = .01, $\varphi = .08$.

Females were more likely than males to suggest peers, χ^2 (1, n = 2420) = 27.58, p = .00, $\varphi = .11$, and online friends, χ^2 (1, n = 2121) = 4.24, p = .04, $\varphi = .05$, talk and listen to young people who self-injure, more likely to suggest online friends involve parents or family members, χ^2 (1, n = 2121) = 3.85, p = .05, $\varphi = .05$, and more likely to suggest peers involve adults, χ^2 (1, n = 2420) = 5.35, p = .02, $\varphi = .49$. Females were also more likely to mention stigma in relation to peers, χ^2 (1, n = 2420) = 11.65, p = .00, $\varphi = .07$, and confidentiality in relation to online friends, χ^2 (1, n = 2121) = 6.1, p = .01, $\varphi = .06$. Males were more likely not to know how peers could help young people who self-injure, χ^2 (1, n = 2420) = 8.1, p = .00, $\varphi = .06$, and more likely to suggest that nothing could be done by peers, χ^2 (1, n = 2420) = 18.59, p = .00, $\varphi = -.09$, or online friends, χ^2 (1, n = 2121) = 5.63, p = .02, $\varphi = -.05$.

Respondents with friends with a history of NSSI were more likely than those without exposure to peer NSSI to suggest peers talk and listen to young people who self-injure, χ^2 (1, n = 2408) = 9.19, p = .00, $\varphi = .06$. Respondents with friends who engaged in NSSI were also more likely to mention stigma in relation to peers, χ^2 (1, n = 2408) = 13.74, p = .00, $\varphi = .08$. Participants without friends who self-injure were more likely to suggest online friends turn to adults χ^2 (1, n = 2111) = 3.91, p = .05, $\varphi = .04$. In addition, respondents with friends with a history of NSSI were more likely to suggest nothing could be done by online friends, χ^2 (1, n = 2111) = 8.12, p = .00, $\varphi = .06$.

Respondents who had not thought about engaging in NSSI were more likely than those with thoughts of NSSI to mention peers refer young people to mental health professionals, χ^2 (1, n = 2409) = 5.65, p = .02, $\varphi = .05$. Participants who had thought about engaging in NSSI were more likely to mention not knowing how peers could help, χ^2 (1, n = 2409) = 8.65, p = .00, $\varphi = -.06$. In addition, respondents who had thought about engaging in NSSI were more likely to suggest online friends could do nothing to help young people who self-injure, χ^2 (1, n = 2112) = 4.74, p = .03, $\varphi = -.05$.

Respondents without a history of NSSI were more likely than those with such a history to suggest peers tell family members, χ^2 (1, n=2395) = 4.02, p=.04, $\varphi=.04$, and adults, χ^2 (1, n=2395) = 3.87, p=.05, $\varphi=.04$. Adolescents with a history of NSSI were more likely to mention bullying, χ^2 (1, n=2395) = 11.33, p=.00, $\varphi=-.07$, and stigma, χ^2 (1, n=2395) = 11.42, p=.00, $\varphi=-.07$, in relation to peers, and stigma, χ^2 (1, n=2100) = 3.85, p=.05, $\varphi=-.05$, in relation to online friends.

Multivariate Effects. To explore more complex relationships between the variables, we conducted a series of chi-square tests with layers that take multiple relationships into account. Specifically, we explored the relationships between gender, age, peer and personal history of NSSI, and endorsement of themes. There was no relationship between the variables and endorsement of the theme "talk and listen" regarding what peers could do to help youth who self-injure (all p > .05). However, girls who had a friend who self-injured were more likely to endorse this theme, $\chi^2 = 44.34$, p = .00, whereas males without a friend who self-injured were less likely to endorse this theme, $\chi^2 = 11.96$, p = .00. Year 10 girls were more likely to suggest talking to professionals, $\chi^2 = 11.10$, p = .02, whereas year 11 males were less likely to suggest friendships could help peers who self-injure, $\chi^2 = 1073$, p = .03. Finally, girls who a history of NSSI were more likely not to know how peers could help, $\chi^2 = 6.57$, p = .01.

Regarding how online friends could help those who self-injure, clear developmental effects were observed. Year 10 girls were less likely to suggest online friends talk and listen,

⁴ Chi-square tests with layers were used in response to reviewer feedback to examine the relationships between more than two variables (e.g., layered by gender to see the relationship between age, gender, and endorsement of themes).

⁵ Adolescents in grades seven to 11 completed the open-ended questions regarding what peers and online friends could do to help young people who self-injure due to time constraints which prevented one school in Victoria from participating when adolescents were in grades seven to 10.

 $\chi^2 = 8.86$, p = .03, tell parents, $\chi^2 = 9.80$, p = .02, or tell a teacher, $\chi^2 = 9.31$, p = .02. Conversely, year seven boys were less likely to endorse telling a professional, $\chi^2 = 9.26$, p = .03, friends, $\chi^2 = 9.08$, p = .03, making friends with those who self-injure, $\chi^2 = 8.83$, p = .03, stopping bullying, $\chi^2 = 8.78$, p = .03, raising awareness, $\chi^2 = 8.52$, p = .04, engaging those who self-injure in activities, $\chi^2 = 9.68$, p = .02, and reducing stigma, $\chi^2 = 9.07$, p = .03. Rather, this group of boys were more likely to suggest online friends could do nothing to help those who self-injure, $\chi^2 = 12.69$, p = .00. Finally, girls who had no prior thoughts, $\chi^2 = 5.70$, p = .02, or history, $\chi^2 = 6.12$, p = .01, of NSSI were more likely to suggest online friends could tell an adult.

Discussion

We examined ways in which adolescents believe peers and online friends could respond to youth NSSI, and explored how views varied according to age, gender, and history of NSSI. We observed that self-disclosure of NSSI to friends was more common than to parents, teachers, and health professionals, consistent with previous research (Evans et al., 2005; Fortune et al., 2008b). Participants recommended that friends talk and listen to young people who self-injure, with females and friends of adolescents who self-injure more likely to suggest peers talk to youth who self-injure, and females also more likely to recommend referral to an adult. Conversely, youth, especially males and those with friends who self-injured, suggested online friends could do nothing to help those who self-injure. Participants with a history of NSSI were less likely to recommend referral.

As girls tend to draw more strongly upon peer support than boys (Rose & Rudolph, 2006) and males are more likely to feel that no one can help or NSSI is not serious (Fortune et al., 2008b), it is not surprising that girls strongly recommend talking to peers about self-injury. Although girls also suggested talking to adults, older girls with experience of NSSI are

reluctant to do so. Arguably these youth have sought help from parents and other adults in the past and been dissatisfied with the response. Adolescents' views of the utility of disclosing NSSI to adults may inform responses to adolescents who self-injure. However, because adolescents are disinclined to talk to adults about self-injury and because of their increasing developmental need for autonomy from adults, it follows that adolescents too require knowledge and skills to intervene with peers who self-injure. Addressing stigma and negative attitudes associated with NSSI is another important area, as they are potential barriers to seeking help for NSSI (Nada-Raja et al., 2003).

The general ambivalence we observed towards seeking help online for NSSI could indicate that we did not capture nuances of online self-injury help-seeking, or that privacy online is more important to adolescents than we have understood. Despite growing popularity of social networking (Duggan, Heath, Lewis, et al., 2011; Mitchell & Ybarra, 2007; Whitlock et al., 2007), adolescents may have clear ideas about what is, and is not, suitable to discuss online. Although there are similarities between what peers and online friends can do, there are also discernible differences, suggesting that the Internet operates as a separate social context for adolescents who self-injure. However, as internet use increases and young people continue to negotiate online social interactions and codes of behaviour (Bradley, 2005), it is possible that online behaviour will shape adolescents' social identity and how they respond to NSSI in the "real" world, suggesting further exploration of adolescents' online behaviour is warranted.

Finally, differences across age groups highlights important developmental changes in the way adolescents feel peers and online friends can help those who self-injure. Notably, main effects show younger participants are more inclined to talk to young people and refer to adults, while older participants are more concerned about stigma and pessimistic about available help. However, these effects were also related to gender, particularly with regard to

assistance offered by online friends. Specially, younger boys were more inclined to suggest online friends could do nothing to help, whereas older girls were less likely to mention talking to adults, unless they had no prior exposure to NSSI. Developmental transitions in adolescence, including greater independence and autonomy from adults, and then peers, could contribute to older adolescents reduced reliance on friends and parents for support.

Implications

Although adolescents' views need to be considered in light of best practice, consulting with adolescents may improve our understanding of their help-seeking behaviour and inform educational programs to enhance service use among adolescents (C. Owens et al., 2011). Specifically, our findings have important implications for development of school-based prevention programs, which are viewed as essential (Evans et al., 2005; Fortune et al., 2008a). Adolescents considered communication as the primary role of peers and online friends. An important consideration, however, is the link between NSSI in peers and later NSSI (Hasking et al., 2013). Although prevalence of NSSI has not increased over time (Muehlenkamp et al., 2012), there is complexity and anxiety for professionals in educating adolescents about peer NSSI, and increasing their perceived responsibility to peers. However, adolescents, particularly young males, need information and advice regarding identifying and safely responding to peers who self-injure, and overcoming their natural reticence to refer to adults. It is possible that education programs targeting younger adolescents (aged 13-14 years) could compensate for adolescents ambiguity regarding what can be done to help.

Prevention programs in which students are trained to respond to self-injuring peers and encouraged to talk to trusted adults can enhance adolescents' connectedness to adults, foster supportive behaviours among peers, and improve help-seeking attitudes, norms, and behaviours across entire student populations (Muehlenkamp et al., 2010; Wyman et al.,

2010). In contrast, a recent study of gatekeeper training for school staff found no change in adult-student communication about suicide and no effect on referral behaviour (Wyman et al., 2008). These educational programs are yet to consider the growing impact of online relationships in the lives of young people and how these friendships can be addressed through training. Similar to online communication about NSSI, educational programs can help adolescents acquire skills for communicating with and supporting peers who self-injure, while still encouraging them to seek support from a teacher or parent.

Mental health professionals should assess and monitor social networking practices of their clients, and provide clear guidelines about safe online behaviour, when necessary. By knowing which social networking media their clients access, they can talk to them about online safety, and develop a list of appropriate websites and discussion forums for NSSI (Swannell et al., 2010). School-based educational programs could also include clear guidelines to assist students with safe internet use and pathways toward offline help-seeking. Increasing awareness of potential negative consequences may be particularly helpful when educating adolescents about online disclosure of NSSI (Christofides et al., 2012). Parents must also take an active role to ensure their children are practicing safe online behaviour.

Parents and teachers are often unsure how to manage youth NSSI and express a need for further information and training in the area (Carlson et al., 2005; Heath et al., 2006; Raphael et al., 2006). A whole-school approach to training that prepares peers, parents, and teachers to respond to youth NSSI is one way to ensure adolescents receive effective support and advice. Given young people are unlikely to seek help from adults our findings support programs that teach students how to respond to friends who self-injure, and how to identify and tell a trusted adult.

Limitations

Our findings should be considered in light of several limitations. Although this study used open-ended questions allowing unstructured expression of ideas, these questions were preceded by questionnaires with potential to influence responses. In addition, data were collected in class groups during school time and ideas presented here might not reflect those of absentees. Furthermore, participants were self-selected, and data generalisability limited to Independent and Catholic schools comprising only 29% of schools in the Australian secondary education system (Australian Bureau of Statistics, 2013). The sample size for some themes (e.g., awareness) was also small when making comparisons. Last, the terms "friend," "peer," and "online friend" were not defined for participants, and adolescents may have used these terms interchangeably. Given the salience of both offline and online adolescent relationships, adolescents themselves should operationally define these terms to examine the extent to which peers and online friends are mutually exclusive groups. In-depth interviews would help to draw out how adolescents negotiate these social domains.

Conclusion

Our findings offer preliminary support for strategies to address youth NSSI from an adolescent perspective. Educational programs that prepare adolescents to access help for peers, or themselves, is one way to limit youth NSSI and suicidal behaviour. To be effective, educational programs addressing NSSI need to be evaluated by adolescents.

Chapter 5: 'Listen to Them': Adolescents' Views on Helping Young People who Self-Injure

Aims and Outline of the Study

In line with the aims of first study presented in Chapter 4, which evaluated adolescents views of what peers and online friends could do to help young people who self-injure, this chapter presents the second study of this thesis which explored adolescents perceptions of what parents and teachers could do to help young people who self-injure, and evaluated how adolescents' views vary according to age, gender, exposure to peer NSSI, and a personal history of NSSI. Although findings from Chapter 4 of this thesis suggested that adolescents who self-injure are more likely to seek help from friends, rather that parents and teachers, other studies have shown that communication with parents and teachers, and access to school-based support services could prevent DSH among young people (Fortune et al., 2008a). However, no prior study has examined adolescents' beliefs about what parents and teachers could actually do to support young people who self-injure.

This is surprising since parents and teachers are among the first to seek treatment for adolescents who self-injure (Oldershaw et al., 2008; Roberts-Dobie & Donatelle, 2007), but can be unprepared, hesitant, and lack confidence when responding to these youth (e.g., Byrne et al., 2008; Carlson et al., 2005). Therefore, the aims of this study were to explore what adolescents believe parents and teachers could do to help young people who self-injure, and to examine how adolescents' views vary according to age, gender, exposure to peer NSSI, thoughts of NSSI, and a lifetime history of NSSI, based on previous literature demonstrating relationships between these variables and help-seeking for DSH (e.g., Evans et al., 2005; Fortune et al., 2008b). Examining adolescents' views of what parents and teachers could do to help young people overcome NSSI, and characteristics related to adolescents' perceptions,

may hold important implications for education initiatives for parents and teachers to improve detection and timely referral of youth who self-injure.

Declaration for Thesis Chapter 5

Monash University

In the case of Chapter 5, the nature and extent of my contribution to the work was the following:

Nature of contribution	Extent of contribution (%)
Study conceptualisation	60%
Data collection, data entry, and data cleaning	50%
Statistical analyses and interpretation of the results	80%
Writing the paper for publication	80%

The following co-authors contributed to the work. If co-authors are students at Monash University, the extent of their contribution in percentage terms must be stated:

Name	Nature of contribution	Extent of contribution (%)					
		for student co-authors					
		only					
Penelope Hasking	Study conceptualisation, statistical	n/a					
	assistance and interpretation, and						
	editing						
Graham Martin	Editing	n/a					

The undersigned hereby certify that the above declaration correctly reflects the nature and extent of the candidate's and co-authors' contributions to this work.

Candidate's signature: Date: 09/09/2014

Main supervisor's signature: Date: 09/09/2014

Abstract

Non-suicidal self-injury (NSSI) among adolescents is a significant problem, yet the majority do not seek professional help. Parents and teachers are arguably most in contact with young people, and are critical in identifying and referring adolescent self-injurers. This study explored what adolescents believe parents and teachers can do to help young people who self-injure. A school-based sample of 2637 students (aged 12-18 years) completed a self-report questionnaire. Adolescents believe having non-judgemental parents and teachers to talk to, improved parent-child relationships, referral to professionals, reduced school pressures, and student education are pivotal to helping young self-injurers. However, many adolescents, particularly those exposed to NSSI, were unsure about whether parents and teachers could do anything to help. These finding have important implications for educational programs that prepare parents and teachers to address adolescent NSSI.

Key words: adolescents; self-injury; parents; teachers; help-giving.

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Introduction

Non-suicidal self-injury (NSSI), the deliberate destruction or alteration of one's own body tissue without suicide intent (Nock & Favazza, 2009), is a major health concern. NSSI characteristically begins between ages 12 and 14 years (Jacobson & Gould, 2007; Rodham & Hawton, 2009; Ross & Heath, 2002), and is reported by 9.4% of Australian youth aged 10 to 17 years (G. Martin et al., 2010). Skin cutting is the most common form of NSSI, followed by self-hitting, and punching or hitting a wall (Ross & Heath, 2002). NSSI has negative impacts on physical and social health (Gratz, 2003; Gratz et al., 2002; Trepal, Wester, & MacDonald, 2006), and may co-occur with suicidality (Conner et al., 2003; Lloyd-Richardson et al., 2007; D. Owens et al., 2002). NSSI may be transient, but for many, co-occurring problems persist into adulthood (J. Martin, Bureau, Cloutier, & Lafontaine, 2011; Storey et al., 2005; Whitlock, Eckenrode, et al., 2006).

Recent studies have recommended school-based interventions (Evans et al., 2005; Hawton et al., 2009; Muehlenkamp et al., 2010), suggesting teachers and parents are ideally placed to identify and respond to adolescent NSSI (Carlson et al., 2005; Muehlenkamp et al., 2010; Oldershaw et al., 2008; Shapiro, 2008). Unfortunately, parents and teachers are often unaware of youth NSSI because adolescents typically do not seek help from adults, and instead turn to peers and friends for support (De Leo & Heller, 2004; Evans et al., 2005; Fortune et al., 2008b). While teachers are in a prime position to intervene (Carlson et al., 2005; Shapiro, 2008), teachers often lack knowledge and confidence to manage student NSSI and are appealing for training in the area (Best, 2006; Carlson et al., 2005; Heath et al., 2006; Heath et al., 2011; Roberts-Dobie & Donatelle, 2007). Similarly, parents report feelings of shock, guilt, failure, anger and helplessness (Raphael et al., 2006), and have expressed a need for support and advice to improve their responses and feelings towards self-injury (Byrne et al., 2008).

In open-ended questions and interviews, adolescents themselves recognise a role for parents and teachers in preventing their own or peers' self-harm (including suicidal behaviour as well as NSSI), citing access to non-judgemental parents and teachers to talk to, education for parents and teachers, and improved parent-child relationships as salient. Adolescents with a history of self-harm were more likely than those without a history to view the behaviour as difficult to prevent (Fortune et al., 2008a). Coggan, Patterson, and Fill (1997) noted adolescents' and young adults' solutions to prevent youth suicide included school and community based training for youth, caregivers, and teachers, information about warning signs and where to access help, and access to someone non-judgemental. Differences in perceptions between those with and without personal experiences of suicide were not explored. Heled and Read (2005) reported similar strategies to prevent youth suicide, including, school-based crisis support services, educational programs for youth, parents, and teachers, and improved family communication. Participants who knew of someone who had completed suicide were more likely to attribute youth suicide to abuse and stigma than those without such exposure. Overall, both adolescents and parents identified parents and teachers as integral to helping young people who self-injure (Rissanen et al., 2009a), with parents believing they could know more about how to respond to and manage the behaviour (Rissanen, Kylmä, & Laukkanen, 2009b). However, movement away from traditional assertions that NSSI is synonymous with suicide requires additional research offering specific clinical and community implications for the prevention of NSSI (Klonsky et al., 2011).

Despite identifying parents and teachers as principal in helping young people who self-injure, to the authors knowledge no study has specifically explored adolescents' views of what parents and teachers could do to help these youth. Yet, understanding the role of parents and teachers from an adolescent perspective may have significant implications for interventions. Although adolescents' suggestions need to be considered in light of school

policies and clinical practices (Taylor et al., 2009), their recommendations could inform education and clinical interventions to minimise inappropriate reactions among parents and teachers, such as expression of shame or horror (Heath et al., 2006; Oldershaw et al., 2008), and thus increase help-seeking attitudes and intentions of youth. Research that allows adolescents to voice their needs in this area will add a unique and insightful view of what adolescents feel would be helpful, and potentially why adolescents do not disclose NSSI to parents and teachers.

Given that adolescents who engage in self-injury or have thoughts of self-injury are less likely to seek help from parents and teachers than those with no history (Evans et al., 2005), our study explored how responses vary according to lifetime history of NSSI, thoughts of NSSI, and exposure to peer NSSI. Although prevalence of NSSI is similar for females and males (Gratz et al., 2002; Heath et al., 2008; Hilt et al., 2008; Lloyd-Richardson et al., 2007; Muehlenkamp & Gutierrez, 2004), males are less likely to seek help for NSSI than females (Evans et al., 2005), suggesting the importance of accounting for gender differences in education about NSSI.

Our research questions included:

- 1. What do adolescents think parents could do to help young people who self-injure?
- 2. What do adolescents think teachers could do to help young people who self-injure?
- 3. How do responses vary according to age, gender, peer lifetime history of NSSI, thoughts of NSSI, and lifetime history of NSSI?

Method

Participants

Two thousand, six hundred and thirty seven students (848 males, 1789 females) aged 12 to 18 years (M = 13.93, SD = 1.0) participated in this study. The majority were born in Australia (89.3%), with 2.3% identifying as Aboriginal or Torres Strait Islander, which is representative of the total estimated indigenous population in Australia (Australian Bureau of Statistics, 2012a). Students were in their first (29.9%), second (33.9%), or third (29.5%) year, in 18 private and 23 catholic secondary schools across four Australian states and the Northern Territory. Twenty-two schools were located in metropolitan areas; nineteen schools were located in regional areas.

Measures

Of the responders, 2274 responded to the open-ended question "What do you think parents could do to help young people who hurt themselves on purpose?" with 2263 responding to the open-ended question "What do youth think teachers could do to help young people who hurt themselves on purpose?" They were able to write as little or as much as they liked.

Participants also completed Part A of the Self-Harm Behaviour Questionnaire (Gutierrez et al., 2001), which assesses whether they had ever engaged in NSSI, the nature of their NSSI, and the frequency (*once – four or more times*), recency, and severity (*not at all serious – life-threatening*) of the behaviour. This measure was used in previous research with the same sample (e.g., Andrews et al., 2012); although calculation of a continuous score reflecting severity of NSSI is possible, for the purposes of the current study we were only interested in whether adolescents had ever hurt themselves on purpose, if they had disclosed

their NSSI and to whom they had disclosed their behaviour (e.g., friend, parent, teacher, or no one). In addition to Part A of the SHBQ, participants were asked whether they had ever thought about hurting themselves without engaging in NSSI, and whether friends had engaged in NSSI.

To increase validity and ensure participants' responses were made with reference to NSSI, a definition of NSSI was provided to participants at the beginning of the questionnaires. However, some adolescents still used the term self-harm in response to what parents and teachers could do to help.

Procedure

After obtaining ethical clearance, principals who agreed for their school to participate provided information sheets to students, who passed them on to parents/guardians. Both parents/guardians and students were asked to provide written informed consent. Participants completed the self-report questionnaire in class groups during school time, in the presence of a researcher and school staff member. Students were reminded that participation was voluntary and they could withdraw at any time, or submit an incomplete questionnaire. Participants created a unique code allowing questionnaires to remain confidential, but enabling identification of students if researchers identified current high-risk behaviours. Information sheets informed schools, parents, and students that the researchers would identify students at high risk to the school's principal, who would then respond according to school policy. On completion, participants received an information pack about mental health.

Analysis

Data were analysed using a thematic analysis approach, a widely used and flexible qualitative analytic method for identifying, analysing, and reporting themes within data

(Braun & Clarke, 2006). Two researchers independently analysed responses to identify discrete themes and sub-themes. Meetings were then used to reconcile discrepancies. Key themes were then sorted and refined; some themes were broken down into subthemes, whilst others were merged. Codes assigned to each theme were then applied to the data. Themes were reviewed throughout the analysis and during team meetings until a comprehensive coding system was developed that accurately represented the data. A third, independent, researcher recoded 20% of the data using the coding scheme to yield inter-rater reliability ranging from moderate to almost perfect (.56 - .91; Landis & Koch, 1977) agreement across themes. The poorest inter-rater score (.56) was for the theme family conflict; this subtheme was included in further analyses, however, results should be interpreted with caution.

Frequency analyses of qualitative data were completed across the total sample and according to gender, lifetime history of NSSI, thoughts of NSSI, and peer history of NSSI. Pearson's chi-square analyses were used to compare group (e.g., students with and without a lifetime history of NSSI) frequencies within subthemes to capture explicit areas adolescents feel parents and teachers can be most helpful. To examine differences in frequencies by age, chi-square tests compared endorsement of subthemes by year level at school (from 7-10).

Results

NSSI Prevalence, Nature, and Help-Seeking

Twenty percent (n = 552) had thought about self-injuring at least once but never engaged in the behaviour. Most had told a friend (27.2%) about their NSSI thoughts, followed by a parent (14.7%), healthcare professional (7.8%), and/or teacher (1.3%). One in ten (10.0%, n = 263) reported one or more lifetime episodes of NSSI; females and males were equally likely to report engaging in NSSI, χ^2 (1, n = 2591) = 2.46, p > 0.05. Many had informed a friend (43.1%), parent (16.4%), healthcare professional (12.9%), and/or teacher

(2.3%). The majority of participants were aged between 12 and 14 years (74.0%) when they first engaged in NSSI. Cutting was the most common form of NSSI (60.7%), followed by hitting or punching oneself or an object (i.e., a wall; 19.1%). Engagement in NSSI was once (30.7%), twice (19.6%), three (13.3%), or four or more times (35.6%), with only 3.8% having wounds that required medical attention. Over fifty percent (52.2%) self-injured within the past year. In this sample, 29.5% (n = 768) of participants reported having at least one friend who self-injured. Females were more likely than males to have self-injuring friends, χ^2 (1, n = 768) = 59.12, p < .001, $\varphi = -.15$.

Thematic Analysis

Eight main themes emerged. Although coded separately, similar themes emerged from parent and teacher questions. Length of responses ranged from one to 37 words. In most cases adolescents presented more than one view in response to each question (e.g., "parents should talk to their children" and "take them to a psychologist"), coded into all relevant categories (e.g., "talk and listen" and "formal organisations"). Themes are organised to present all those that emerged for both parents and teachers, followed by those unique to parents, then those unique to teachers. Quotes have been included under each theme to illustrate their meaning. Frequencies of responses for each theme and subtheme are shown in Tables 5 and 6.

Table 5

Frequencies of Responses for Each Theme and Subtheme According to the Question "What Do You Think Parents Could Do to Help Young
People Who Hurt Themselves on Purpose"

-				Ge	nder		Li	fetime	peer N	SSI	Life	time th	nought 1	NSSI	Lifetime NSSI			
	Total		Male		Female		Yes		No		Yes		No		Y	es	No	
	(n=2)	2274)	(n =	720)	(n=1)	1554)	(n = 693)		(n = 1569)		(n = 466)		(n = 1796)		(n = 227)		(n=2)	2022)
Theme	n	%	\overline{n}	%	n	%	\overline{n}	%	n	%	n	%	n	%	\overline{n}	%	n	%
1. Talk and listen	1687	74.2	504	70.0	1183	76.1	482	69.6	1196	76.2	314	67.4	1363	75.9	136	59.9	1532	75.8
2. Adults	122	5.4	33	4.6	89	5.7	32	4.6	88	5.6	20	4.3	100	5.6	12	5.3	108	5.3
Family	10	0.4	2	0.3	8	0.5	3	0.4	7	0.4	3	0.6	7	0.4	1	0.4	9	0.4
School staff	5	0.2	0	0.0	5	0.3	0	0.0	5	0.3	0	0.0	5	0.3	0	0.0	5	0.2
Other adult	107	4.7	31	4.3	76	4.9	29	4.2	76	4.8	17	3.6	88	4.9	11	4.8	94	4.6
3. Formal organisations	389	17.1	116	16.1	273	17.6	93	13.4	295	18.8	62	13.3	325	18.1	26	11.4	357	17.6
4. Reduce	18	0.8	2	0.3	16	1.0	7	1.0	11	0.7	5	1.1	13	0.7	2	0.9	16	0.8
stigma/ensure																		
confidentiality																		
Stigma	18	0.8	2	0.3	16	1.0	7	1.0	11	0.7	5	1.1	13	0.7	2	0.9	16	0.8
Confidentiality	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

5. Don't know/nothing	138	6.1	58	8.0	80	5.1	67	9.7	6.7	4.3	48	10.3	87	4.8	35	15.4	100	4.9
Don't know	82	3.6	38	5.3	44	2.8	31	4.5	48	3.1	25	5.4	56	3.1	15	6.6	66	3.3
Nothing	56	2.5	20	2.8	36	2.3	36	5.2	19	1.2	23	4.9	31	1.7	20	8.8	34	1.7
6. Family context	248	10.9	41	5.7	207	13.3	93	13.4	155	9.9	60	12.9	188	10.5	36	15.8	212	10.5
Love	173	7.6	27	3.8	146	9.4	53	7.6	120	7.6	37	7.9	136	7.6	19	8.4	154	7.6
Conflict	36	1.6	6	0.8	30	1.9	27	3.9	9	0.6	16	3.4	20	1.1	13	5.7	23	1.1
Activities	39	1.7	8	1.1	31	2.0	13	1.9	26	1.7	7	1.5	32	1.8	4	1.8	35	1.7
7. School context	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stress	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bullying	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Education	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note. NSSI = non-suicidal self-injury.

Overarching themes are presented in bold, with subthemes below.

Table 6

Frequencies of Responses for Each Theme and Subtheme According to the Question "What Do You Think Teachers Could Do to Help Young People Who Hurt Themselves on Purpose"

-				Ge	nder		Li	fetime	peer N	ISSI	Life	time th	oughts	NSSI		SI		
	Total		Male		Female		Yes		No		Yes		No		Yes		N	No
	(n=2)	2263)	(n = 716)		(n = 1547)		(n = 686)		(n = 1565)		(n = 461)		(n = 1790)		(n = 227)		(n = 1)	2011)
Theme	n	%	\overline{n}	%	n	%	\overline{n}	%	n	%	n	%	n	%	\overline{n}	%	n	%
1. Talk and listen	1316	58.2	383	53.5	933	60.3	356	51.9	955	61.0	228	49.5	1084	60.6	93	41	1214	60.4
2. Adults	268	11.8	67	9.4	201	13.0	62	9.0	206	13.2	39	8.4	227	12.7	18	7.9	248	12.3
Family	162	7.2	35	4.9	127	8.2	41	6.0	121	7.7	24	5.2	138	7.7	12	5.3	149	7.4
School staff	8	0.4	2	0.3	6	0.4	1	0.1	7	0.4	0	0.0	8	0.4	0	0.0	8	0.4
Other adult	98	4.3	30	4.2	68	4.4	20	2.9	78	5.0	15	3.3	81	4.5	6	2.6	91	4.5
3. Formal organisations	328	14.5	96	13.4	232	15.0	73	10.6	253	16.2	14	3.0	51	2.8	25	11.0	298	14.8
4. Reduce	28	1.2	4	0.6	24	1.5	12	1.7	16	1.0	7	1.5	21	1.2	4	1.8	24	1.2
stigma/ensure																		
confidentiality																		
Stigma	12	0.5	2	0.3	10	0.6	6	0.9	6	0.4	5	1.1	7	0.4	4	1.8	8	0.4
Confidentiality	16	0.7	2	0.3	14	0.9	6	0.9	10	0.6	2	0.4	14	0.8	0	0.0	16	0.8

5. Don't know/nothing	451	19.9	152	21.2	299	19.3	200	29.1	246	15.7	15	32.7	294	16.4	89	39.2	353	17.5
Don't know	138	6.1	54	7.5	84	5.4	49	7.1	86	5.5	30	6.5	106	5.9	18	7.9	118	5.9
Nothing	313	13.8	98	13.7	215	13.9	151	22.0	160	10.2	121	26.2	188	10.5	71	31.3	235	11.7
6. Family context	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Love	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Conflict	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Activities	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7. School context	127	5.6	28	3.9	99	8.4	40	5.8	84	5.3	24	5.2	102	5.6	11	4.9	115	7.6
Stress	54	2.4	16	2.2	38	2.5	22	3.2	32	2.0	12	2.6	42	2.3	7	3.1	47	2.3
Bullying	11	0.5	2	0.3	9	0.6	4	0.6	5	0.3	2	0.4	9	0.5	2	0.9	9	0.4
Education	62	2.7	10	1.4	52	3.4	14	2.0	47	3.0	10	2.2	51	2.8	2	0.9	59	2.9

Note. NSSI = non-suicidal self-injury.

Overarching themes are presented in bold, with subthemes below.

Themes regarding what both parents and teachers could do to help included:

1. Talk and listen

Three quarters (74.2%, n = 1687) of respondents commented that parents could talk to young people who self-injure and help to solve their problems, while over half (58.2%, n = 1316) suggested teachers could do the same.

"Listen to them." "Talk to their kids." "Parents should try to listen to their problems." "Ask them why they hurt themselves and give them advice of what they should do." "Have a chat with them about why they are hurting themselves."

2. Adults

Referral to families, school personnel, or some other adult who could help was mentioned as a strategy for parents (5.4%, n = 122) and teachers (11.8%, n = 268). Participants felt that parents could gather family members together to resolve problems causing the young person to self-injure.

"Have a talk with the whole family about it." "...as a family try to work it out."

Seven percent commented that teachers should alert parents and family members of young self-injurers. Participants also felt that teachers should involve parents and families because this approach could lead to provision of additional support or resources. Others suggested it would be difficult for teachers to help, and informing parents and families would be all they could do to help.

"...tell their parents." "Immediately contact parents." "Teachers could inform parents so that the parents can get the children some help." "There isn't much they can do besides informing family."

In addition, respondents felt parents and teachers could suggest for young people who self-injure to seek help from school personnel, including teachers and principals. Students suggested that school personnel could liaise with mental health professionals.

"Tell a teacher." "Advise them to seek the principal's help." "...maybe tell the principal and they could find help though the school counsellor."

Adolescents also commented that parents and teachers could refer young people to someone they could talk to and receive help from, but did not specify who this person might be.

"Contact someone who can help." "Send them to someone who can help." "...seek immediate help for their son or daughter."

3. Formal organisations

Approximately one in seven respondents (17.1%, n = 389) mentioned that parents could refer young people who self-injure to professionals, such as counsellors, psychologists, and psychiatrists.

"Parents could bring them to a psychiatrist." "...set up an appointment with a counsellor." "Take them to a counsellor, psychologist or psychiatrist."

Likewise, referral to professionals was mentioned by 14.5% (n = 328) of respondents as to what teachers could do to help young people who self-injure.

"...make them see a counsellor." "Advise them to see the school counsellor."

4. Reduce stigma/ensure confidentiality

More respondents mentioned stigma and confidentiality in relation to how teachers could help young people who self-injure (1.2%, n = 28) compared to parents (0.8%, n = 18). Participants felt that parents and teachers needed to be more openminded and non-judgmental, and avoid characterising young people who self-injure as "unstable," "suicidal," or "freaks."

"...they should be nonjudgmental." "Help them by not judging them." "...not label them or make them out as suicidal or a freak." "...don't look down upon them or label them unstable."

Participants emphasised the importance of teachers maintaining confidentiality with young people.

"...keep it confidential." "Not tell anyone."

5. Don't know/nothing

Overall, 6.1% (n = 138) of respondents mentioned they were "unsure" or felt parents could do nothing to help, while almost one in five (19.9%, n = 451) were "unsure" or felt nothing could be done by teachers to help young self-injurers. Adolescents suggested that teachers often do not notice NSSI or give good advice when students are distressed.

"Don't know." "I don't know because teachers generally don't seem to notice, act like it's not there, and if they do notice they handle it wrong." "I don't know because most teachers I know don't give very good advice."

"Nothing" was the final area identified by respondents. Participants suggested that often young people handle the situation alone or seek support from friends rather than parents and teachers.

"I don't believe parents could help." "Leave it alone. I would rather be left alone and figure it out myself." "I don't think teachers should get involved." "I don't think teachers could do anything." "Leave them to talk about it with friends, teachers should not intervene."

Respondents also commented that teachers could do nothing because they are unaware of young people who self-injure, or young people do not trust them and would not listen.

"Nothing really, most people keep it to themselves if they hurt themselves and teachers are mostly unaware." "I don't think they could do much because not many people go to teachers for help or trust them." "Nothing, young people often don't listen to them.

Others suggested that they would not like to speak to teachers about personal problems, including self-injury, with some commenting that it is not the responsibility of teachers to help young people who self-injure.

"Nothing, it is really hard to talk to teachers about personal issues." "I personally think teachers have no right to know about students who self-harm." "I personally would hate it if a teacher came and spoke to me about it. I don't think it is their responsibility or right to do that."

Themes unique to what parents could do to help included:

6. Family context

A common response (10.9%, n = 248) mentioned that parents could give or show their children more love, create a closer bond, reduce family conflict, and increase family activities.

"Love them more." "Bond with them." "Always make sure the child knows they really love them."

Participants mentioned that parents could help young self-injurers by reducing conflict in the family, including "anger," "abuse," "yelling," "arguing," and "nagging," as well as reduce family stress and instability arising from parental conflict, such as "separation" and "divorce."

"...don't make their life difficult or worse for them by yelling at them." "Stop fighting in front of their kids." "...stop divorcing."

Participants also commented on difficulties young people have talking to parents about these issues because they tend to "freak out," "yell," "make assumptions," or become "angry" and "disappointed," making the situation worse or causing repetition of self-injury.

"Not get angry or assume things and just be understanding and not disappointed."

"Parents should not get angry with their child once they've found out." "...let them be honest

about why they are upset and don't get angry at what they say." "Stop giving them reasons to hurt themselves...kids hurt themselves because of parents."

Family activities, including holidays, sports, arts, social events, and outings, were also mentioned by respondents. Participants felt family activities could help young people who self-injure by taking their mind off problems, allowing them to enjoy life, giving purpose to their lives, and improving their self-esteem.

"...have family outings, e.g., movies." "Take them to a theme park and let them enjoy life." "Join them up to do something that takes their minds off harming themselves like sport or dance." "...do fun things with them so they feel their life has purpose." "...involve their kids in things that make them feel good about themselves."

Themes unique to what teachers could do to help included:

7. School context

Reducing academic stress and bullying was mentioned by 5.6% (n = 127) of respondents. Adolescents related academic pressures such as homework, assignments, and examinations directly to youth NSSI.

"Take them out of activities and school...anything that is putting stress on them."

"Give them less homework." "Not place too much pressure on them with assignments and grades."

Participants mentioned that teachers need to notice and stop the bullying in schools.

"...they could crack down on bullying." "Make sure they aren't getting bullied."

Approximately three percent of adolescents suggested that teachers should educate students about the consequences of NSSI, how to cope when feeling distressed, and who to seek help from for NSSI. Suggested strategies to educate students about NSSI included: support groups, lectures, flyers, booklets, and classes.

"Give lectures." "Give lessons on why you should not hurt yourself." "Start a club where people can express their feelings and say positive things." "Hand out fliers in class."

Respondents related classroom education around NSSI to education about drugs, alcohol, and sex.

"...have a class like they do for sex education." "...we have drug and alcohol education so why not education on self-harm."

Participants also felt that research in schools could help teachers to learn more about NSSI.

"Maybe do research to learn more about the issue from a self-harmer's perspective."

Endorsement of Subthemes by Age, Gender, and NSSI History

Participants in year eight and nine (i.e., typically aged 14-15 years) were more likely to mention teachers talk and listen to youth who engage in NSSI, χ^2 (3, n = 2245) = 12.63, p < .05, $\varphi = .07$, while those in year eight and 10 were more likely to suggest parents refer to mental health professionals, χ^2 (3, n = 2256) = 10.14, p < .05, $\varphi = .07$, and to mention stigma in relation to teachers, χ^2 (3, n = 2245) = 17.28, p < .01, $\varphi = .09$. Younger participants in year seven were more likely to suggest teachers work to prevent bullying, χ^2 (3, n = 2245) = 18.53, p < .01, $\varphi = .09$, while those in year nine and 10 (typically aged 15-16 years) were more likely to suggest teachers could do nothing to help, χ^2 (3, n = 2245) = 32.88, p < .001, $\varphi = .12$.

Females were more likely than males to suggest teachers, χ^2 (1, n = 2263) = 9.07, p < .01, φ = .06, and parents, χ^2 (1, n = 2274) = 9.32, p < .01, φ = .06, talk and listen to young people who self-injure, more likely to suggest parents give their children more love, χ^2 (1, n = 2274) = 21.5, p < .001, φ = .10, more likely to suggest teachers involve parents and family members, χ^2 (1, n = 2263) = 7.63, p < .01, φ = .06, and more likely to suggest teachers educate students about NSSI, χ^2 (1, n = 2263) = 6.37, p < .05, φ = .06. Males were more

likely to say they were unsure about how parents could help young people who self-injure, χ^2 $(1, n = 2274) = 7.78, p < .01, \phi = -.06.$

Participants with friends with a history of NSSI were less likely than those without exposure to suggest parents, χ^2 (1, n = 2262) = 10.8, p < .01, $\varphi = .07$, and teachers, χ^2 (1, n = 2251) = 15.96, p < .001, $\varphi = .08$, talk to young people who self-injure, less likely to comment that teachers refer young people to someone who could help, χ^2 (1, n = 2251) = 4.42, p < .05, $\varphi = .05$, and less likely to suggest parents, χ^2 (1, n = 2262) = 8.83, p < .01, $\varphi = .06$, and teachers, χ^2 (1, n = 2251) = 11.4, p < .01, $\varphi = .07$, refer young people to mental health professionals. Participants with friends who engaged in NSSI were more likely to mention family conflict, χ^2 (1, n = 2262) = 31.8, p < .001, $\varphi = -.12$, and more likely to suggest nothing could be done by parents, χ^2 (1, n = 2262) = 30.5, p < .001, $\varphi = -.12$, and teachers, χ^2 (1, n = 2251) = 54.67, p < .001, $\varphi = -.16$, to help young people who self-injure.

Respondents who had thought about engaging in NSSI were less likely than those without thoughts of NSSI to mention parents, χ^2 (1, n=2262) = 13.53, p<.001, $\varphi=.08$, and teachers, χ^2 (1, n=2251) = 18.13, p<.001, $\varphi=.09$, talk and listen to young people who self-injure, less likely to suggest parents, χ^2 (1, n=2262) = 5.73, p<.05, $\varphi=.05$, and teachers, χ^2 (1, n=2251) = 6.35, p<.05, $\varphi=.05$, refer young people to mental health professionals. Respondents who had thought about engaging in NSSI (but were not self-injurers) were more likely to mention family conflict, χ^2 (1, n=2262) = 11.28, p<.01, $\varphi=-.07$, more likely to suggest they did not know how parents could help, χ^2 (1, n=2262) = 4.78, p<.05, $\varphi=-.05$, and more likely to comment that parents, χ^2 (1, n=2262) = 15.01, p<.001, $\varphi=-.08$, and teachers, χ^2 (1, n=2251) = 75.41, p<.001, $\varphi=-.18$, could do nothing to help.

Participants with a lifetime history of NSSI were less likely than those without to suggest that parents, χ^2 (1, n = 2249) = 25.95, p < .001, $\varphi = .11$, and teachers, χ^2 (1, n = 2238)

= 30.8, p < .001, $\varphi = .12$, talk to young people who self-injure, and less likely to suggest parents refer young people to formal organisations, χ^2 (1, n = 2249) = 5.23, p < .05, $\varphi = .05$. Participants who had engaged in NSSI were more likely to mention family conflict in relation to parents, χ^2 (1, n = 2249) = 24.45, p < .001, $\varphi = -.11$, and stigma in relation to teachers, χ^2 (1, n = 2238) = 4.79, p < .05, $\varphi = -.06$, more likely not to know how parents could help, χ^2 (1, n = 2249) = 5.64, p < .05, $\varphi = -.05$, and more likely to suggest that nothing could be done by parents, χ^2 (1, n = 2249) = 41.27, p < .001, $\varphi = -.14$, and teachers, χ^2 (1, n = 2238) = 64.68, p < .001, $\varphi = -.17$, to help young people who self-injure.

Discussion

We explored adolescents' views on how parents and teachers could respond to youth NSSI, and investigated how views varied according to age, gender, exposure to peer NSSI, thoughts of NSSI, and history of NSSI. Parents and teachers are in a prime position to identify and manage youth NSSI. However, given that young people are unlikely to seek their help, we needed to understand whether youth believe parents and teachers are in a position to help. In line with previous studies (De Leo & Heller, 2004; Evans et al., 2005; Fortune et al., 2008b; Nada-Raja et al., 2003), friends provide the main source of support for NSSI, with fewer adolescents turning to parents and teachers. The qualitative results of this study provide a rich and frank suite of strategies which could be addressed in educational programs to prepare parents and teachers to manage adolescent NSSI.

Overall, females were more likely than males to suggest parents and teachers talk with young people, and to comment on the importance of family relationships, while those with NSSI experience were less likely to suggest communication and more likely to reflect on the role of family conflict in NSSI. The importance of relationships and having someone to talk to for girls may reflect their greater tendency to seek help for NSSI (Evans et al., 2005), but

also appears to be the flip side of studies linking poor parental care, physical neglect, maltreatment, and family conflict with adolescent, particularly female, NSSI (Bureau et al., 2010; Gratz & Chapman, 2007; Gratz et al., 2002; Swannell et al., 2012; Van der Kolk, Perry, & Herman, 1991; Yates, Tracy, & Luthar, 2008). Our work also corroborates earlier suggestions that adolescent self-injurers feel they can cope alone, plan to sort things out for themselves, and do not want to burden their family (Evans et al., 2005; Fortune et al., 2008b; Hume & Platt, 2007).

The endorsement of helping a young self-injurer through finding someone, including an adult, relative, or teacher, to talk to youth who self-injure, parallels previous suggestions that adults should intervene when they recognise NSSI (Rissanen et al., 2009a). Adolescents did recommend referral to mental health professionals, although those with personal experience were less likely to do this. This supports the idea that self-injurers are unwilling to seek formal help (Evans et al., 2005; Fortune et al., 2008b; Hawton et al., 1996; Hume & Platt, 2007), and when they do are dissatisfied with mental health professionals (Warm et al., 2002). An alternative explanation may be a lack of identifying themselves as having a serious problem in need of professional support (Evans et al., 2005). This may be particularly true in the current sample because the majority of NSSI episodes may not have been severe enough to require medical or psychological attention.

Adolescents' reluctance to seek professional help could also derive from their experience of being labelled "unstable," "suicidal," or "freaks," in accordance with previous studies (Coggan et al., 1997; Fortune et al., 2008a, 2008b; Heled & Read, 2005; Nada-Raja et al., 2003). This may parallel teachers' expression of shock, horror, repulsion, alarm, and panic when faced with student NSSI (Best, 2006; Heath et al., 2006), as well as parents' fear of stigma and unwillingness to seek professional help (e.g., NSSI should be managed within the family without service input; Oldershaw et al., 2008; Raphael et al., 2006). Conceivably,

exposure to these attitudes may intensify adolescents' distress, and feeling of guilt and worthlessness, leading to NSSI as a means of coping. Therefore, it is particularly important for clinical intervention to target both coping skills among adolescents, and communication skills of parents and teachers.

Although others have reported that adolescents feel parents and teachers could do nothing to help (Fortune et al., 2008a), and parents and teachers are themselves unsure how to help (Byrne et al., 2008; Carlson et al., 2005; Heath et al., 2006; Oldershaw et al., 2008; Raphael et al., 2006; Rissanen et al., 2009b), we were surprised at this, given the amount of recent public media discussion about mental health problems and help-seeking. The uncertainty may derive from earlier observations that young people who self-injure, particularly males, thought the problem would resolve itself, did not think anyone could help, felt others would not listen, take them seriously or care, and thought seeking help would create more problems (Coggan et al., 1997; Fortune et al., 2008b; Nada-Raja et al., 2003). In line with a recent evaluation of an educational program with at-risk youth (Muehlenkamp et al., 2010), discussing the importance of seeking help, as well as what to expect when one seeks help, may increase students' openness to seeking help for peers, or themselves, for NSSI.

Implications

Our findings, particularly the richness and detail of qualitative comments from adolescents, have important implications for parents, teachers, and mental health professionals who may be faced by a young self-injurer. Listening to, and talking with young people, providing them with information and resources is not solely the domain of professional counsellors. They are ordinary strategies applicable by most adults. However, the suggestions do underscore the ongoing need for increasing public knowledge about a

problem that, in adolescence, is largely self-limiting. However, parents and teachers do continue to be unsure how to manage adolescent NSSI and there is a need for training in the area (Best, 2006; Byrne et al., 2008; Carlson et al., 2005; Heath et al., 2006; Heath et al., 2011; Raphael et al., 2006; Rissanen et al., 2009b; Roberts-Dobie & Donatelle, 2007).

Based on findings from the current study, specific training for parents and teachers could target how to communicate with adolescents who self-injure, how and when to access professional help, how to parent children who self-injure, and how to address and not exacerbate fears regarding not only stigma and confidentiality, but also possible sequelae. Existing psycho-education material for parents and teachers (see, for example: Muehlenkamp et al., 2010) could incorporate adolescents' experience of feeling misunderstood and seemingly frustrated by reactions of parents and teachers, which may enhance the quality of care after NSSI and foster future help-seeking. Group training for teachers could focus on suggested ways to respond and rehearsal of skills before applying them in response to a student who discloses NSSI; family therapy could strengthen parents' ability to monitor their reactions to their child's self-injury and role play alternative approaches.

The study also identified the importance of educational programs to be made available to adolescents; given that most adolescents attend school, the delivery of these in schools may be highly effective (Fortune et al., 2008b). We hope that our findings can be used in school-based educational programs for adolescents that encourage help-seeking, address concerns regarding stigma and confidentiality and, in particular, promote openness to seeking help from parents, teachers, and/or mental health professionals. Systematic clinical assessment of adolescents' needs and educational programs to improve help-seeking attitudes and intentions may be particularly important for adolescents' expressing ambivalence about what would be helpful. These recommendations may also be especially applicable to middle and senior secondary school students in Australia and high school students in North America

(year levels 9-12) who had the least confidence in teachers' ability to help, despite their desire to talk to teachers about NSSI.

Limitations

A number of limitations need to be considered. First, the study sample was not randomly selected but self-selected at different levels by private and catholic schools, principals, parents, and students. Based on comments from parents about the sensitive nature of the study, it is possible parents of children who frequently engage in NSSI withheld consent. Despite the common sense in our results they may not generalise across all Australian schools and students. Second, data were collected in class groups during school time and it is possible that school absentees may have been biased to self-injurers, thus creating a loss of experience and knowledge. Another limitation was that we did not specifically collect information about the outcome of prior help-seeking for NSSI, which could have influenced responses. As noted previously, inter-rater reliability of the theme "family conflict" was moderate, warranting caution when interpreting findings. Lastly, as part of a larger study, the two open-ended questions were preceded by a number of scales which may have influenced responses. For example, students were asked questions in relation to help-seeking for emotional or behavioural problems from parents, teachers, and mental health professionals. To develop targeted interventions designed to improve adolescents' service use for NSSI we believe further work to explore parent and teacher knowledge, and training needs regarding NSSI, is warranted.

Conclusion

Our study builds on existing literature suggesting that adolescents are reluctant to seek help from parents and teachers for NSSI, and examined adolescents' views of how parents and teachers could help young people who self-injure. The current study provides important

information to enable development of educational programs for adolescents, parents, and teachers. It may also provide new insights for clinical practices of mental health professionals working with young people who self-injure.

Chapter 6: Extended Methodology for the School Staff Studies

Introduction to the Extended Methodology for the School Staff Studies

This chapter will outline the quantitative and qualitative methods used to collect and analyse data for Chapter 7 to Chapter 9. This chapter will focus specifically on describing the school staff and the pre-service teacher samples.

Method for the School Staff Studies

Participants

School staff. Five hundred and one teachers and non-teaching staff (aged 21-67 years; M = 43.63, SD = 11.23), from 94 secondary schools in Australia participated. The sample included teachers (52.1%, n = 261), school mental health workers, such as counsellors, psychologists, and welfare coordinators (i.e., teachers with an additional counselling role; 21.2%, n = 106), school leaders, such as principals, deputy principals, and year level coordinators (i.e., teachers with the responsibility of students' pastoral care; 16.4%, n = 82), and administrative and support staff, including school nurses and integration (i.e., teacher) aides (10.4%, n = 52). No school nurse specified holding a mental health role, despite school nurses in some districts of Australia providing mental health support to students (McAllister et al., 2010).

School staff were recruited from 32 government and 62 non-government (i.e., Catholic and Independent) schools in each state and territory of Australia, including 24 in Victoria, 22 in Western Australia, 12 each in Queensland, South Australia, and New South Wales, seven in Tasmania, four in the Australian Capital Territory, and one in the Northern Territory. Most school staff were recruited from schools in Victoria (37.0%) and Queensland (14.7%), while school staff in New South Wales were under-represented (5.4%) relative to

the distribution of teachers in Australian secondary schools (33.0% New South Wales; Australian Bureau of Statistics, 2013). More female (69.7%, n = 348) than male (30.3%; n = 151) school staff also participated compared to national estimates for teachers (58.3% female; Australian Bureau of Statistics, 2013); two participants did not specify their gender. Years of experience working in secondary schools varied from less than one year to 45 years (M = 14.75 years, SD = 11.01).

Three hundred and eighty six participants were qualified teachers (77.7%), with the highest level of teaching qualifications including bachelor degrees (33.7%; with honours 2.6%), postgraduate diplomas of education (38.9%), master degrees (21.9%), and doctorate degrees (2.9%). Teachers who participated taught students in grades seven to 12 in English and literature (39.8%), mathematics (30.0%), the sciences (30.3%), social sciences and humanities (64.7%), visual and performing arts (22.0%), health and physical education (16.0%), technology (11.7%), languages other than English (6.8%) and/or home economics (5.8%). Ninety five school staff held a mental health qualification (22.1%), with the highest level of formal mental health training including bachelor degrees (41.3%), certificates (31.5%), master degrees (25.0%), and doctorate degrees (2.2%).

Pre-service teachers. Two hundred and sixty seven pre-service secondary school teachers (otherwise known as student teachers; aged 18-60 years; M = 28.40, SD = 9.66) from 14 universities (i.e., colleges) in all states and territories of Australia (except Western Australia and the Northern Territory) participated. Pre-service teachers are students attending tertiary institutions who have started but are yet to complete the theoretical and practical requirements of a teaching degree, including supervised practice in school settings (i.e., placement), enabling them to register and practice as teachers in Australia. Pre-service teachers were recruited from eight universities in New South Wales, two in Victoria, and one each in Queensland, Tasmania, the Australian Capital Territory, and South Australia.

Undergraduate teaching degrees in Australia are typically four years in duration, but can be longer if students study part-time or simultaneously complete more than one degree (i.e. a double degree). Most pre-service teachers were in the first four years of a teaching degree (77.8%; M = 3.30 years, SD = 2.10), and had completed up to 22 weeks of placement (M = 4.61 weeks, SD = 10.86). More females (79.1%, n = 208) than males (20.9%, n = 55) participated (four pre-service teachers did not specify their gender).

While the questionnaire for school staff (Appendix C) and pre-service teachers

(Appendix D) included several questionaries, only measures included in Chapter 7 to Chapter

9 will be described. School staff and pre-service teachers were administered the same

questionnaire with minor alternations to demographics questions as outlined below.

Materials

Demographics Questions

School Staff were asked to provide demographic information on their age, gender, occupation in the education sector, years of professional experience, extent of personal and professional experience with students and/or other people who self-injure, the extent of any specific training in relation to self-injury, and desire for future training.

Demographic questions for pre-service teachers included their age, gender, years of tertiary training, weeks of supervised placement in school settings, extent of personal and professional experience with students and/or other people who self-injure, the extent of any specific training in relation to self-injury, and desire for future training.

Attitudes towards Deliberate Self-Harm Questionnaire (ADSHQ)

The ADSHQ (McAllister et al., 2002) was developed to examine dimensions of accident and emergency department nurses' attitudes towards patients who self-injure

(referred to as DSH). Items on the ADSHQ were developed based on a review of the literature and a focus group with post-graduate nursing students, and piloted with 20 accident and emergency department nurses to establish face and content validity. The self-report measure was then validated among 352 nurses in Australia using exploratory factor analysis (EFA) which revealed four factors, including: 1) perceived confidence in assessment and referral of self-injuring patients (e.g., "Ongoing education and training would be useful in helping me deal appropriately with deliberate self-harm clients"; α = .71); 2) ability to deal effectively with patients who self-injure (e.g., "I have the appropriate knowledge in counselling skills to help deliberate self-harm clients"; α = .74); 3) empathetic approach (e.g., "Clients who deliberately self-harm are just attention seekers"; α = .67); and 4) ability to cope effectively with legal and hospital regulations that guide practice (e.g., "The hospital system impedes my ability to work effectively with deliberate self-harm clients"; α = .57; McAllister et al., 2002).

Pre-service teachers and school staff completed the 25-item ADSHQ, which was modified by substituting the terms education system for hospital system, student for client, and self-injury for self-harm, ensuring that the terms used within the questionnaire were consistent and appropriate for school staff and pre-service teachers (Table 7). Items on the ADSHQ were scored on a 4-point Likert scale from one (*strongly disagree*) to four (*strongly agree*). Negatively phrased items were reverse scored and items summed to produce a total score for each subscale, with higher scores indicating greater perceived confidence and more positive attitudes in response to students who self-injure. The modified questionnaire was validated among school staff (Chapter 7) using EFA to yield 16-items across three distinct factors, including: 1) dealing effectively with self-injuring students; 2) perceived confidence in assessment and referral of self-injuring students; and 3) ability to cope effectively with legal and school regulations that guide practice.

Table 7

Changes to the Wording of Items from the Original ADSHQ

ADSHQ factor	Original item wording	New item wording
Factor 1: Perceived	Clients who deliberately	Students who deliberately
confidence in assessment and	self-harm are in desperate	self-injure are in desperate
referral of DSH clients	need of help	need of help
Factor 2: Dealing effectively	I deal effectively with	I deal effectively with
with DSH clients	deliberate self-harm clients	students who deliberately
		self-injure
Factor 3: Empathetic	Dealing with self-harm	Dealing with students who
approach	clients is a waste of the	self-injure is a waste of an
	healthcare professional's	educators time
	time	
Factor 4: Ability to cope	The way the hospital system	The way the education
effectively with legal and	works encourages repetition	system works encourages
hospital regulations that	of deliberate self-harm	repetition of deliberate self-
guide practice	behaviours	injury behaviours

Note. Factor 3 (empathetic approach) did not emerge as a factor when the ADSHQ was validated among school staff.

Self-Injury Knowledge Questionnaire

The Self-Injury Knowledge Questionnaire (Jeffery & Warm, 2002) is a self-report measure which was developed based on a review of the literature to assess healthcare professionals' (e.g., psychiatrists, psychologists, and nurses) knowledge about self-injury (referred to as self-harm). This questionnaire has also been used with teachers and other school staff (Beld, 2007; Butts, 2008; Reed, 2010). The 20-item Self-Injury Knowledge Questionnaire includes 10 items which Jeffery and Warm (2002) identified as accurate statements about self-injury (e.g., "self-injury is a form of communication"), and 10 items identified as inaccurate statements about self-injury (e.g., "self-injury is a women's

problem"). Pre-service teachers and school staff rated their agreement with each statement on a 5-point Likert scale ($strongly\ disagree-strongly\ agree$). Statements relating to inaccurate statements about self-injury were reverse scored and respective items summed to produce a total score for each subscale, with higher scores indicated greater understanding of self-injury. Jeffery and Warm (2002) reported that the Self-Injury Knowledge Questionnaire has good internal consistency (.75) and spit-half reliability (.84) with healthcare professionals, while reliability of the measure with teachers is also adequate ($\alpha = .71$; Butts, 2008).

The Teachers' Knowledge and Beliefs about Self-Injury Questionnaire

The Teachers' Knowledge and Beliefs about Self-Injury questionnaire (Heath et al., 2006; Heath et al., 2011), is a 19-item self-report questionnaire which was designed to measure teachers perceptions towards youth NSSI across four dimensions, including: 1) confidence to respond to students who self-injure (e.g., "I would feel comfortable if a student spoke to me about NSSI"), 2) self-perceived knowledge about student self-injury (e.g., "I feel knowledgeable about NSSI"); 3) actual knowledge about student self-injury (e.g., "Students who self-injure are usually suicidal"); and 4) attitudes towards students who self-injure (e.g., "I find the idea of cutting or burning the skin horrifying").

Pre-service teachers and school staff responded to 12 multiple choice items scored on a 5-point Likert scale from one (*strongly disagree*) to five (*strongly agree*); items for the information and attitudes subscales were reverse scored, and respective items summed to yield total scores for each subscale. Higher scores indicated greater confidence, higher self-perceived and actual knowledge, and more positive attitudes. The Teachers' Knowledge and Beliefs about Self-Injury questionnaire has low to adequate internal consistency among teachers for the confidence ($\alpha = .65$), perceived knowledge ($\alpha = .79$), actual knowledge ($\alpha = .40$), and attitudes ($\alpha = .57$) subscales (Heath et al., 2011).

Although Heath et al. (2006) validated the Teachers' Knowledge and Beliefs about Self-Injury questionnaire and revealed only two factors (i.e., self-perceived knowledge and attitudes), the original questionnaire which also assessed teachers confidence and actual knowledge was used in this thesis, in line with more recent research (Heath et al., 2011), and to compare this measure of confidence with the newly validated ADSHQ. To improve reliability of the actual knowledge subscale and ensure that items were scored in the same direction, the question "students who self-injure often have eating disorders" was reverse scored. Although research has found that self-injury and eating disorders often co-occur among adolescents, many young people who self-injure do not have eating disorders and vice versa (Muehlenkamp, 2005). Thus, use of the term "often" may have misled pre-service teachers and school staff to disagree with this item.

Five multiple choice questions also assessed the knowledge of pre-service teachers and school staff regarding the age of onset and prevalence of NSSI, and methods used by adolescents to self-injure. In addition, pre-service teachers and school staff responded to two open-ended questions asking them to describe why they believe secondary school students would self-injure, and what they think researchers in this area need to know about their experiences with students who self-injure (Heath et al., 2006; Heath et al., 2011).

Open-Ended Questions

Pre-service teachers and school staff experienced with students who self-injure were asked open-ended questions about their usual response to students who self-injure, how effective and confident they feel helping students who self-injure, and how they might respond differently to students who self-injure in future. Those who had participated in training regarding NSSI were also asked to respond to open-ended questions about the

content of the training they had received, how it was delivered, and how effective they feel the training was.

Participants, regardless of their previous experience and training in the area of NSSI, were also asked open-ended questions about perceived barriers to responding to students who self-injure in schools, and who they would go to for help or advice if they encountered a student who had self-injured. Finally, participants were asked to indicate their willingness to participate in future training regarding NSSI, the preferred content and delivery of such training, and how they feel about young people who self-injure.

Procedure

School staff. Ethical approval was obtained from the Monash University Human Research Ethics Committee. Approval was also obtained from Catholic Education Archdioceses and local Dioceses in Victoria, South Australia, Queensland, the Australian Capital Territory, and Tasmania, and Departments of Education in Victoria, South Australia, the Australian Capital Territory, and Tasmania, which allowed Catholic and Government schools, respectively, in these states and territory to participate, with the permission of their school's principal. Independent schools did not require approval from an external organisation to participate, provided that consent from their school's principal was obtained. School principals of independent schools and those within each authorised state and territory Department of Education and Catholic Education district were contacted.

One thousand, four hundred and eighty eight principals were sent a letter inviting their school to participate. Eighty six school principals consented to participate (5.9%). Comments from principals who did not consent suggested that time constraints and competing school priorities (including commitment to other research projects) prevented these schools from participating. Principals who agreed for their school to participate were asked to distribute

copies of the information sheet (which included a URL link to the online questionnaire; Appendix E) to teachers and non-teaching staff. School psychologists were also invited to participate through an advertisement on the Australian Psychological Society website (http://www.psychology.org.au/).

Interested staff were invited to complete the online questionnaire at a time and location of their convenience. When participants clicked on the link to complete the questionnaire, all identifiable tracking information, such as IP and email addresses were hidden in all reports, survey dashboards, and data exports. Surveys were returned anonymously via the online survey supplier to a password protected account which was accessible only to the researchers. The online questionnaire took between 30 and 40 minutes to complete. School staff were reminded on the information sheet that participation was voluntary and they could withdraw from the study prior to submitting the online questionnaire.

Given that the online questionnaire was anonymous and consent was implied when participants submitted the questionnaire, the response rate could not be calculated. However, based on comments from principals, it is possible that staff who had difficulty accessing the online questionnaire and those with limited time were less likely to complete the questionnaire. Contact details of the researchers were provided on the information sheet, and the researchers were available to answer questions from school staff about the questionnaire. Participants were also provided with contact details of mental health services and crisis hotlines at the end of the questionnaire and on the information sheet in the event that they experienced distress as a result of participating in the project. As an incentive to complete the questionnaire, participants were invited to enter a draw to win movie tickets by volunteering their preferred contact details.

Pre-service teachers. A similar procedure was used to recruit pre-service teachers. After obtaining ethical clearance from the Human Research Ethics Committee of Monash University, 129 coordinators of university-based teacher education courses nationwide were sent a letter and invited to distribute the information sheet (Appendix E) to pre-service teachers at their university. Sixty six coordinators agreed to distribute the information sheet to pre-service teachers (51.2%). Pre-service teachers were invited to access the online questionnaire through the URL link provided on the information sheet, and reminded that participation was voluntary and they could withdraw from the study prior to submitting the questionnaire. Interested pre-service teachers completed the anonymous questionnaire at a time and location of their convenience. Contact details of the researchers were provided on the information sheet and researchers were available to answer questions from participants during the course of the study. Telephone numbers and websites of crisis hotlines were provided on the information sheet, as well as upon completion of the questionnaire. The online questionnaire took between 30 and 40 minutes to complete, and participants were invited to enter a draw to win cinema tickets as compensation for their time.

Quantitative Analyses

Missing Data Analyses

Missing data analyses were performed to assess whether missing data were missing completely at random (MCAR), missing at random (MAR), or missing not at random (MNAR; otherwise known as not missing at random [NMAR]). MCAR refers to instances where missing data are not related to, or conditional on, observed values in the data or unobserved variables beyond the data. MAR refers to the propensity for missing data to be associated with, or conditional on, observed values in the data. MNAR refers to situations in which even after accounting for observed values, missing data are related to, or conditional

on, unobserved variables outside of the data (Scheffer, 2002; Sinharay, Stern, & Russell, 2001; Sterne et al., 2009). Although it is possible to determine whether missing data are MCAR or MAR, it is difficult to distinguish between MAR and MNAR because the difference between these two types of missing data is based on unobserved variables (Sinharay et al., 2001).

The measures had between 20 and 30% missing data, and Little's MCAR test suggested that the pattern of missing data was not MCAR in Chapter 7, χ^2 (4059) = 4303, p < .01, or Chapter 8, χ^2 (203) = 237.49, p < .05. Therefore, missing data were MAR or MNAR, and listwise deletion of missing cases could potentially bias estimates and reduce power (Tabachnick & Fidell, 2007). Pairwise deletion, in which only cases with missing data for the analysis being carried out are excluded, may also potentially bias estimates for data that is not MCAR (Sterne et al., 2009; Tabachnick & Fidell, 2007). Multiple imputation, expectation-maximisation, and regression imputation are also valid procedures for handling missing data, provided the missing data are MAR, and not MNAR, and the percentage of missingness is less than 25% (Sterne et al., 2009).

To evaluate the potential impact of treating missing data as MAR, logistic regressions were completed to explore the relationships between missing data and observed variables, and to test for patterns in the missing data using dummy variables with two groups (not missing = 0, missing = 1; Jeličić, Phelps, & Lerner, 2009; Patrician, 2002; Spratt et al., 2010). The models could distinguish between participants with and without missing data on subscales of perceived confidence and knowledge. Specifically, participants with missing values on perceived confidence and knowledge were more likely to be pre-service teachers, while those with missing data on confidence were less likely to have experience with students who self-injure.

Therefore, missing values were not MCAR and cases with missing data needed to be retained to decrease biased estimates and preserve statistical power for further analyses (Tabachnick & Fidell, 2007). According to the MAR assumption, single (or mean) and multiple imputation methods could provide an unbiased estimate of missing values that would be have been observed if all participants had completed the measures. However, given that the proportion of missing values on the subscales was greater than 10%, mean substitution could not be used because this method may have lead to biased estimates of missing values (Scheffer, 2002). Multiple imputation could also be used if missing values were MAR, and the range of observed variables which predicted the missing values were included in the imputation model (Sterne et al., 2009).

However, if the missing data were associated with unobserved variables (i.e., MNAR) then multiple imputation may overestimate the relationships between variables, and introduce additional sources of bias into the model (Sterne et al., 2009). For example, if participants who did not complete the measures due to a lack of time were more likely to have experience responding to students who self-injure, then unless limited time was included in the model, multiple imputation may have underestimated the perceived confidence of participants, and wrongly estimated the association between confidence regarding self-injury and experience with students who self-injure (Sterne et al., 2009).

Examination of the pattern of missing data revealed that on average subscales of the ADSHQ had 24.3% missing data, while subscales of the Self-Injury Knowledge Questionnaire had 26.7% missing data, and subscales of the Teachers' Knowledge and Beliefs about Self-Injury questionnaire had on average 29.5% missing data. Consequently, missing data appeared to increase across the questionnaire between the first (i.e., ADSHQ) and last (i.e., Teachers' Knowledge and Beliefs about Self-Injury questionnaire) measure. Therefore, it cannot be excluded that some of the data may have been MNAR, and methods

for handling missing data which are MAR, such as multiple imputation, may not provide an appropriate solution for the missing data (Sterne et al., 2009).

Multiple imputation also does not produce a unique answer and each imputed data set yields slightly different estimates and standard errors. Therefore, parameter estimates need to be combined across the multiply imputed sets of data using Rubin's (1987) method to obtain a single set of results. However, EFA (as used on the ADSHQ), which requires multiple analyses of factor loadings and solutions, does not support pooling of multiply imputed data sets produced by multiple imputation (Patrician, 2002). Based on this missing data analyses, pairwise deletion was determined to be the most appropriate approach to handle the missing data, to reduce biased estimates associated with imputing between 20 and 30% of missing data across the variables (Sterne et al., 2009), while also retaining statistical power for further analyses (Acock, 2005).

Confirmatory and Exploratory Factor Analysis

The 25-item Attitudes towards Deliberate Self-Harm Questionnaire (ADSHQ; McAllister et al., 2002) was subject to confirmatory and exploratory factor analyses. A confirmatory factor analysis (CFA) was performed with AMOS using maximum likelihood estimation to explore whether the initial factor structure of the ADSHQ could be replicated using the observed data. The chi-square goodness-of-fit was significant, χ^2 (279) = 1543.497, p < .001, suggesting that the factor structure was a poor fit for the data. However, given that chi-square goodness-of-fit indices are particularly sensitive to sample size (Matsunaga, 2010; Tabachnick & Fidell, 2007), the comparative fit index (CFI) and root mean square error of approximation (RMSEA) were used to evaluate the fit of the model (Hu & Bentler, 1999). The model RMSEA was higher than the recommended cut-off value of .06 (RMSEA = .09), while the CFI (CFI = .42) value demonstrated poor model fit as it was less than the

recommended cut-off value of .95 (Hu & Bentler, 1999). Given the poor fit between the model and the data, EFA with oblique rotation was performed on the ADSHQ.

EFA is a technique used to summarise and describe large groups of inter-correlated variables and group them into smaller sets of dimensions or latent variables. EFA is used extensively by researchers to develop and evaluate tests and measures (Tabachnick & Fidell, 2007). However, prior to performing EFA, the suitability of the data for EFA should be explored. Specifically, two main issues were considered in determining whether the data were suitable for EFA: the sample size and the strength of relationships between items. The required sample size of at least 300 cases for EFA was exceeded, while inspection of the correlation matrix revealed coefficients above .30 (Tabachnick & Fidell, 2007), supporting use of EFA with oblique rotation (Matsunaga, 2010). Factorability of the correlation matrix was also supported by Bartlett's Test of Sphericity (Bartlett, 1954), which was significant (*p* < .05), and the Kaiser-Meyer-Olkin (KMO; Kaiser, 1970; Kaiser, 1974) measure of sampling adequacy, which exceeded the recommended minimum value of .60 (Tabachnick & Fidell, 2007). EFA can also be sensitive to outliers (Tabachnick & Fidell, 2007). Therefore, univariate and multivariate outliers were detected and deleted, but later retained as the factor solution did not change with deletion of these outliers.

After establishing that the data were appropriate for EFA, a number of techniques were used to determine the number of factors to retain, including Kaiser's criterion, Cattell's scree test, and Horn's parallel analysis. Using Kaiser's criterion, only factors with eigenvalues (the amount of total variance explained by the factors) of 1.0 or greater were retained for further analyses. Cattell's scree test (Cattell, 1966) was then inspected to find the point of inflection or break (i.e., elbow) in the data, where the curve changed direction and become horizontal. Only factors above this point were retained. The number of data points above this break (not including the point at which the break occurred) was used to establish

the number of factors to retain, as these factors explained the most variance in the data. Finally Horn's parallel analysis (Horn, 1965) compared the size of the eigenvalues with those obtained from a randomly generated data set of the same size. Only factors with eigenvalues larger than the criterion values from the randomly generated data set were retained (Tabachnick & Fidell, 2007; Williams, Brown, & Onsman, 2010). The results of these three tests supported the decision to retain three factors of the ADSHQ. Specifically, EFA revealed four factors with eigenvalues exceeding 1.0, while inspection of the scree plot revealed a clear break after the third factor, and results of the parallel analysis showed only three factors with eigenvalues which exceeded the corresponding criterion value obtained from the randomly generated data matrix (Tabachnick & Fidell, 2007; Williams et al., 2010).

Oblique rotation analysis was used (rather than orthogonal rotation) as the underlying constructs were correlated, and therefore not independent (Tabachnick & Fidell, 2007). This process was repeated until a *simple solution* (Thurstone, 1947) was obtained where each item loaded strongly onto one factor, and each factor was represented by several strongly loading items (i.e., above the recommended level of .40; Matsunaga, 2010; Tabachnick & Fidell, 2007). Items which loaded strongly (with loading greater than .40) on only one factor were retained, while items with loadings of less than .40 or those which loaded onto a number of factors resulting in a *non-simple solution* (Thurstone, 1947) were removed and the analysis was repeated until a simple three-factor solution was obtained. Cronbach's alpha coefficients were then used to determine the internal consistency of the three factors, with additional items removed to improve the reliability of factors (Raubenheimer, 2004).

Multivariate Analyses of Covariance

Multivariate analyses of covariance (MANCOVAs) were used to evaluate differences between two or more groups of the independent variables (IVs) on a set of dependent

variables (DVs), with two covariates (i.e., age and length of experience working in schools). MANCOVAs were used instead of several analyses of covariance (ANCOVAs) to adjust for the increased risk of inflated type I error associated with conducing a series of ANCOVAs, and to determine whether there were differences on the DVs between the groups separately, and in combination with each other (Tabachnick & Fidell, 2007).

Preliminary assumption tests were conducted to determine whether the data conformed to the assumptions for conducting MANCOVAs, including normality, linearity, univariate and multivariate outliers, homogeneity of variance-covariance matrices, and multicollinearity (Tabachnick & Fidell, 2007). Normality and linearity were checked using Mahalanobis distance and scatterplots between the variables and levels of the IVs. Although skewness and kurtosis were detected and square-root transformations were applied, linearity, outliers, skewness, and kurtosis were not improved with transformations and several additional outlying cases were identified. Therefore, untransformed data were retained for further analyses. Cases with univariate and multivariate outliers were detected (p < .001). However, exclusion of these outliers did not change the results so data were retained.

Box's test of equality of covariance matrices (i.e., Box's M) revealed that the data did not violate the assumption of homogeneity of variance-covariance matrices (p > .05). Pearson correlation coefficients between the DVs also suggested that multicollinearity and singularity was not a problem (correlations equal to or less than .70; Tabachnick & Fidell, 2007). Post hoc comparisons using Tukey's Honestly Significant Difference (HSD) were conducted for the IVs with more than two groups to identify where the significant differences were between groups (i.e., mental health professionals vs. teachers).

Qualitative Analyses

Thematic Analysis

For similar reasons to those described in Chapter 3 (Table 1), thematic analysis was used to analyse the qualitative data generated from the open-ended questions included in Chapter 7 to Chapter 9 of this thesis.

Chapter 7: "We're Working in the Dark Here": Education Needs of Teachers and School Staff Regarding Student Self-Injury

Aims and Outline of the Study

This chapter comprises the third study of this thesis which aimed to validate a measure of attitudes among school staff towards students who self-injure, to identify the knowledge, attitudes, and confidence of teachers and other school staff towards youth NSSI, and explore the relationships between these factors and how school staff respond to students who self-injure. Although Chapter 5 of this thesis found that adolescents want non-judgmental teaches to talk to about NSSI, and previous research has shown that teachers are among the first to identify and refer young people who self-injure (Oldershaw et al., 2008; Roberts-Dobie & Donatelle, 2007), no prior study has evaluated the level of knowledge and confidence of Australian teachers and other school staff in responding to students who self-injure, and the attitudes they may hold towards this group of students.

Previous research suggests that teachers and other school staff have limited knowledge of NSSI, express unfavourable attitudes towards the behaviour, and lack confidence and training when responding to students who self-injure (e.g., Carlson et al., 2005; Heath et al., 2011). However, the authors of these studies did not measure teachers attitudes towards NSSI using questionnaires with demonstrated reliability and validity. Therefore, reliability of a measure of attitudes with school staff was established in this study to ensure that conclusions draw from this thesis and recommendations for prevention and early intervention initiatives are drawn from reliable data.

Furthermore, while researchers have identified gaps in the knowledge of teachers and other school staff regarding youth NSSI, whether the attitudes and confidence of school staff towards NSSI are related to their responses to students who self-injure has not been

evaluated. This is despite theoretical and empirical literature indicating that attitudes and self-efficacy are important determinants of behaviour, and training for school staff to improve their attitudes and confidence towards at-risk youth has the potential to increase help-seeking among students (e.g., Ajzen, 1991; Wyman et al., 2008).

Therefore, the aims of the study presented in this chapter were to validate a measure of attitudes towards NSSI with school staff, to examine the knowledge, attitudes, and confidence of school staff towards students who self-injure, and explore the relationship between staff attitudes and responses to NSSI, using the thematic analysis procedure described in Chapter 3 (Table 2) and multivariate analyses. By achieving these aims, this study may inform the development of tailored education programs and resources for teachers and other school staff in response to youth NSSI.

Declaration for Thesis Chapter 7

Monash University

In the case of Chapter 7, the nature and extent of my contribution to the work was the following:

Nature of contribution	Extent of contribution (%)
Study conceptualisation	70%
Data collection and data cleaning	100%
Statistical analyses and interpretation of the results	80%
Writing the paper for publication	80%

The following co-authors contributed to the work. If co-authors are students at Monash University, the extent of their contribution in percentage terms must be stated:

Name	Nature of contribution	Extent of contribution	
		(%) for student co-	
		authors only	
Penelope Hasking	Study conceptualisation, assistance with	n/a	
	statistical analyses and interpretation, and		
	editing		
Andrea Reupert	Assistance with qualitative analyses and	n/a	
	interpretation, and editing		

The undersigned hereby certify that the above declaration correctly reflects the nature and extent of the candidate's and co-authors' contributions to this work.

Candidate's signature: Date: 09/09/2014

Main supervisor's signature: Date: 09/09/2014

Abstract

Although teachers and other school staff encounter adolescents who self-injure, the behaviour evokes strong reactions. We (a) validated a measure of attitudes towards self-injury, (b) examined knowledge, confidence, and education needs regarding self-injury, and (c) explored the relationship between attitudes and responses to self-injury among 501 secondary school teachers and other school staff. Three factors reflecting participants' attitudes were extracted. Experience was related to knowledge and confidence regarding self-injury, but not to attitudes. Thematic analysis of open-ended questions indicated a desire for education and resources. Implications for teacher education and school policies to support teachers in addressing self-injury are discussed.

Key words: self-injury; education; teachers; school staff.

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Introduction

Non-suicidal self-injury (NSSI), the deliberate destruction of body tissue without suicidal intent (Nock & Favazza, 2009), typically begins in adolescence (Jacobson & Gould, 2007; Ross & Heath, 2002), with prevalence among adolescents approximately 10 to 23% (G. Martin et al., 2010; Muehlenkamp & Gutierrez, 2007). Despite adverse outcomes for adolescents who self-injure, these young people are reluctant to seek professional help (Evans et al., 2005; Fortune et al., 2008b). This may, to some extent, result from negative attitudes and inaccurate knowledge of health professionals (McAllister et al., 2002), leading to inappropriate management of these individuals (Gagnon & Hasking, 2012; McAllister & Estefan, 2002; Warm et al., 2002) and reduced help-seeking (Hadfield et al., 2009; Patterson et al., 2007b).

Teachers and other staff working in secondary schools are in a unique position to identify youth who self-injure and encourage help-seeking (Heath et al., 2011). Yet, relatively few studies have examined the knowledge and attitudes of school staff towards NSSI, or their confidence in addressing this complex issue. Similar to health professionals, inaccurate knowledge and negative attitudes (including confidence in assessment and referral of students who self-injure, and empathy) may interfere with the ability of school staff to efficiently identify and refer these students (Heath et al., 2011). Given referral by teaching and other school staff is a significant factor in receipt of timely treatment (Oldershaw et al., 2008; Roberts-Dobie & Donatelle, 2007), research exploring their response and attitudes towards NSSI is crucial.

In response to the extent of NSSI among students (see, for example Jacobson & Gould, 2007), school staff are calling for education to improve their knowledge, confidence, and skills to prevent youth NSSI (Best, 2005, 2006; Carlson et al., 2005; Heath et al., 2006;

Roberts-Dobie & Donatelle, 2007). For example, Best (2005, 2006) reported UK teachers and other school staff (i.e., school nurses and counsellors) are ill-informed about self-harm (suicidal behaviour and NSSI) and express shock, repulsion, alarm, and panic towards the behaviour. In North America, Carlson et al. (2005) found teachers experienced with students who self-injure are more knowledgeable and confident to respond, while Heath et al. (2011) found those with more years of teaching experience are more likely to hold negative attitudes (e.g., self-injury is horrifying) than inexperienced teachers. Robinson et al. (2008) documented that Australian school psychologists and those with NSSI education are more confident in their ability to respond than school welfare coordinators (teachers with an additional counselling role) and school nurses.

While experience and education appear to be associated with improved knowledge and confidence in response to NSSI, findings in relation to attitudes are mixed, possibly because few studies have employed standardised measures to examine attitudes towards NSSI. Before sound research in this area can be conducted, a measure of attitudes needs to be validated to ensure accurate and reliable data are used to inform education initiatives. Further, although *confidence* to respond to youth who self-injure has been assessed in previous work, little is known about how teachers and other staff working in the secondary sector actually *respond* to NSSI in a school setting. Similar to health professionals, changes in the knowledge and attitudes of school staff towards NSSI through education may enhance how effectively they manage the behaviour (Heath et al., 2011).

School staff are often asked to implement school-based universal (i.e., targeting all students) mental health interventions, as well as refer students in need of additional support (Reinke, Stormont, Herman, Puri, & Goel, 2011). School staff thus act as "gatekeepers" for this group of young people. Although research has shown that training enhances knowledge and confidence of school staff to respond to students who self-injure (Robinson et al., 2008),

few have evaluated the impact of staff attitudes and confidence on actual responses to NSSI. The influence of attitudes and self-efficacy on behaviour has been widely documented (Ajzen, 1991; Bandura, 1989). Specifically, the Theory of Planned Behaviour articulates the relationship between positive attitudes, perceived behavioural control, and behaviour (Ajzen, 1991), while Social Cognitive Theory argues that confidence in one's ability to enact change (i.e., self-efficacy) is an important determinant of behaviour (Bandura, 1989). As applied to NSSI, both positive attitudes and belief in one's ability to address NSSI in a school setting would seem to be important determinants of whether school staff can appropriately act as gatekeepers for youth at risk.

The surveillance model of gatekeeper training builds on these theories, suggesting that training increases confidence to detect and intervene. Conversely, the communication model argues that the attitudes of students and the relationships between students and school staff can impact on how effective training might be (Wyman et al., 2008). While both staff training and communication with students are likely to improve attitudes, confidence, and ability to respond to NSSI in school settings, to date, no empirically validated gatekeeper training programs specifically address NSSI. To inform the most efficient means of gatekeeper training we first need to understand the current education needs of school staff.

We recognise that teachers may lack formal mental health training (Koller et al., 2004), and therefore are not expected to perform the role of mental health professionals. Further, teacher education cannot realistically prepare teachers for all the situations they will meet. Yet professional development can equip teachers and other school staff with the knowledge and necessary skills to make informed choices in response to NSSI. Education requires accurate identification of the current attitudes and skills of school staff regarding youth NSSI (Kibler, 2009; Roberts-Dobie & Donatelle, 2007). The current study sought to extend previous research by evaluating responses of teachers and other staff towards NSSI in school

settings, and the relationship between their attitudes, confidence, and responses to this behaviour.

The Current Study

We aimed to validate a measure of attitudes towards NSSI, examine the knowledge, attitudes, and confidence of school staff towards NSSI, and determine if demographics and work history are related to knowledge, attitudes, and confidence in addressing NSSI. We also sought to elicit the attitudes, typical response to NSSI, and experiences of NSSI in the school environment through open-ended questions which do not pre-suppose knowledge and allowed teachers and staff to voice their concerns regarding NSSI in the school system. By investigating the response of school staff, it will be possible to explore whether knowledge and confidence are related to communication with and referral of students who self-injure, in accordance with the surveillance model. Given the preceding review, it was anticipated that school mental health workers and those with experience or education in the area would demonstrate greater knowledge and confidence towards NSSI than teachers and those without NSSI experience or education.

Method

Participants

Five hundred and one secondary school staff (348 females, 151 males; aged 21-67 years; M = 43.63, SD = 11.23) completed an online questionnaire. The sample comprised mainly teachers (52.1%, n = 261), school-based mental health workers, including counsellors, psychologists, and welfare coordinators (21.2%, n = 106), school leaders, including principals, deputy principals, and year level coordinators (with the responsibility of students' pastoral care; 16.4%, n = 82), and administrative and support staff, including school nurses

and integration (i.e., teacher) aides (10.4%, n = 52). Although school nurses in some Australian jurisdictions provide mental health care (McAllister et al., 2010), nurses in the current sample were not part of the student welfare team. Years working in secondary schools ranged from less than one to 45 years (M = 14.75 years, SD = 11.01). Participants were recruited from publically funded and private secondary schools (students aged 12-18 years) in all Australian states and territories.

Materials

Demographic Questions

Participants were asked to provide demographic information on their age, gender, occupation in the education sector, and years of professional experience, as well as whether they had responded to students who had self-injured (yes or no), and whether they had received training in relation to self-injury (yes or no).

Staff Attitudes

Participants completed a modified version of the 25-item Attitudes towards Deliberate Self-Harm Questionnaire (ADSHQ) originally developed to investigate attitudes and confidence of hospital emergency department nurses' in their responses to patients who self-injure (McAllister et al., 2002). The modification consisted of substituting the terms educational system for hospital system, and student for client. Responses were made using a 4-point Likert scale from 1 (*strongly disagree*) to 4 (*strongly agree*). The original ADSHQ contained four distinct factors which assessed perceived confidence in assessment and referral of clients who self-injure, dealing effectively with self-injuring clients, empathetic approach, and ability to cope effectively with legal and hospital regulations that guide practice. Initial validation of the measure with nurses revealed adequate to relatively poor

internal consistency across the four factors (perceived confidence α = .71; dealing effectively α = .74; empathetic approach α = .68; and ability to cope α = .57; McAllister et al., 2002). In an additional open-ended question, participants were asked to describe how they feel about young people who self-injure.

Staff Knowledge

The 20-item Self-Injury Knowledge Questionnaire (Jeffery & Warm, 2002) measured the ability of participants to identify accurate (e.g., self-injury is a coping strategy) and inaccurate (e.g., self-injury is a failed suicide attempt) statements about NSSI. Accurate and inaccurate items were identified based on the literature and statements endorsed by those who self-injure. Participants indicated the extent to which they agreed with each statement on a 5-point Likert scale from 1 (*strongly disagree*) to 5 (*strongly agree*; Jeffery & Warm, 2002). Tests of total scale and subscale reliability in this sample revealed adequate internal consistency (total scale $\alpha = 77$; accurate statements $\alpha = 78$).

The Teachers' Knowledge and Beliefs about Self-Injury questionnaire (Heath et al., 2006; Heath et al., 2011) is a 19-item measure (including 12 Likert scale items, 5 multiple-choice items, and 2 open-ended questions) designed to assess teachers' ability to recognise information about NSSI, as well as attitudes towards self-injuring adolescents, confidence responding to adolescents who self-injure, and level of perceived knowledge towards youth NSSI (i.e., self-perceived knowledge). Participants responded to 12 items on a 5-point Likert scale (*strongly disagree – strongly agree*). Cronbach's alpha scores indicated poor to acceptable internal consistency of the total scale ($\alpha = .50$), and across items assessing information ($\alpha = .58$; 5 items), attitudes ($\alpha = .63$; 3 items), confidence ($\alpha = .75$; 2 items), and self-perceived knowledge ($\alpha = .80$; 2 items). Participants also responded to five multiple-choice items, which assessed knowledge and experience of NSSI, and two open-ended

questions including: "Why do you think secondary school students would deliberately self-injure?"; and "What do you think researchers in this area need to know about your experiences with self-injury in students?" (Heath et al., 2006; Heath et al., 2011).

Response to NSSI

In an open-ended question participants who had encountered students who self-injure were asked to "describe what [they] did to assist the student who self-injured." For the purpose of the present study, the definition of NSSI as outlined in the introduction of this manuscript (i.e., Nock & Favazza, 2009) was provided to participants at the beginning and midway through the questionnaire to increase validity and ensure participants' responses were made with reference to NSSI. Although participants were given a definition of NSSI, some used the term self-harm in response to the open-ended questions. However, Gagnon and Hasking (2012) demonstrated that Australian psychologists may use the term self-harm when referring to NSSI.

Procedure

After obtaining ethical approval (i.e., IRB approval), school principals were mailed information about the project and invited to contact the researchers if they consented to information sheets being distributed to teaching and other school staff. Of the 1488 principals mailed information about the project, 86 agreed to distribute the information to staff. The study was also advertised to school psychologists on the Australian Psychological Society website. Participants were invited to access an anonymous online questionnaire through a URL link included on the information sheet or advertisement. The online questionnaire took approximately 30 to 40 minutes to complete, and participants were invited to enter a draw to win cinema tickets as compensation for their time.

Data Analysis

To accurately assess attitudes held by participants and measure changes in attitudes over time or as a result of education programs, a reliable and valid measurement tool is urgently required. Confirmatory factor analysis (CFA) was conducted on the modified 25-items of the ADSHQ to investigate whether the existing structure, validated with emergency department nurses (McAllister et al., 2002), was a good fit for staff in the school environment (McAllister et al., 2002). Given the conceptual overlap between factors assessed by the ADSHQ and the Teachers' Knowledge and Beliefs about Self-Injury questionnaire resultant factors were correlated. Pearson correlation coefficients and MANCOVA were used to examine whether knowledge, attitudes and confidence varied according to age, gender, years of professional experience, occupation, experience and education in NSSI, and responses to NSSI. G*Power (Faul, Erdfelder, Lang, & Buchner, 2007) a priori power analysis (Cohens $f^2 = .02$, p = .05; power = .80) determined a sample size of 245 participants was required, fewer than our sample of 501.

Qualitative responses were analysed using thematic analysis as proposed by Braun and Clarke (2006). Initial codes were developed and collated into themes. Key themes were then sorted and refined, whilst others were merged. Responses exceeded the total number of participants because some participants presented more than one view (e.g., "concerned" and "wanted to help") which were coded into all relevant themes (e.g., "sympathetic and concerned" and "desire to help"). Twenty percent of data were recoded by a researcher independent of the study to produce inter-rater reliability ranging from moderate to almost perfect (.56 - .91; Landis & Koch, 1977) agreement across themes. Chi-square analyses examined how responses differed according to occupation.

Results

Prior to analysis, data were examined for accuracy of data entry, missing values and fit between the distribution and assumptions of multivariate analysis. Data were not missing completely at random (MCAR), χ^2 (4059) = 4303, p < .01. In light of this, logistic regressions were conducted to assess missingness (0 = not missing, 1 = missing) and the pattern of bias in the data. Not surprisingly, participants who had no previous experience in responding to students who self-injure were more likely than those with such experience to lack data regarding confidence to deal effectively with these students (OR 3.37, 99% CI [0.97] -11.62]), and ability to cope with legal and school regulations guiding practice (OR 3.45, 99.0% CI [1.07 – 11.11]). Pairwise deletion was used to decrease the potential for biased estimates and increase statistical power (Acock, 2005). Tests of homogeneity of variancecovariance matrices showed the data were homogenous (p > .05). To improve pairwise linearity, outliers, and reduce moderate skewness and kurtosis, square-root transformations were applied. With transformed variables, linearity, skewness, and kurtosis was not improved and several additional outlying cases were identified; therefore untransformed data were retained for further analyses. Cases with univariate and multivariate outliers were detected at p < .001; however, as the same pattern of results was obtained with the exclusion of these cases, data were retained. To account for family-wise error when conducting multiple ANOVAs alpha was set at .01. This alpha level was set to minimise type I error, while also reducing the likelihood of type II error associated with adjusting the alpha level according to the number of tests performed (Bronferroni adjustments; Perneger, 1998; Rothman, 1990).

Confirmatory Factor Analysis (CFA)

A CFA was performed with AMOS using maximum likelihood estimation to explore whether the initial factor structure of the ADSHQ could be replicated using the observed

data. The model demonstrated poor model fit across all fit indices, χ^2 (279) = 1543.497, p < .001, CFI = .42, RMSEA = .09 (Hu & Bentler, 1999). Given the poor fit between the model and data, exploratory factor analysis (EFA) with oblique rotation was performed on the ADSHQ.

Exploratory Factor Analysis (EFA)

Prior to performing EFA, suitability of data for EFA with oblique rotation was established. The correlation matrix revealed several coefficients of .30 and above, supporting oblique rotation (Matsunaga, 2010). The Kaiser-Meyer-Oklin (KMO) value of sampling adequacy was .78, exceeding the recommended value of .60 (Kaiser, 1970, 1974; Tabachnick & Fidell, 2007), and Bartlett's Test of Sphericity, χ^2 (120) = 1418.15, p < .001, supported factorability of the correlation matrix (Bartlett, 1954; Tabachnick & Fidell, 2007).

A three-factor solution was extracted, accounting for 48.34% of the total variance, with eigenvalues exceeding 1 and scree-plot point of inflection after the third factor. Eighteen of the 25 items obtained factor loadings greater than the recommended .40 (Matsunaga, 2010; Tabachnick & Fidell, 2007); one item had non-simple solutions and was deleted from the final structure. Factor loadings ranged from .51 to .85, with the majority exceeding .60. The three factors extracted in the EFA resembled three of the four factors originally reported by McAllister et al. (2002), including dealing effectively with self-injuring students, perceived confidence in assessment and referral of self-injuring students, and ability to cope effectively with legal and education system regulations that guide practice. Reliability of the three subscales using Cronbach's alpha was examined, and two items whose absence lead to an increase in reliability were removed, one by one, with the item leading to the highest increase in reliability removed first. This process was repeated until the removal of remaining items did not lead to an increase in each subscale's alpha (Raubenheimer, 2004), resulting in a

revised 16-item measure with higher internal consistency across factors (Factor 1 = .81; Factor 2 = .67; and Factor 3 = .70; see Table 8) than noted in the initial validation sample (McAllister et al., 2002).

Table 8

Factor Loadings for the ADSHQ in a Sample of School Professionals

Item	Factor 1 ^a	Factor 2 ^b	Factor 3 ^c
16. I have the appropriate knowledge and	.85		
counselling skills to help students who deliberately			
self-injure			
19. I have the appropriate knowledge in	.84		
communication skills to help students who			
deliberately self-injure			
10. I deal effectively with students who deliberately	.74		
self-injure			
5. I feel useful when working with students who	.71		
deliberately self-injure			
1. Overall, I am satisfied with the control I have in	.55		
dealing with students in my school who deliberately			
self-injure			
13. Ongoing education and training would be useful		.71	
in helping me deal appropriately with students who			
deliberately self-injure			
22. Students who deliberately self-injure are in		.67	
desperate need of help			
14.Risk assessment is an important skill for me to		.65	
have			
8. Knowledge of referral sources is important when		.59	
dealing with students who deliberately self-injure			
20. Providing students who deliberately self-injure		.52	
information about community support groups is a			
good idea			
17. Referral of students who deliberately self-injure		.51	
to external consultant services for further			
assessment or treatment is an effective course of			
action			

11. The education system impedes my ability to	.75			
work effectively with students who deliberately				
self-injure				
6. The way the education system works encourages		.70		
repetition of deliberate self-injury behaviour				
4. Sometimes I feel used by the education system	.65			
23. The legal system impedes my ability to work	.63			
effectively with students who deliberately self-				
injure				
15. Sometimes, when all other actions have failed, I	.57			
feel the need to go to extremes when dealing with				
students who deliberately self-injure				
Eigenvalue	3.55	2.24	1.95	
Variance	22.15%	13.99%	12.19%	
Cronbach's alpha	.81	.67	.70	

Note. Item numbers correspond to the original items numbers of the questionnaire.

Subscales of the Teachers' Knowledge and Beliefs about Self-Injury questionnaire correlated, in the expected direction, with factors of the ADSHQ (Table 9), demonstrating convergent validity. Discriminant validity was demonstrated by low correlations of Factor 2 and Factor 3 with ability to identify information about NSSI, as assessed by the Knowledge and Beliefs Questionnaire. Factor 2 was not correlated with participants' self-perceived knowledge of NSSI, possibly because only one item (item 13 "Ongoing education and training would be useful in helping me deal appropriately with students who deliberately self-injure") of the ADSHQ explored self-perceived knowledge of NSSI.

^a Dealing effectively with self-injuring students.

^b Perceived confidence in assessment and referral of self-injuring students.

^c Ability to cope effectively with legal and school regulations that guide practice.

Table 9

Correlations Between Demographic Variables, Factors of the ADSHQ, and Subscales of the Teachers' Knowledge and Beliefs about Self-Injury Questionnaire and Self-Injury Knowledge Questionnaire

								(Correlation	1					
Scale	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
1	12.65	2.72	-												
2	19.89	2.17	.09	-											
3	9.86	2.30	26***	06	-										
4	7.37	1.66	.67***	.14*	16**	-									
5	6.22	1.80	.70***	.10	13*	.68***	-								
6	16.54	1.75	.23**	.09	.01	.16**	.21**	-							
7	10.66	2.09	.48***	.18**	28**	.32***	.33***	.26***	-						
8	34.62	4.59	.22**	.14**	. 05	.21**	.34***	.14*	.08	-					
9	39.57	4.39	.31***	.28***	19**	.16**	.26***	.43***	.63***	.09	-				
10	43.63	11.23	21	07	08	07	15*	07	02	12*	04	-			
11	-	-	.05	.18*	.05	05	.06	.02	.04	.21**	.07	13**	-		
12	14.69	11.02	82***	06	01	01	10	14**	07	08	10	.72***	19**	-	
13	-	-	35***	.01	.09	33***	37***	17*	18**	31**	18**	03	.11	14**	-
14	-	-	56***	09	.17**	39***	56***	27***	29***	27***	25**	.05	09	.03	.36**

1 = Factor 1 (Dealing effectively with self-injuring students); 2 = Factor 2 (Perceived confidence in assessment and referral of self-injuring students); 3 = Factor 3 (Ability to cope effectively with legal and school regulations that guide practice); 4 = Confidence; 5 = Perceived knowledge; 6 = Information; 7 = Attitudes; 8 = Accurate statements; 9 = Inaccurate statements; 10 = Age; 11 = Gender; 12 = Years of professional experience; 13 = NSSI experience; and 14 = NSSI training.

*p < .05, **p < .01, ***p < .001.

Knowledge Regarding the Nature and Extent of NSSI

The majority of participants (65.3%) correctly identified cutting as the most common method of NSSI, followed by scratching (12.1%). Most correctly identified emotion regulation (75.9%; e.g., "a release when they can't deal with emotional turmoil") and self-punishment (16.8%; e.g., "to punish themselves") as two of the most common function of NSSI. Many also mentioned to influence others as a motivation for NSSI (19.9%; e.g., "to fit in with the current trends as teenagers," and "attention-seeking and to manipulate people close to them"). Most (89.4%) correctly identified the typical age of NSSI onset between 10 and 17 years of age. When asked to identify the typical age when NSSI is most prevalent, only 21.8% correctly identified 18 to 24 years of age (G. Martin et al., 2010), while 76.2% suggested NSSI was most common in those aged 10 to 17 years. When asked to identify the prevalence of NSSI among adolescents, 25.4% correctly identified 6 to 10%, while 54.8% underestimated the prevalence as less than 5.0%.⁶

Exposure to NSSI and Education Needs

A third of participants (34.3%) reported knowing someone who had engaged in NSSI. Of these, 24.9% had encountered a family member, 12.3% had encountered a friend, and 6.5% had themselves engaged in NSSI. Most participants (69.5%) reported encountering at least one student who had engaged in NSSI (ranging from one to over 300 students). Among school teachers, leaders, and school administrative and support staff, 80.4% reported they had never received any education in NSSI, while 81.8% reported they would be willing to undertake education, and 73.6% indicated they required education in the area. Interestingly,

⁶ These figures were correct for Australian adolescents based on literature which was available at the time of publication (see G. Martin et al., 2010). More recent estimates of the prevalence of NSSI among adolescents are higher (17-18%; Muehlenkamp et al., 2012; Swannell et al., 2014).

among school mental health workers, less than a third (22.9%) had never received education, and 75.4% felt they needed education in NSSI.

Relationships Between Demographic Variables and Knowledge, Attitudes, and Confidence

Younger participants were more knowledgeable and had higher self-perceived knowledge of NSSI than older colleagues (Table 9). Length of professional experience was negatively related to participants' ability to identify information about NSSI, suggesting senior school professionals had poorer knowledge of NSSI than junior colleagues. Females reported greater perceived confidence and knowledge of NSSI. Participants experienced with students who self-injure and with education in NSSI were more confident responding to students who engaged in NSSI, had higher self-perceived knowledge of NSSI, demonstrated more accurate understanding of NSSI, and held more positive attitudes towards NSSI than those without experience or education. MANCOVA rather than a series of ANCOVAs was used to protect against inflated type I error due to multiple tests across correlated DVs (see Table 9; Tabachnick & Fidell, 2007). A MANCOVA was also conducted to determine whether occupation on its own or in combination with training and experience had an effect on knowledge, confidence, and attitudes.

To determine how demographic variables related to attitudes and knowledge a 2x4x2x2 between-subjects multivariate analysis of covariance (MANCOVA) was performed with each of the subscales of the ADSHQ, the Teachers' Knowledge and Beliefs about Self-Injury questionnaire, and the Self-injury Knowledge Questionnaire serving as dependent variables (DVs). Independent variables were gender (male and female), occupation (school leader, teacher, mental health worker, administrative and school support staff), experience with students who have engaged in NSSI (yes and no), and education in NSSI (yes and no).

Given the potential confounding effect of age and length of professional experience, age and years of professional experience were entered as covariates. Significant differences on the combined DVs were found for occupation, F(27, 692) = .82, p < .01; $\lambda = .82$; $\eta^2 = .06$, experience with students who have engaged in NSSI, F(9, 237) = 2.63, p < .01; $\lambda = .90$; $\eta^2 = .09$, and education in NSSI, F(9, 237) = 2.84, p < .01; $\lambda = .90$; $\eta^2 = .10$, but not for gender, F(9, 237) = 1.25, p > .05; $\lambda = .95$; $\eta^2 = .04$. No interaction effects were found.

Univariate differences for occupation and education were observed for a subscale of the ADSHQ (i.e., dealing effectively with self-injuring students; p < .01). Mean scores suggested mental health workers (M = 15.83, SD = 1.83) were more confident that school administration and support staff (M = 14.12, SD = 1.81), school leaders (M = 14.06, SD = 1.43), and teachers (M = 12.91, SD = 1.71) in dealing effectively with students who self-injure. Participants with education in NSSI (M = 14.64, SD = 2.11) were more confident with students who self-injure than those without education (M = 11.49, SD = 2.26).

Univariate differences were also found for education in NSSI on the DVs of confidence responding to students who engage in NSSI and self-perceived knowledge of NSSI (as assessed by the Teachers' Knowledge and Beliefs about Self-Injury questionnaire; all p < .01). Participants with education in the area reported more confidence responding to students who engage in NSSI (M = 8.29, SD = 1.27) than those without education (M = 6.87, SD = 1.63), and had higher self-perceived knowledge (M = 7.62, SD = 1.35) than those without education (M = 5.50, SD = 1.53).

Occupation had an effect on a subscale of the Self-Injury Knowledge Questionnaire (p < .01), with mental health workers more likely (M = 41.94, SD = 3.66) to recognise inaccurate statements about NSSI than school leaders (M = 39.75, SD = 4.33) and teachers (M = 38.65, SD = 4.22).

Qualitative Analysis

To further assess attitudes, participants were asked to describe their feelings towards young people who self-injure. Key themes included the following: (1) feeling sympathetic and concerned for their wellbeing; (2) frustrated by the lack of support available to these young people and the need for additional services; (3) willingness to help these young people by resolving their problems and helping them to manage their emotions; (4) lack of knowledge and confidence to help these young people; and (5) feeling frustrated and angered by the behaviour, or manipulated by young people who self-injure (see Table 10).

When asked if there was anything participants wanted researchers to know about their experiences working with young people who self-injure, five themes were identified (see Table 10): (1) the need for additional education and policies to manage NSSI in schools; (2) additional resources to resolve time constraints placed on staff to resolve mental health concerns of students; (3) significance of the school; (4) family context in relation to rising prevalence of NSSI among students; and (5) education for students to seek help for themselves or peers. Administrative and support staff were more likely than school leaders, mental health workers and teachers to endorse education for *students* regarding NSSI, χ^2 (3, n = 217) = 12.17, p < .01, phi = .24, and mental health professionals were more likely to describe issues in relation to the school context (e.g., contagion), χ^2 (3, n = 217) = 15.28, p < .01, phi = .26.

Table 10

Exemplars from Thematic Analysis

Theme	Percentage ^a	Example
How teachers and school staff feel of	about young peo	ple who self-injure
Sympathetic and concerned	61.1	"Compassionate, sympathetic and sad"
		"Concerned for their wellbeing"
Lack of services and need for	24.1	"I feel frustrated that the system does very little for them"
support		"I feel that they need support"
Desire to help	13.5	"I want to help them"
		"I would like to be able to help them"
Lack understanding	9.2	"Confused and unsure of what to do to help"
		"wanting to help, but don't really know how"
Frustrated and angry	4.6	"Frustrated"
		"Sometimes angry"
What teachers and school staff wan	t researchers to	known about student NSSI
Training and policies	41.4	"I know that teachers on the ground are coming into contact with them and are not skilled
		to deal with it"
		"I believe effective management of this issue in schools requires clear policies and
		procedures and staff training"
		"We're working in the dark here"

Professional pressures and	22.6	"How can we assist with the limited time available"
additional resources		"To understand that we see lots of students with a range of problems and are unable to help
		all of them"
School context and prevalence	22.6	"There can be contagion in schools"
		"It is on the rise dramatically and becoming more common"
Family context	6.8	"Usually I have seen it in students with family issues or stress related to family"
		"It seems to come in waves and the students who feel they are not connected to their
		parents are very vulnerable"
Information for students	6.0	"Education aimed at the students themselves so they can feel safe and confident to identify
		and refer their peers and seek assistance themselves"
		"Kids who support their friends need to know what the best thing to do is. There is a lot of
		effort put into the student who is harming, but they usually have a close friend or two who
		may be carrying them along – they need to know they are supported along the way also"

^a Percent of the sample who provided a response coded into this category.

Responses to NSSI

Participants' responses to student NSSI were coded into five discrete themes: (1) referred student to mental health professional (37.6%; e.g., "referred to a psychologist"); (2) performed risk assessment or provided counselling (34.3%; e.g., "conducted risk assessment and provided counselling"); (3) contacted the students' parents or guardian (15.5%; e.g., "contacted their parents"); (4) referred student to school leader or teacher (6.2%; e.g., "reported student to principal"); and (5) provided mental health resources or information (2.1%; e.g., "provided information to students").

Five 2x4 between-subjects multivariate analyses of covariance (MANCOVA) were performed to determine whether occupation and response to student NSSI (categorised according to the themes outlined above) were related to knowledge, attitudes and confidence. A significant difference on the combined DVs was found based on whether teachers and other school staff provided counselling or risk assessment (yes and no), F (9, 184) = 2.83, p < .01; λ = .88; η ²= .12, but not according to whether they referred to a mental health professional, contacted the students' parents, provided information or resources, and referred the student to a school leader or teacher. No interaction effects with occupation across DVs were found.

Whether participants provided counselling or conducted a risk assessment was related to Factor 1 of the revised ADHSQ (dealing effectively with self-injuring students), confidence responding to students who engage in NSSI, and self-perceived knowledge about NSSI (p < .01). Teachers, school leaders, mental health workers, and school administration and support staff who provided counselling (M = 13.61, SD = 2.44) were more likely than those who did not (M = 12.00, SD = 2.28) to feel they could deal effectively with students who self-injure, had more confidence responding to students who self-injure (M = 7.89, SD = 1.00).

1.40 vs. M = 7.10, SD = 1.60), and were more likely (M = 6.88, SD = 1.61) than those who did not provide counselling (M = 5.97, SD = 1.55) to have higher self-perceived knowledge.

Chi-square tests revealed that participants with training and education in NSSI were more likely than those without training to provide counselling, χ^2 (1, n = 230) = 6.58, p < .01, phi = .18, and to contact parents, χ^2 (1, n = 230) = 12.73, p < .001, phi = .24.

Discussion

We aimed to validate a measure of attitudes towards NSSI with teachers and other secondary school staff, and examine variables associated with knowledge, attitudes, confidence, and response to NSSI. We also sought to elicit attitudes and experiences of NSSI in the school system through open-ended questioning of participants. EFA of the ADSHQ identified three factors including ability to deal effectively with self-injuring students, perceived confidence in assessment and referral, and ability to cope effectively with legal and school regulations that guide practice. Mental health professionals and participants with education in the area reported greater knowledge and confidence to address NSSI in the school system than teachers and those without such education. Teachers, school leaders, mental health workers, and administrative and support staff who provided counselling were likely to feel confident in addressing NSSI. Qualitative data indicated that teachers and other school staff felt empathic and wanted to help young people who self-injure, but a lack of education and resources was highlighted.

EFA and Attitudes toward NSSI

Results of the EFA suggest attitudes of teachers and other school staff towards NSSI are multidimensional and similar to those endorsed by healthcare workers (McAllister et al., 2002). One factor (i.e., empathetic approach) of the original ADSHQ did not emerge because

items of this dimension initially loaded onto Factor 2 (perceived confidence in assessment and referral of self-injuring students), but were then removed to improve subscale reliability. It is possible that these items were less relevant to teachers and the education system than the hospital environment for which they were initially devised (e.g., "self-injuring students just clog up the system"). Findings of EFA may also be indicative of clinically relevant distinctions between hospital and educational settings, such that hospitalised patients may engage in more severe forms of self-injury than adolescents in the community, leading medical professionals to endorse less empathetic statements about clients who self-injure. Analyses of reliability and validity support use of the dimensions with teachers as baseline measures to explore attitudinal change following education in the area.

Relationships Between Key Variables

Overall, school staff were generally accurate about the nature of NSSI consistent with previous research (Heath et al., 2011). However, as in previous studies (Carlson et al., 2005; Heath et al., 2006; Heath et al., 2011), the majority underestimated the prevalence of NSSI. This is despite a third of participants personally knowing someone who had self-injured and two thirds exposed to at least one student who had engaged in NSSI. Of note, six percent had themselves engaged in NSSI, somewhat comparable to lifetime prevalence studies of NSSI among adults (Klonsky et al., 2003).

Results supported hypotheses that school mental health workers and those with education in NSSI would have greater understanding of NSSI and confidence responding to the behaviour. In line with Jeffery and Warm (2002), those whose work requires development of a therapeutic relationship with adolescents may come to have more knowledge and skills than staff whose work is based on school leadership or teaching. It is important to be

cautious, however, because mean differences between groups were small, warranting further investigations to see whether these differences have clinical significance.

Overall, teachers acknowledged their lack of knowledge in relation to NSSI.

Responses to open-ended questions suggested that although teachers and other school staff could identify common functions of NSSI, such as emotion regulation and self-punishment (Klonsky, 2007a), many felt additional education, resources, and school policies were needed to respond efficiently. Participants expressed concern about rising prevalence rates and contagion in schools, reflecting suggestions in the literature of an apparent increase in rates of NSSI among youth (Whitlock, Powers, et al., 2006).

Although many identified attention-seeking and manipulation as motivations for NSSI, the majority reported feeling sympathy for these students, frustrated by the perceived lack of services, and although willing to assist students who self-injure, confused about how to help, congruent with earlier research (Heath et al., 2006; Heath et al., 2011). This is not surprising given that even among mental health workers approximately three quarters had not received education in NSSI and requested further education. Previous studies have also found school mental health workers lack education regarding NSSI (Roberts-Dobie & Donatelle, 2007). School mental health workers, who are responsible for intervening with students who self-injure in school settings, may require training around assessment and treatment planning for students who self-injure.

Corresponding to the surveillance model, greater self-perceived knowledge and confidence to respond to students who self-injure may increase staff communication with students who self-injure. These findings align with both the Theory of Planned Behaviour and

⁷ Based on research published after this study, when the methodology of studies on the prevalence of NSSI is considered, rates of NSSI do not appear to have increased (Swannell et al., 2014).

Social Cognitive theory which suggest a key role for self-efficacy in volitional behaviour (Ajzen, 1991; Bandura, 1989). However, findings contradict the gatekeeper communication model which argues that increased knowledge and appraisals of efficacy are insufficient on their own to increase suicide identification and referral behaviours (Wyman et al., 2008). While greater knowledge and self-efficacy may exert a unique impact on behaviour of school staff, future work would benefit from additional exploration of how communication with students both impacts, and is impact by, gatekeeper training in NSSI. In line with the communication model, self-injury communication and referral behaviours of staff may have increased as most staff had already responded to students who self-injured. Given that teachers and other school staff were less knowledgeable and confident than mental health workers, educational programs targeting this group of staff are essential.

Teacher Education and Policy Implications

While not impacting on the behaviour of staff, attitudes of teachers may influence whether adolescents feel comfortable seeking help for NSSI at school. Previous research has found adolescents are unlikely to seek help from teachers for NSSI (Fortune et al., 2008b), perhaps due to a fear of parents being contacted, or perception of negative attitudes teachers might hold (Patterson et al., 2007b). Positive attitudes towards students who self-injure may be paramount in ensuring students seek help from teachers, maximising the chance of early intervention. School policies and referral guidelines are needed to inform and enhance the response of teachers and care provided to students who self-injure in school settings.

Our findings suggest participants with inaccurate knowledge are as likely as those with accurate knowledge to provide counselling to students who self-injure and assess their level of risk for further self-injury and potential suicide. However, self-perceived knowledge (as opposed to endorsement of factual statements) and confidence were higher among

teachers and staff who provided counselling to self-injuring students. Although the impact of inadequate knowledge of teachers on student outcomes is unknown, these findings support recommendations of school teachers, leaders, and mental health staff that gatekeeper educational programs on NSSI need to be implemented in schools.

In the context of the surveillance model, findings support implementation of staff training programs and school policy to improve knowledge of risk factors and warning signs, and increase staff confidence to talk to and refer students who self-injure. Specifically, educational programs could focus on improving the five core gatekeeper skills: active listening, clarifying questions, asking about intentions to self-injure, persuasion to get help, and referral to care (Cross, Matthieu, Cerel, & Knox, 2007). In-service education may also provide an opportunity for teachers to discuss their experiences and responses to students who self-injure, reassuring them of their ability to respond appropriately, as well as to troubleshoot difficulties and brainstorm solutions. Given their frequent contact with students who self-injure, education programs could also focus on how to monitor students' emotional and social wellbeing, recognise their need for additional help, monitor students' injuries and signs of infection, and observe reactions of peers and potential for contagion.

In addition, results suggest there may be little difference in terms of knowledge and attitudes towards youth NSSI, and the factors that might influence these constructs, among school staff in Australia and other countries. For example, despite their positive and supportive attitudes, teachers and other school staff in Australia and Canada are concerned about their limited knowledge and skills to respond (Heath et al., 2011; Robinson et al., 2008). Because self-injury begins between 12 and 14 years (Jacobson & Gould, 2007; Ross & Heath, 2002), these recommendations may be especially applicable to teachers of middle and senior secondary school students in Australia and high school teachers in North America (students aged 14-18 years), while junior and middle school teachers in North America and

late primary school and early secondary school teachers in Australia (students aged 11-14 years) may benefit from education regarding prevention.

Limitations

While providing important insights into the knowledge and attitudes of teachers and other secondary school staff regarding NSSI, some limitations are noteworthy. First, while internal consistency of the Teachers' Knowledge and Beliefs about Self-injury questionnaire was relatively low (especially for the information subscale) and further validation of this measure is warranted, the measures used in the current study are the only available measures of knowledge, confidence, and attitudes developed for school staff. Although assessing overlapping constructs, use of all three measures allowed us to compare measures of attitudes and underscored the importance of developing a reliable and valid measure of teachers' perceptions towards NSSI.

Second, although findings illustrated some limits of staff knowledge, attitudes, and confidence towards NSSI, sample sizes within the various occupation groups were too small to permit direct comparisons between various school leaders (e.g., principals and year level coordinators) and mental health workers (e.g., school counsellors and psychologists).

Arguably, year level coordinators and principals, for example, have differing degrees of student contact, and consequently may form different attitudes towards mental health issues and how they are addressed in the school context. Given that only a few participants held doctoral qualifications it was also not possible to analyse differences according to educational level. Future research would benefit from a targeted comparisons of the knowledge and attitudes held by different school personnel.

⁸ An additional measure of attitudes, and perceived knowledge and confidence towards NSSI, with demonstrated reliability, has since been developed from three existing measures (see Heath et al., 2006; McAllister et al., 2002; Patterson et al., 2007a) and could be used in future (Muehlenkamp et al., 2013).

Third, as participation in the study was voluntary, participants self-selected to complete the online questionnaire and it was at the principals' discretion to invite all staff or select staff to complete the questionnaire, it was not possible to determine the response rate and representatives of participants. The low rate of principal agreement in advertising the study suggests results may not generalise to the broader educational sector. Comments received from principals who did not consent suggested time constants and competing school commitments prevented schools from participating. However, it is also possible that principals who agreed to participate were more confident that their staff had received training in relation to mental health issues. Finally, despite qualitative findings alluding to directions for education, exhaustive qualitative exploration of preferred training content and delivery among school staff is required.

Conclusion

Although secondary school staff are concerned about adolescent NSSI and willing to help, the majority acknowledged their need for continued education, and improved access to school-based resources and community services. Further research is needed to explore training and school guidelines to support school staff, in addition to attributes and barriers likely to shape their responses, and influence adolescent help-seeking for NSSI. Integration of NSSI prevention and early intervention strategies into existing school mental health policies and gatekeeper education are critical steps needed to improve staff confidence and knowledge to detect and respond to NSSI in schools.

Chapter 8: Pre-Service and In-Service Teachers' Knowledge, Attitudes, and Confidence Towards Self-Injury among Pupils

Aims and Outline of the Study

Similar to the aims of the third study presented in Chapter 7 of this thesis, the aims of this study were to explore and compare pre-service and in-service teachers' level of knowledge and attitudes towards youth NSSI, and their confidence to intervene with students who self-injure. The results presented in the previous chapter indicated that teachers are the least knowledgeable and confident when responding to students who self-injure, of the school staff surveyed. Results of earlier research has also found that teachers tend to underestimate the prevalence of self-injury among students, experience negative reactions, such as horror, shock, and anxiety towards the behaviour, and are unsure how to respond to students who self-injure (Best, 2005, 2006; Carlson et al., 2005; Heath et al., 2006; Heath et al., 2011). Consequently, results from Chapter 7 and previous research suggests that teachers need further resources, training, and policies to help them address NSSI in the school setting (e.g., Carlson et al., 2005; McAllister et al., 2010).

No prior study has examined the knowledge, attitudes, and confidence of pre-service and in-service teachers towards NSSI among students, with many studies focusing on the knowledge, attitudes, and confidence of teachers and other school staff towards DSH (e.g., Best, 2005, 2006), or specific forms of self-injury (i.e., self-cutting; Carlson et al., 2005). Therefore, based on the lack of research examining the knowledge, attitudes, and confidence of pre- and in-service teachers towards NSSI among students, and given the adverse impact that teachers' negative attitudes may have on adolescents' willingness to access support for NSSI in future, the aims of this fourth study were to investigate and compare the knowledge, attitudes, and confidence of pre-service and in-service teachers towards youth NSSI. Results

of this study may inform the development of training programs and resources for pre-service teachers through teacher education courses and in-service teachers in professional development programs, ensuring that optimal care is provided to young people who self-injure in Australian classrooms.

Declaration for Thesis Chapter 8

Monash University

In the case of Chapter 8, the nature and extent of my contribution to the work was the following:

Nature of contribution	Extent of contribution (%)
Study conceptualisation	70%
Data collection and data cleaning	90%
Statistical analyses and interpretation of the results	80%
Writing the paper for publication	80%

The following co-authors contributed to the work. If co-authors are students at Monash University, the extent of their contribution in percentage terms must be stated:

Name	Nature of contribution	Extent of contribution
		(%) for student co-
		authors only
Penelope Hasking	Study conceptualisation, assistance with	n/a
	statistical analyses and interpretation, and	
	editing	
Andrea Reupert	Study conceptualisation, assistance with	n/a
	qualitative analyses and interpretation,	
	and editing	

The undersigned hereby certify that the above declaration correctly reflects the nature and extent of the candidate's and co-authors' contributions to this work.

Candidate's signature: Date: 09/09/2014

Main supervisor's signature: Date: 09/09/2014

Abstract

Teachers are ideally placed to identify and refer pupils who self-injure, but are often unaware when pupils self-injure or unsure how to respond. The aims of this study were to explore and compare pre-service and in-service teachers' knowledge and attitudes towards self-injury, and their confidence responding to pupils who self-injure. Pre-service teachers (*n* = 267) and in-service teachers (*n* = 261) completed self-report questionnaires. Prior education regarding self-injury was positively related to knowledge and confidence, while pre-service teachers were more confident than in-service teachers in their ability to cope with legal and school regulations. Thematic analysis of open-ended questions indicated that although pre-and in-service teachers are concerned about pupils who self-injure and are willing to help these students, they feel ill-informed about self-injury and requested school policies and additional education regarding the behaviour. Results have implications for educational programs that prepare pre- and in-service teachers to identify and respond to pupils who self-injure.

Key words: youth; self-injury; prevention; teacher education.

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Introduction

Non-suicidal self-injury (NSSI), the deliberate destruction of body tissue without suicidal intent (Nock & Favazza, 2009), typically begins between 12 and 14 years of age (Jacobson & Gould, 2007), and approximately 10% of Australian youth engage in NSSI (G. Martin et al., 2010). Recently, pooled international prevalence of NSSI was estimated between 17 and 18% among adolescents, a rate that has remained stable for the last five years (Muehlenkamp et al., 2012; Swannell et al., 2014). NSSI includes cutting, scratching, selfhitting, and hitting or punching walls, but excludes suicidality and socially sanctioned behaviours (e.g., piercing and tattooing; Heath et al., 2006). Although NSSI is associated with mental illness (Nock et al., 2006), and suicide (D. Owens et al., 2002; Whitlock et al., 2013), less than a third of adolescents who self-injure seek professional help (Fortune et al., 2008b; Hasking et al., 2010). The high prevalence of NSSI in adolescence and associated risk factors, including low academic performance (G. Martin et al., 2005), problems in relationships with family members and friends (Hawton & Harriss, 2008), being bullied (Hay & Meldrum, 2010), and poor social connectedness (Rotolone & Martin, 2012), suggests school staff are in a unique position to identify warning signs of NSSI and refer pupils who self-injure. Therefore, strategies to improve adult sensitivity to risk factors and warning signs of NSSI among adolescents could be critical to ensuring that at-risk youth are identified and receive timely intervention.

In particular, classroom teachers are ideally placed to recognise early indicators of NSSI among pupils, preventing escalation of NSSI and later suicide (Heath et al., 2011). However, while teachers are among the first to refer adolescents who self-injure to mental health professionals (Oldershaw et al., 2008; Roberts-Dobie & Donatelle, 2007), teachers in the US and Canada, especially those with limited experience of youth NSSI, have reported negative attitudes and inadequate knowledge regarding NSSI (Carlson et al., 2005; Heath et

al., 2011). Similarly, qualitative studies have found that teachers in the UK and Canada lack confidence when responding to pupils who self-injure (Best, 2005, 2006; Heath et al., 2006). Specifically, these studies have found that teachers express fear, uncertainty, and helplessness when responding to pupils who self-injure (Best, 2005, 2006), and are calling for further education to improve their confidence and skills to prevent youth NSSI (Carlson et al., 2005; Heath et al., 2006).

Theoretical Models of Behaviour

Both the Theory of Planned Behaviour (Ajzen, 1991) and Social Cognitive Theory (Bandura, 1989) argue the merits of positive attitudes and confidence to enact change in shaping behaviour. Although these theories are yet to be applied to NSSI, negative attitudes and perceived difficulty responding to pupils who self-injure are likely determinants of how teachers communicate and intervene with pupils who self-injure. Specifically, negative attitudes and a lack of confidence among teachers could result in insensitive, and potentially harmful, responses to adolescents who self-injure (McAllister et al., 2002), which could influence whether adolescents seek help for NSSI in future. In related work, researchers have shown that nurses' attitudes towards self-poisoning can predict their behavioural intentions towards self-poisoning patients (McKinlay, Couston, & Cowan, 2001). Changing teachers' attitudes and confidence in addressing NSSI, through education, may enhance how effectively they respond to the behaviour and/or act as gatekeepers by identifying and referring at-risk pupils to mental health professionals (Conterio, Lader, & Bloom, 1998; Muehlenkamp et al., 2010). Although teachers may not be trained mental health professionals, and should not be expected to perform the role of mental health professionals, teachers are often responsible for implementing school-based mental health interventions (Reinke et al., 2011), thus further education to enhance their initial response to and referral of youth who self-injure is warranted.

The current lack of mandatory mental health training for pre-service teachers (i.e., teacher education students; Graham et al., 2011) in Australia means many teachers are illequipped to address complex issues such as NSSI when they enter the education system. Education programs could commence during pre-service teaching courses, resulting in teachers who have the necessary skills to address NSSI before they experience direct need in schools (Koller et al., 2004). However, to provide education to pre-service and/or in-service teachers, and potentially enhance the quality of care pupils receive, we first need to establish the current knowledge and education needs of teachers regarding NSSI and explore the level of training required. Understanding the similarities and differences between pre- and inservice teachers' knowledge and attitudes towards NSSI, as well as the impact of prior experience and education in the area, can inform development of educational programs to equip both current and future teachers to identify and refer pupils who self-injure, thus improving confidence of teachers, and in the longer term, mental health outcomes for pupils who self-injure.

The Current Study

In this study we compared the knowledge, attitudes, and confidence of pre-service and in-service teachers regarding NSSI. Given differences in career stage and possible exposure to pupils who self-injure, we anticipated that in-service teachers would report greater knowledge and confidence, and more positive attitudes, than pre-service teachers since they have more professional experience in schools (e.g., Carlson et al., 2005). Pre- and in-service

⁹ While experience and education specifically in relation to self-injury appear to be associated with greater perceived knowledge and confidence in response to NSSI (Carlson et al., 2005; Robinson et al., 2008), the opposite seems to be true in relation to attitudes of teachers (Heath et al., 2011). However, since Heath et al. (2011) only examined attitudes towards NSSI using individual survey items in the analyses, and based on previous literature with healthcare professionals (e.g., Anderson, 1997; McCann et al., 2007; McCarthy & Gijbels, 2010; McLaughlm, 1994), it was hypothesised that in-service teachers would hold more positive attitudes than pre-service teachers.

teachers with experience or training in NSSI were also expected to demonstrate greater knowledge, confidence, and more positive attitudes than those without experience and training. Given that attitudes towards pupils who self-injure can be related to demographic variables, such as age, gender, and experience with self-injury (e.g., Heath et al., 2011), we also explored differences across demographic groups. Finally, we elicited open responses from participants regarding their attitudes towards pupils who self-injure. We hoped this qualitative approach would supplement the quantitative analyses by generating ideas for future education programs that would be valued and desired by teachers, and also potentially offer attitudes beyond those proposed in validated questionnaires.

Method

Participants

Two hundred and sixty-seven pre-service secondary school teachers (79.1% female; $Mean\ age = 28.40\ years$, SD=9.66) and 261 in-service secondary school teachers (65.1% female; $Mean\ age = 42.15\ years$, SD=11.45) participated in the study. Although the mean age of pre-service teachers was older than expected, it is consistent with previous research in the UK (Boulton, Hardcastle, Down, Fowles, & Simmonds, 2013). Pre-service teacher education is the education and training (including placement in school settings) provided to student teachers before they can become registered school teachers in Australia. Secondary schools in Australia (similar to North American junior/middle and high schools) cater for pupils aged 12 to 18 years.

Pre-service secondary school teachers were recruited from 14 universities in one territory and all but one state of Australia. Pre-service teachers were in the first four years of their teaching degrees and had completed between two and 22 weeks of school placement ($Mean\ weeks = 4.61$; SD = 5.23). In-service teachers were recruited from publically funded

and private secondary schools in all Australian states and territories. Among in-service teachers, years working in secondary schools ranged from less than one to 45 years (*Mean years* = 14.35 years, SD = 10.86).

Materials

Demographic Questions

Participants provided demographic information including age, gender, and years of professional experience, as well as whether they had responded to pupils who had self-injured (yes or no), and if they had received training in relation to self-injury (yes or no).

Teacher Confidence

A modified 25-item version of the Attitudes towards Deliberate Self-Harm Questionnaire (ADSHQ; McAllister et al., 2002), originally developed to assess attitudes and perceived confidence of Australian nurses' regarding NSSI, was completed by participants. The modified measure which substituted terms such as educational system for hospital system, and students for clients, was recently validated by the authors in a sample of school staff (Berger, Hasking, & Reupert, 2014). Exploratory factor analysis yielded a 16-item measure containing three distinct factors scored on a four-point Likert scale (*strongly disagree – strongly agree*), including: (i) perceived confidence in assessment and referral of pupils who self-injure; (ii) dealing effectively with self-injuring pupils; and (iii) an ability to cope effectively with legal and school regulations that guide practice with pupils who self-injure. Internal consistency of these subscales for the current sample was adequate (perceived confidence $\alpha = .73$; dealing effectively $\alpha = .64$; and ability to cope $\alpha = .77$).

Teacher Knowledge

The 20-item Self-Injury Knowledge Questionnaire (Jeffery & Warm, 2002) examined participants' knowledge of NSSI according to 10 accurate (e.g., self-injury is a coping strategy) and 10 inaccurate (e.g., self-injury is a girl's problem) statements about NSSI. Accurate and inaccurate items were identified based on a literature review and statements endorsed by those who self-injure. Participants' responses were scored on a 5-point Likert scale ($strongly\ disagree - strongly\ agree$) to indicate their level of knowledge regarding whether or not statements about self-injury were true or false. Internal consistency of the accurate and inaccurate subscales was adequate in the current sample (accurate statements $\alpha = .75$; inaccurate statements $\alpha = .75$).

Teacher Attitudes and Perceived Knowledge

The Teachers' Knowledge and Beliefs about Self-Injury questionnaire (Heath et al., 2006; Heath et al., 2011) measured participants' ability to identify information about NSSI (e.g., NSSI is a symptom of a mental disorder), attitudes towards young people who self-injure (e.g., I find the idea of students cutting or burning their skin horrifying), their perceived level of knowledge (e.g., I feel knowledgeable about NSSI), and confidence responding to youth NSSI (e.g., I feel confident that I would know how to respond). Participants responded to 12 items on a 5-point Likert scale from 1 (*strongly disagree*) to 5 (*strongly agree*). In line with previous research (Heath et al., 2006), internal consistency of the subscales was low to acceptable (information α = .53; attitudes α = .55; perceived knowledge α = .74; and confidence α = .65). Five multiple-choice and two open-ended questions assessed participants' knowledge of the nature and prevalence of NSSI in adolescence, as well as their experiences responding to pupils who self-injure (Heath et al., 2006; Heath et al., 2011).

Although these three measures assess overlapping constructs, in light of the lack of validated measures to assess teachers' attitudes, knowledge, and confidence towards NSSI, use of all three measures allowed us to correlate like-constructs for convergent validity, particularly for measures with low internal consistency. To improve data validity, Nock and Favazza's (2009) definition of NSSI, referred to as the deliberate destruction of one's own body tissue without suicidal intent, was included at the beginning and midway through the questionnaires.

Open-Ended Questions

To further assess pre- and in-service teachers' attitudes towards, and experiences of pupils who self-injure, participants were asked to describe how they feel about young people who self-injure, and what they think researchers in this area need to know about their experiences with pupils who self-injure.

Procedure

After obtaining ethical approval, school principals and university subject/course coordinators were asked to distribute information about the study to in-service and preservice teachers, respectively. Of the 129 subject/course coordinators mailed information about the project, 66 (51.2%) agreed to distribute information to pre-service teachers, while 86 (5.9%) of the 1488 school principals contacted agreed to provide information to in-service teachers. Pre-service and in-service teachers were invited to access the online questionnaires through a URL link supplied with the information sheets. Participants were reminded on information sheets that participation was voluntary and they could withdraw from the study prior to submitting the questionnaires. The online questionnaires took between 30 and 40 minutes to complete, and participants were invited to enter a draw to win cinema tickets as compensation for their time.

Data Analysis

constructs of interest varied according to age, gender, length of teaching experience, and experience or training in NSSI. G*Power (Faul et al., 2007) a priori power analysis (Cohens $f^2 = .02$, p < .01 power = .80) determined that a sample size of 206 participants was required. Therefore, the current sample of 528 had sufficient power to detect a medium effect. Thematic analysis was used to analyse responses to open-ended questions. Initial codes were developed and collated into overarching themes. Participants' responses were then coded according to these themes, and where necessary, themes were refined or merged during the coding process (Braun & Clarke, 2006). The total percentage of responses exceeded 100% because many participants provided more than one response to each question. Twenty percent of data were re-coded by a researcher independent of the study to produce inter-rater reliability ranging from substantial to almost perfect (.65 - .99; Landis & Koch, 1977) agreement across themes. Chi-square analyses examined how responses differed between pre-service and in-service teachers.

Pearson correlation coefficients and MANCOVA were used to examine whether the

Results

Prior to analysis, accuracy of data entry, and statistical assumptions were assessed. Little's MCAR test suggested data were not missing completely at random (MCAR), χ^2 (203) = 237.49, p < .05. In light of missing data, logistic regression was used to assess the pattern of bias for missing and non-missing data (0 = not missing, 1 = missing). Pre-service teachers were more likely than in-service teachers to have missing data for measures of knowledge (OR 11.73, p < .01), confidence (OR 10.49, p < .01) and perceived knowledge (OR 21.62, p < .01). Pairwise deletion was used to decrease biased estimates among pre-service teachers and maintain statistical power (Acock, 2005). Square-root transformations were applied.

However, linearity, outliers, skewness, and kurtosis were not improved by transformations, thus untransformed data were retained. Homogeneity of variance-covariance matrices was demonstrated (p > .05). To minimise family-wise error associated with conducting multiple ANOVAs, while also reducing the likelihood of type II error, alpha was set at .01 (Perneger, 1998; Rothman, 1990). In terms of convergent validity, subscales of the ADSHQ and Teachers' Knowledge and Beliefs about Self-Injury questionnaire for both pre- and in-service teachers generally correlated in the expected direction (Table 11).

Table 11

Correlations Between Demographic Variables and Subscales for Pre-Service and In-Service Teachers

In-service														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Pre-service ^a														
1. Dealing	-	.00	13	.02	.05	.60***	.58***	.07	.24**	.04	09	.03	23**	31***
effectively														
2. Perceived	15	-	06	.09	.23**	.07	02	.09	.16*	03	.19**	.03	03	.05
confidence														
3. Ability to	03	07	-	.10	04	04	02	.15*	12	10	.02	03	.00	.03
cope														
4. Accurate	.12	.14	24**	-	.03	.09	.21**	05	.01	09	.17*	04	33***	11
statements														
5. Inaccurate	01	.21*	.18*	.08	-	05	.09	.50***	.58***	06	.01	11	06	02
statements														
6. Confidence	.55***	03	03	.17*	.16*	-	.58***	.00	.09	01	14	.10	20**	19*
7. Perceived	.46***	.01	23**	.36***	.20*	.57***	-	.04	.14	10	02	04	27***	40***
knowledge														
8. Information	06	.19*	.07	01	.41***	.07	06	-	.30***	18*	04	13	09	05
9. Attitudes	04	.04	.10	.20*	.63***	.12	.15	.20*	-	06	10	11	.05	09
10. Age	04	02	.21*	.05	09	.03	14	16*	.02	-	20**	.76***	07	.03

11. Gender	07	.16*	.01	.12	.02	09	13	.07	.05	07	-	13*	11	03
12. Length of	.08	17*	.08	08	09	.09	03	05	19*	.28***	10	-	14	02
experience														
13. NSSI	20*	.06	.07	14	.01	21*	19*	11	01	.01	.04	15	-	.29***
experience														
14. NSSI	38***	16	.04	16	01	21*	31***	.02	.01	09	.03	.04	.29**	-
training														

^a Correlations for pre-service teachers are shown in the bottom left hand corner of the table and correlations for in-service teachers are shown in the top right hand corner of the table.

^{*}p < .05, **p < .01, ***p < .001.

Quantitative Analysis

Knowledge and Education Needs Regarding NSSI

Participants (31.2%) correctly identified cutting as the most common method of NSSI, followed by scratching (14.9%). In response to why pupils self-injure, participants identified three common functions, including: emotion regulation (77.5%; e.g., "to cope with emotional pain"; "to manage stress"); interpersonal influence (22.5%; e.g., "To gain attention and sympathy"; "A cry for help"; "To be like their peers"); and self-punishment (19.9%; e.g., "To punish themselves"; "Low self-esteem"). While many participants (87.0%) correctly identified 10 to 17 years for the age of onset, fewer (21.7%) identified 18 to 24 years as the age when NSSI is most prevalent. 10 Half (50.9%) underestimated the prevalence of youth NSSI (indicating prevalence as less than 5%), with 39.5% able to correctly identify prevalence between 6 and 20%. In-service teachers were more likely than pre-service teachers to underestimate the prevalence of NSSI as between 0 and 1%, χ^2 (1, n = 286) = 10.05, p < .01, phi = -.19. Over half of in-service teachers and one fifth of pre-service teachers had responded to pupils who self-injure. Most pre-service and in-service teachers had never received training in NSSI, and requested further training. Pre-service teachers were more likely than in-service teachers to report that they needed training in the area of NSSI (Table 12).

¹⁰ Prevalence of NSSI peaks between ages 18 and 24 (G. Martin et al., 2010).

Table 12

Pre-Service and In-Service Teachers Experience and Training Regarding Self-Injury in Schools

	Pre-service		In-se	ervice		
	\overline{n}	%	n	%	p	phi
Experience with NSSI	33	21.4	111	58.7	< .001	38
Previous education in NSSI	14	10.2	27	14.9	ns	-
Need training in NSSI	119	90.8	76	72.4	< .01	.24

Relationship with Demographic Variables

Older pre-service teachers were less concerned about legal and school regulations than their younger peers, while younger in-service teachers were able to identify accurate information about NSSI better than older colleagues. Female pre- and in-service teachers also had greater confidence in responding to pupils who self-injure than their male counterparts. Pre- and in-service teachers with experience and training in NSSI were more confident they could effectively respond to pupils who self-injure than peers and colleagues without experience or training (Table 11). A 4-way between-subjects multivariate analysis of covariance (MANCOVA) was conducted with subscales of knowledge, attitudes, and confidence serving as dependent variables (DVs). Independent variables were gender (male and female), role (pre-service and in-service), experience with pupils who self-injure (yes and no), and training in NSSI (yes and no). Given the potential confounding effect of age and length of professional experience on the dimensions of interest (see Table 11), these variables were entered as covariates. Significant differences on the combined DVs were found for role, F(9, 217) = 2.55, p < .01; $\lambda = .90$; $\eta^2 = .10$, and training, F(9, 217) = 2.86, p < .01; $\lambda = .89$; $\eta^2 = .11$. No interaction effects between independent variables were found.

Univariate differences across role and training in NSSI were found for confidence subscales of the ADSHQ (i.e., dealing effectively with self-injuring pupils, and ability to cope effectively with legal and hospital regulations that guide practice). Mean scores suggested pre-service teachers were more confident than in-service teachers that they could cope with regulations, while participants with training in NSSI were more confident they could deal effectively with pupils who self-injure than those without training in the area. Results for the Teachers' Knowledge and Beliefs about Self-Injury questionnaire suggested participants with training had higher self-perceived knowledge than those without training (Table 13).

Table 13

Means and Standard Deviations of Subscales for Role and Training

	Pr	e-service	In	-service			
	M	SD	M	SD	$\overline{}$ F	p	η^2
Attitudes toward self-harm questionnair	e						
Dealing effectively with self-injury	11.30	2.42	11.47	2.20	0.32	ns	-
Perceived confidence to assess and refer	20.50	2.05	19.72	2.01	4.67	ns	-
Ability to cope with regulations	13.47	2.15	10.26	2.29	12.39	< .01	.05
Self-injury knowledge questionnaire							
Accurate knowledge	34.67	4.70	33.80	4.37	0.45	ns	-
Inaccurate knowledge	38.83	4.47	38.56	4.37	0.44	ns	-
Teachers' knowledge and beliefs about s	elf-injury que	stionnaire					
Confidence	6.56	1.64	6.95	1.65	0.13	ns	-
Perceived knowledge	5.69	1.86	5.66	1.65	0.10	ns	-
Information	17.65	2.11	17.36	2.50	0.63	ns	-
Attitudes	10.48	2.11	10.08	1.98	0.06	ns	-

	7	Training	No	training			
	\overline{M}	SD		SD	F	p	η^2
Attitudes toward self-harm questionnair	e						
Dealing effectively with self-injury	13.24	1.64	11.00	2.19	15.24	< .001	.06
Perceived confidence to assess and refer	20.19	2.07	20.08	2.03	0.62		-
Ability to cope with regulations	11.32	2.40	11.73	2.80	0.76		-
Self-injury knowledge questionnaire							
Accurate knowledge	35.43	4.01	34.05	4.58	0.78	ns	-
Inaccurate knowledge	38.45	4.45	38.50	4.21	1.91	ns	-
Teachers' knowledge and beliefs about s	elf-injury que	stionnaire					
Confidence	7.59	1.48	6.56	1.64	4.08	ns	-
Perceived knowledge	7.22	1.27	5.39	1.68	11.56	< .01	.05
Information	17.65	2.31	17.43	2.39	3.54	ns	-
Attitudes	10.40	1.86	10.10	2.03	0.47	ns	-

Qualitative Analysis

Although coded separately, similar themes emerged across questions for pre- and inservice teachers. In most cases participants presented more than one view in response to each question (e.g., "I feel sorry for them" and "would like to help them"), which were coded into all relevant categories (e.g., "feeling sympathetic and concerned for their wellbeing", and "desire to help pupils who self-injure"). When asked to describe how they feel about adolescents who self-injure, 121 pre-service teachers and 153 in-service teachers responded. About two thirds of in-service teachers (68.6%) and half of pre- service teachers (56.2%) who responded to the question reflected sympathy for pupils who self-injure and concern for their welfare. Pupils' need for support and assistance to overcome NSSI was also mentioned by about one third of pre-service teachers (31.4%) and one fifth of in-service teachers (22.9%). Approximately 10% of both pre- and in-service teachers commented that they would like to be in a position to help pupils who self-injure. Finally, 5% of pre-service teachers and 10% of in-service teachers suggested that they lack knowledge to respond effectively to pupils who self-injure. Exemplary quotes representing each theme are in Table 14.

When asked "Is there anything else you want us, as researchers in the area, to know about your experiences with pupils who self-injure?" 47 pre-service and 67 in-service teachers volunteered information along two key themes: 1) need for further training and policies to respond to pupils; and 2) additional resources to minimise pressures placed on teachers. Close to half of the pre-service (53.2%) and in-service (47.8%) teachers highlighted their need for further education and school policies to address NSSI in schools. In addition, in-service (17.9%) rather than pre-service (2.1%) teachers noted their need for additional time and mental health resources in school settings in response to this question (Table 14). No other differences between groups were observed.

Table 14

Exemplars for Key Themes

Theme	n (%) ^a	Exemplars	p	phi
Feelings towards pupils w	ho self-injure			
Sympathetic and concerned	for pupils			
Pre-service	68 (56.2)	I feel sorry for them (female)	ns	-
In-service	105 (68.6)	I feel concerned for their mental state (male)		
Pupils need for support and	assistance			
Pre-service	38 (31.4)	I feel that they need help (female)	ns	-
In-service	35 (22.9)	They need support and help (female)		
Desire to help pupils				
Pre-service	12 (9.9)	I want to help them all (male)	ns	-
In-service	30 (13.1)	I would like to be able to help them (female)		
Inadequate knowledge to he	elp pupils			
Pre-service	6 (5.0)	Ill-equipped and unknowledgeable (male)	ns	-
In-service	16 (10.5)	I don't know how to help (male)		

Anything else about your	experiences with pup	oils who self-injure		
Teachers need further train	ning and policies			
Pre-service	25 (53.2)	I think the best thing for early career teachers is an action plan,		-
		particularly the first steps to be taken (female)		
In-service	32 (47.8)	We are teachers and not trained to deal in depth with these issues, but		
		as the students are in our classes; we need some idea about the way to		
		handle the situations (female)		
Additional resources to mi	nimise professional pre	essures		
Pre-service	1 (2.1)	There needs to be more professionals available within the schools to	<.01	.27
		assist students in this area (female)		
In-service	12 (17.9)	Teachers need to have time to communicate observations /concerns		
		rather than having it tacked on top of all the other duties that are now		
		expected of them (male)		

^a Number and percent of sample who provided a response coded into this category.

Discussion

We aimed to understand and explore differences between pre-service and in-service teachers' knowledge, confidence, and attitudes towards NSSI, and how these variables relate to demographics and prior education in NSSI. Pre-service teachers were more confident than in-service teachers that they could cope with legal and school regulations in relation to NSSI, while training in NSSI was related to confidence to address self-injury in schools. Responses to open-ended questions suggested that although pre- and in-service teachers expressed a willingness to help pupils who self-injure, participants were unsure how to respond, and identified a lack of training and school policies. In-service teachers were more concerned than pre-service teachers about the lack of available time and resources in schools to address NSSI. To respond confidently to pupils who self-injure, pre- and in-service teachers require additional education and school policies, consistent with teachers' call for training in the US (Carlson et al., 2005) and Canada (Heath et al., 2006).

Although pre- and in-service teachers were generally accurate about the nature of NSSI, many underestimated its prevalence among adolescents, a finding previously observed among teachers (Carlson et al., 2005; Heath et al., 2011). That pre-service teachers were more confident in navigating the education system might indicate pre-service teachers are unaware of potential barriers to supporting pupils who self-injure in schools. Pre-service teachers were, however, more likely to request training in NSSI, suggesting that they are aware of potential gaps in their knowledge and support development of training resources for teachers before they enter the profession. Conversely, in-service teachers highlighted the lack of available time and mental health services in schools, which is also the sentiment of teachers working in Canadian schools (Heath et al., 2006). Participants reported being sympathetic and concerned for pupils' welfare, but at the same time ill-equipped to give pupils the support they believed is required. Over half of in-service teachers had responded to

pupils who self-injure, but only one in five had received training, suggesting that similar to teachers in the US (Carlson et al., 2005) there is a clear disconnect between practice and teacher education. It is encouraging that pre- and in-service teachers gave overwhelming support for professional development in this area. Implementation of education programs into schools requires stakeholder support (McAllister et al., 2010), a challenge that may be overcome by giving voice to the needs of teachers regarding NSSI education.

Implications

Results suggest multiple education options, including curriculum-based courses for pre-service teachers and professional development programs for in-service teachers. Pre-service teachers would benefit from learning how to recognise pupils who self-injure, skills in talking to pupils who self-injure, and when and how to access professional services. These skills could then be applied in schools, fostering a stronger workforce and more supportive educational environment for both staff and pupils. Similarly, major components of professional development for in-service teachers could further teachers' understanding of how to communicate with pupils who self-injure, and improve their knowledge of warning signs and referral protocols, fostering early identification and enhancing links with community health services to streamline referral practices.

In light of pupils' reluctance to seek help from teachers (Fortune et al., 2008b), training may enhance teachers' confidence and ability to identify and communicate with these pupils, while at the same time could normalise their feelings and responses, reduce stigma, and improve help-seeking intentions of pupils, thus preventing further self-injury and later suicide. In-service teacher education could also ensure that supervising teachers model appropriate behaviour in response to NSSI when pre-service teachers are completing placement in school settings, and potentially enhance current and future teachers' willingness

to intervene with these students. Training may be particularly relevant for teaching staff who perceive NSSI as merely attention-seeking or fashionable and enhance their openness to helping students who self-injure.

It is possible that development of such training programs and policy guidelines will have significance for pre- and in-service teachers worldwide, based on teachers' lack of knowledge and confidence regarding youth NSSI (e.g., Carlson et al., 2005; Heath et al., 2006), and global calls for further education and policies addressing NSSI in schools (Duggan, Heath, Toste, et al., 2011; Heath et al., 2006; McAllister et al., 2010; Roberts-Dobie & Donatelle, 2007). In light of the international push for teachers to address mental health issues in classrooms (Robinson et al., 2013; Rothi, Leavey, & Best, 2008), NSSI represents one of many mental health problems confronting teaching staff. However, limited pre-service mental health training across countries (Graham et al., 2011; Koller et al., 2004), coupled with the international lack of resources for responding to mental health concerns of youth (O'Hara, 2014; Stewart, 2014), and the high prevalence of NSSI in adolescence based on recent pooled international prevalence data (Muehlenkamp et al., 2012; Swannell et al., 2014), challenges stakeholders and policy makers to think through how schools can best address NSSI.

It is possible that teacher training regarding NSSI could be delivered alongside education regarding other maladaptive coping behaviours, such as substance abuse and suicide (Toste & Heath, 2010), reducing demands on teachers' time and improving understanding among teachers that NSSI is often used by young people to cope with emotions. Development of online resources and training modules could potentially improve teachers' knowledge and promote self-directed learning about NSSI, while also being sensitive to barriers faced by teachers when responding to mental health concerns in schools,

such as financial and time constraints, and the geographical spread of schools in large countries such as Australia, the US and Canada.

One area where more work is needed, however, is in identifying the training needs of teachers in non-English-speaking countries. Six-month prevalence rates of NSSI in adolescents across German-speaking countries appear to vary, but are generally consistent with other international research (Plener et al., 2013). An early review of self-injury in South East Asia identified a number of studies focused on self-harm (where suicidal behaviour may also have been assessed), but none specifically focused on self-injury (H. K. Thompson & Hasking, 2009). However, emerging literature suggests self-injury is just as much of an issue among adolescents from non-Anglophone countries, with up to one third of high school students in China reporting NSSI (Tang et al., 2013; You, Lin, & Leung, 2013). Arguably schools in these countries would also benefit from identification of teachers' training needs, and implementation of training programs into pre-service and professional development courses.

Limitations

Although these findings provide important insights into the knowledge and attitudes of teachers across stages of the profession, it is important to note that participants self-selected into the study and the response rate and representativeness of participants could not be determined. Although comments from principals suggested time constraints and competing school priorities prevented schools from participating, some principals may have agreed to participate because their staff had received training regarding self-injury.

Furthermore, results may be subject to a selection bias, preferentially recruiting participants who have witnessed or responded to youth self-injury. The views of those without such experience may not be adequately represented. While relatively low internal consistency was

noted for subscales of the Teachers' Knowledge and Beliefs about Self-injury questionnaire, this is the only measure of perceived knowledge and attitudes developed specifically for teachers. Therefore, results of this measure should be interpreted with caution and further validation of this measure, and research connecting knowledge, attitudes, confidence, and actual behaviour with pupils who self-injure is warranted.

Conclusion

Despite their willingness to help pupils who self-injure, pre- and in-service teachers identified their lack of knowledge, training, and resources to confidently address self-injury in schools. Education for pre-service teachers and school staff delivered through existing university teaching courses for pre-service teachers and school professional development programs for school staff may foster early detection and referral of pupils who self-injure in schools, and could improve the confidence and wellbeing of school staff as they continue to support the mental health and welfare of pupils who self-injure.

Chapter 9: Response and Training Needs of School Staff Towards Student Self-Injury Aims and Outline of the Study

This chapter presents the fifth study of this thesis which aimed to understand how teachers and other school staff respond to students who self-injure, and to establish the training needs of pre-service teachers and school staff towards youth NSSI. Although results from Chapter 7 and Chapter 8 of this thesis suggested that teachers and other school staff desire training and resources to care for adolescents who self-injure, no prior study has examined how teachers and other school staff respond to these adolescents, how effective they believe these responses to be, and barriers to responding appropriately to young people who self-injure. In addition, no prior study has explored the specific training needs of preservice teachers and school staff towards youth NSSI. This is surprising given findings from previous research suggesting that further training is needed for teachers and other school staff to support adolescents who self-injure (Heath et al., 2006; McAllister et al., 2010), and that training in the area can increase staff knowledge and confidence when responding to youth who self-injure (Carlson et al., 2005; Robinson et al., 2008).

The aims of this study were to explore how pre-service teachers and school staff respond to students who self-injure, to examine their perceived confidence and effectiveness when responding to these adolescents, and identify barriers in responding to students who self-injure. This study also aimed to examine the training needs of pre-service teachers and school staff towards youth NSSI, focusing on the preferred content and delivery of such training. This study was the next step in ensuring that pre-service teachers and school staff receive tailored education programs and resources which may remove existing barriers to responding to students who self-injure, and improve staff confidence and skills to manage

youth NSSI, and thus improve early detection and referral of at-risk youth to professional services.

Declaration for Thesis Chapter 9

Monash University

In the case of Chapter 9, the nature and extent of my contribution to the work was the following:

Nature of contribution	Extent of contribution (%)
Study conceptualisation	80%
Data collection and data cleaning	90%
Statistical analyses and interpretation of the results	80%
Writing the paper for publication	80%

The following co-authors contributed to the work. If co-authors are students at Monash University, the extent of their contribution in percentage terms must be stated:

Name	Nature of contribution	Extent of contribution		
		(%) for student co-		
		authors only		
Penelope Hasking	Study conceptualisation, assistance with	n/a		
	statistical analyses and interpretation, and			
	editing			
Andrea Reupert	Study conceptualisation, assistance with	n/a		
	qualitative analyses and interpretation,			
	and editing			

The undersigned hereby certify that the above declaration correctly reflects the nature and extent of the candidate's and co-authors' contributions to this work.

Candidate's signature: Date: 09/09/2014

Main supervisor's signature: Date: 09/09/2014

Abstract

Although school staff are in a prime position to intervene with students who self-injure, how they respond to these students and their training needs regarding self-injury have not been examined. The aims of this study were to explore the responses and training needs of school staff towards youth self-injury. Pre- and in-service teachers and other school staff (N = 768) completed open-ended questions. Results suggested that school staff require training to respond effectively and confidently to students who self-injure. Self-injury education programs may enhance the knowledge and confidence of staff to detect and respond to students who self-injure.

Key words: self-injury; prevention; teacher training.

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Introduction

Non-suicidal self-injury (NSSI), the deliberate destruction of body tissue without suicidal intent (i.e., cutting, scratching, and self-hitting; Nock & Favazza, 2009), typically begins between 12 and 14 years of age, and can be equally prevalent among males and females (Jacobson & Gould, 2007). Approximately 10 to 23% of adolescents in Australia, the US, and Canada engage in NSSI (G. Martin et al., 2010; Muehlenkamp & Gutierrez, 2007; Ross & Heath, 2002). Consistent with this, pooled international prevalence of NSSI is 17 to 18% among adolescents, a rate which has remained stable for the last five years (Muehlenkamp et al., 2012; Swannell et al., 2014). According to empirical and theoretical research, adolescents typically engage in NSSI to alleviate negative emotions or to punish themselves (Klonsky, 2007a), as a result of stressful life events, and maladaptive coping and emotional regulation skills (Nock, 2009b; Nock & Prinstein, 2004, 2005).

Functional models of NSSI have suggested that people engage in NSSI for primarily intrapersonal reasons (i.e., to regulate negative affect), but also for interpersonal reasons (i.e., to communicate with or to influence others), however, this function is less common in community samples relative to other functions (Nock & Prinstein, 2004, 2005). The most comprehensive theoretical account of NSSI argues that the risk of NSSI is increased by distal factors (e.g., child maltreatment) that lead to vulnerability in responding to stress (e.g., poor distress tolerance). NSSI is then maintained and reinforced as a means of regulating emotional and social situations (Nock, 2009b). However, although NSSI is associated with psychiatric disorders, such as depression and anxiety (Nock et al., 2006), and completed suicide (Whitlock et al., 2013), less than a third of adolescents who self-injure seek professional help (Fortune et al., 2008b) or medical treatment (Hasking et al., 2010) for the behaviour.

The high prevalence of NSSI among adolescents and associated risk factors, such as poor academic achievement (G. Martin et al., 2005), low-self-esteem (Hawton et al., 2002), being bullied (Hay & Meldrum, 2010), and problems in relationships with family members and friends (Hawton & Harriss, 2008), suggests teachers and other school staff are in a prime position to recognise early warning signs of NSSI and intervene with young people who self-injure. Indeed, teachers and other school staff are often the first to notice NSSI among students and refer adolescents who self-injure (Oldershaw et al., 2008; Roberts-Dobie & Donatelle, 2007). They therefore, have a pivotal role in timely provision of treatment and possible prevention of youth suicide. However, despite regularly encountering students who self-injure, appropriate training for staff to improve understanding and care of adolescents who self-injure in schools is limited.

While teachers and school-based mental health professionals encounter youth NSSI, teachers and other school staff in the US (Carlson et al., 2005), Canada (Heath et al., 2006; Heath et al., 2011), and Australia (McAllister et al., 2010) are uncertain when responding to students who self-injure, and have identified a need for further staff training and/or school prevention programs addressing NSSI (Carlson et al., 2005; McAllister et al., 2010).

Teachers and school-based mental health professionals in the UK have also expressed shock, anxiety, repulsion, and panic towards students who engage in deliberate self-harm (DSH; including suicidal behaviour as well as NSSI; Best, 2005, 2006), with other studies suggesting that teachers lack appropriate knowledge about NSSI, misinterpreting self-injury as attention-seeking and manipulative (Carlson et al., 2005; Heath et al., 2011). Although researchers have found no correlation between length of teaching experience, knowledge about NSSI, and confidence responding to students who self-injure (Carlson et al., 2005; Heath et al., 2006; Heath et al., 2011), teachers experienced with students who self-injure are

more knowledgeable and confident responding to these students than teachers without such experience (Best, 2005, 2006; Carlson et al., 2005; Simm et al., 2008, 2010).¹¹

While two training resources exist to educate school staff about self-injury (i.e., the Signs of Self-Injury prevention program and S.A.F.E alternatives; Conterio et al., 1998; Muehlenkamp et al., 2010) research to evaluate their effectiveness is yet to be conducted. In addition, both programs are based in the US, and how these approaches might need to be adapted or modified for other contexts remains to be seen. Gatekeeper training is an internationally recognised and widely used strategy to improve early identification and referral of at-risk individuals (Isaac et al., 2009; Wyman et al., 2008), with researchers finding that training programs to educate school mental health professionals about DSH (including suicidal behaviour) can improve their knowledge about DSH and confidence to intervene with young people who self-harm (Robinson et al., 2008).

However, to provide effective education to school staff about NSSI and improve the overall quality of care provided to students who self-injure, we first need to establish the nature of information that would most benefit teachers and other school staff, and how this could be efficiently delivered. We also need to better understand how staff currently respond to NSSI and potential barriers they perceive to effective responding. Although many teachers are not trained mental health professionals (Koller et al., 2004), the majority of teachers have experience with students who self-injure (Carlson et al., 2005), thus training to enhance their knowledge and confidence could optimise responses to students who self-injure in the school setting.

¹¹ Although researchers have found no relationship between length of teaching experience, and knowledge and confidence in relation to NSSI, experience and education specifically in the area of self-injury are related to greater perceived knowledge and confidence in response to NSSI (e.g., Carlson et al., 2005; Robinson et al., 2008). However, given research suggesting that length of teaching experience is not related to confidence in response to students who self-injure, we did not expect in-service teachers to report greater confidence than preservice teachers.

The aims of this study were to explore the response and training needs of Australian secondary school staff towards NSSI among adolescents. Establishing the training needs of both pre-service (i.e., teacher education students) and in-service teachers, and other school staff, may help to inform whether such training should begin in pre-service teacher training courses, introduced later in professional development programs for in-service teachers and staff, or both. Participants completed open-ended questions allowing them to describe, in their own words, how they have responded to NSSI in the past (if at all) and what their training needs are. Given differences in exposure to students who self-injure, we expected teachers (both pre- and in-service) and other school staff to differ in their responses and training needs regarding NSSI. Specifically, it was anticipated that pre- and in-service teachers would report less confidence and greater need for training than school mental health workers. Given research suggesting that length of teaching experience is unrelated to confidence when responding to students who self-injure, we did not expect in-service teachers and staff with more years of professional experience to report greater confidence than junior staff and pre-service teachers. Identifying areas of divergence in the response and training needs of school staff will inform development of tailored educational programs and tools to equip current and future teachers, and other school staff to identify and confidently respond to students who self-injure.

Method

Participants

Seven hundred and sixty eight staff (556 females, 206 males, 6 unspecified; aged 18-67 years; M = 38.35, SD = 12.94) working in the Australian secondary sector completed an online questionnaire. The sample included pre-service teachers (34.8%, n = 267), in-service teachers (34.0%, n = 261), school mental health workers, including counsellors,

psychologists, and welfare coordinators (13.8%, n = 106), school leaders, including principals, deputy principals, and year levels coordinators (with the responsibility of students' pastoral care; 10.7%, n = 82), and administrative and school support staff, including school nurses, integration (i.e., teacher) aides, and administration staff (6.8% n = 52).

Pre-service teacher education is the education and training (including supervised placement in school settings) provided to student teachers before they can become registered secondary school teachers in Australia. Secondary schools in Australia (similar to North American junior/middle and high schools) cater for students aged 12 to 18 years. Although pre-service teachers must undertake a minimum of 80 days of professional experience to achieve full registration as a teacher in Australia (Australian Institute for Teaching and School Leadership, 2014), mental health training is not mandatory for pre-service teachers in Australia (Graham et al., 2011). While there is also no universal, national requirement for pre-service teachers to undertake first aid training, in some roles there is an expectation of basic first aid training.

Pre-service teachers were recruited from 14 Universities in all Australian states and territories, excluding two. Pre-service teachers were in the first year of their teaching degree (11.2%), or had completed one (11.6%), two (15.5%), three (10.3%), or four (29.2%) years of tertiary education, and between two and 22 weeks of school placement (M = 4.61; SD = 5.23). In-service teachers and other staff were recruited from publically funded and private secondary schools in all Australian states and territories. Among in-service teachers and school staff, years working in secondary schools ranged from less than one year to 45 years (M = 14.75, SD = 11.01).

Materials

Demographic questions included age, gender, occupation in the secondary education sector, years of professional experience, experience responding to students who self-injure, and participation in training regarding self-injury and desire for future training.

Participants were asked several open-ended questions to understand how they respond to students who self-injure and their training needs. Participants who had responded to students who self-injure were asked to: 1) "Describe what [they] did to assist the student who self-injured"; 2) "Describe how effective [they thought] this response was in helping the student who self-injured"; 3) "Describe how confident [they] felt in helping the student who self-injured"; and 4) "Describe what [they] might do differently to help students who deliberately self-injure." All participants were asked to: 5) "Describe any barriers [they] perceive to helping students who deliberately self-injure"; and 6) "Describe who [they] might go to for help or advice if [they] encountered a student who has deliberately self-injured."

Participants who had received training in NSSI were asked to: 1) "Describe the content of the training"; 2) "Describe how [the training] was delivered"; and 3) "Describe why or why not the training was effective." All participants were asked to: 4) "Describe why or why not [they] would be willing to undertake training"; 5) "Describe [their] preferred content of the training"; 6) "Describe how [they] would prefer to receive this training"; and 7) "Describe how often [they] would like to receive this training [in NSSI]." An additional open-ended question allowed participants to freely describe any other issues regarding their experiences with students who self-injure.

Although checklists, rating scales, or Likert scales could have been used to assess responses to self-injury and perceived effectiveness of training, given the lack of prior research in this area, and lack of existing validated tools, we opted to use a more qualitative

approach. By adopting open ended questions we hoped to elicit responses to NSSI, barriers to effective responding, and novel ideas for training beyond those in the limited literature and the researchers' understanding, to gain an appreciation of how NSSI is addressed "on the ground." To increase validity and ensure responses related to NSSI, Nock and Favazza's (2009) definition of NSSI was included at the beginning of the questions. Although participants were given a definition of NSSI, some used the term self-harm in response to the open-ended questions. However, Gagnon and Hasking (2012) demonstrated that Australian psychologists may use the term self-harm when referring to NSSI. Of the total sample, 522 participants responded to questions assessing whether they had responded to students who self-injure, and 478 responded to questions regarding training in NSSI.

Procedure

After ethical approval was obtained, approval of school principals and university subject/course coordinators was sought to distribute information sheets about the project to in-service teachers and other school staff, and among pre-service teachers, respectively. Of the 1488 school principals contacted, 86 agreed to distribute information sheets to in-service teachers and staff, while 66 of the 129 coordinators contacted agreed for information to be distributed to pre-service teachers. The study was also advertised to school psychologists on the Australian Psychological Society website. Information sheets invited in-service teachers, other school staff, and pre-service teachers to access the online questionnaire though a URL link. Participants were reminded on information sheets that participation was voluntary and they could withdraw from the study prior to submitting questionnaires. The online questionnaire took between 30 and 40 minutes to complete, and participants were invited to enter a draw to win cinema tickets as compensation for their time.

Analysis

Descriptive statistics and chi-square analyses were used to examine whether experience and training in NSSI differed according to role in the school. Thematic analysis, a widely used and flexible technique for analysing and reporting qualitative data, was used to organise and quantify open-ended responses. Themes were developed to represent openended responses. Responses were constantly re-read and re-coded to verify themes, and where necessary, validate new themes or merge existing themes (Braun & Clarke, 2006). Participants were free to write up to 4000 characters in response to open-ended questions; therefore, many participants offered more than one view in response to each question. Interrater reliability, established through coding of 20% of data by a researcher independent of the study, was substantial to almost perfect (.65 - 1.0; Mean agreement = .85; Landis & Koch, 1977). Chi-square analyses examined how responses differed between pre- and in-service teachers, and other school staff according to whether or not participants endorsed themes (i.e., endorsed vs. not endorsed). A one-way between-groups ANOVA was conducted to explore the impact of role in school (i.e., pre-service teachers vs. in-service teachers) on level of perceived effectiveness (very ineffective – very effective) and confidence (very unconfident – extremely confident) to respond to students who self-injure. Pearson correlations were then used to examine the relationship between length of teaching experience, and confidence and perceived efficacy in response to students who self-injure.

Results

Quantitative Analysis

Over half of the participants had responded to students who self-injure (55.4%, n = 289), while only a quarter (25.3%; n = 121) had received training in NSSI. School mental health workers and school leaders were more likely to have responded to students who self-

injure than other staff, while mental health workers were more likely to have received training in NSSI. Pre-service teachers were more likely to request training in NSSI (see Table 15).

Table 15

Experience and Training in Non-Suicidal Self-Injury in Schools

	Pre-service	In-service	School	Mental health	Administrative/support		
	teachers	teachers	leaders	workers	staff		
	n (%)	n (%)	n (%)	n (%)	n (%)	p	phi
			Resp	onded to NSSI			
Yes	33 (21.4)	111 (58.7)	50 (83.3)	73 (93.6)	21 (52.5)	<.001	.51
Method of responding to NSSI							
Refer to mental health professional	7 (35.0)	86 (81.1)	38 (82.6)	54 (79.4)	15 (71.4)	<.001	.29
Personally intervene	13 (65.0)	70 (66.0)	37 (80.4)	57 (83.8)	13 (61.9)	<.05	.19
Contact parents	1 (5.0)	19 (17.9)	19 (41.3)	35 (51.5)	6 (28.6)	<.001	.34
Refer to principal or colleague	8 (40.0)	20 (18.9)	1 (2.2)	9 (13.2)	2 (9.5)	<.01	.26
Supply mental health resources	1 (8.3)	2 (1.9)	5 (10.9)	4 (5.9)	0 (0.0)	ns	-
No	121 (78.6)	78 (41.3)	10 (16.7)	5 (6.4)	19 (47.5)		
			Tra	ining in NSSI			
Yes	14 (10.2)	27 (14.9)	16 (30.8)	54 (77.1)	10 (26.3)	<.001	.52
Content of training							
Referral process and services	11 (84.6)	21 (80.8)	9 (56.3)	36 (67.9)	6 (66.7)	ns	_
Risk assessment procedure	11 (84.6)	10 (38.5)	6 (37.5)	38 (71.7)	5 (55.6)	<.01	.35
Counselling and communication skills	4 (30.8)	10 (38.5)	10 (62.5)	35 (66.0)	3 (33.3)	<.05	.30
General information	3 (23.1)	8 (30.8)	6 (37.5)	22 (41.5)	4 (44.4)	ns	-

Delivery of training							
Workshops	3 (23.1)	15 (57.7)	11 (68.8)	39 (73.6)	6 (60.0)	<.05	.32
Seminars and lectures	12 (92.3)	15 (57.7)	6 (37.5)	35 (66.0)	4 (40.0)	<.05	.31
Workbooks multimedia and readings	3 (23.1)	2 (7.7)	1 (6.3)	13 (24.5)	3 (30.0)	ns	-
Supervision/ consultation	2 (15.4)	4 (15.4)	0 (0.0)	5 (9.4)	1 (10.0)	ns	-
No	123 (89.8)	154 (85.1)	36 (69.2)	16 (22.9)	28 (73.7)		
			Need trai	ining in NSSI			
Yes	119 (97.5)	76 (92.7)	24 (92.3)	49 (86.0)	20 (100.0)	<.05	.03
Preferred content of training							
Referral process and services	72 (59.5)	54 (62.8)	15 (50.0)	22 (41.5)	12 (57.1)	ns	-
Risk assessment procedure	72 (59.5)	45 (52.3)	18 (60.0)	31 (58.5)	11 (52.4)	ns	-
Counselling and communication skills	83 (68.6)	54 (62.8)	18 (60.0)	38 (71.7)	10 (47.6)	ns	-
General information	44 (36.4)	18 (20.9)	9 (30.0)	19 (35.8)	3 (14.3)	ns	-
Preferred delivery of training							
Workshops	79 (65.3)	51 (58.6)	23 (76.7)	40 (76.9)	19 (86.4)	<.05	.18
Seminars and lectures	64 (52.9)	46 (52.9)	17 (56.7)	29 (55.8)	10 (45.5)	ns	-
Workbooks multimedia and e-resources	29 (24.0)	20 (23.0)	4 (13.3)	28 (53.8)	3 (13.6)	<.001	.28
No	3 (2.3)	6 (5.7)	2 (5.9)	8 (12.3)	0 (0.0)		
Unsure	9 (6.9)	23 (21.9)	8 (23.5)	8 (12.3)	4 (16.7)		

Qualitative Analysis

To ascertain how participants typically responded to students who self-injure, participants with such experience were asked to describe their usual response to students who self-injure, how confident and effective they felt they were in helping these students, and how they would respond differently in future. Barriers impeding the ability of staff to respond effectively to students who self-injure, and who staff would turn to for help or advice in response to students who self-injure were also explored.

1. The process of responding to students who self-injure

Of the participants who had responded to students who self-injure, the most common response was to refer these students to mental health professionals (76.7%, n = 201), followed by intervening themselves with students who self-injure (72.5%, n = 190). Of those who said they would become personally involved they cited actions such as performing risk assessments or providing individual counselling. Other responses to students who self-injure included contacting students' parents and guardians (30.5%, n = 80), referring students who self-injure to school principals, coordinators, and colleagues (15.3%, n = 40), and/or supplying mental health resources and telephone numbers of crisis hotlines (5.0%, n = 13).

2. Perceived effectiveness of response to students who self-injure

When asked how effective their typical response was in helping students who self-injure, participants' remarks were categorised as: very effective, somewhat effective, unsure how effective, somewhat ineffective, or very ineffective. Half the participants described their response as somewhat effective (50.8%, n = 134), a third were unsure how effective their typical response was in helping students who self-injure (29.2%, n = 77), while fewer

described their response as very effective (12.1%, n = 32). Participants' reporting that their response was effective, described the process of helping students who self-injure as gradual.

Relatively effective, dependent upon support given at home and motivation of student to get help and follow through with advice (Mental health worker)

It is still an ongoing process for those who are dealing with the self-harm. It has been effective so far because the students and parents have been referred to professionals and the parents are highly involved. Sometimes it feels like 'one step forward, two steps back,' however, it is about perseverance and constant monitoring (School leader)

Very effective for some, however, this takes time and depends on their efforts to implement strategies. Many factors can affect this. Things change rapidly for young people so it's hard to measure (Administrative and support worker)

Participants who described their response as quite ineffective (6.1%, n = 16) or very ineffective (1.9%, n = 5) highlighted that their response could improve with additional education and school resources.

My supervising teacher was not very effective in dealing with the problem and I ended up passing it on again to the head teacher... (Pre-service teacher)

This student had a history of self-harm and had been seeing a psychologist outside, which we tried to work with. I feel more needed to be done, especially as we did not have a trained mental health person in the school (In-service teacher)

I don't think I was very effective at all. My training has not prepared me for this sort of interaction with students. I could have handled it better, if I had been trained to deal with it (In-service teacher)

3. Perceived confidence in response to students who self-injure

Less than half the participants reported feeling confident (48.1%, n = 126) responding to students who self-injure, including when school policies and mental health services are available in schools. Others described feeling uncertain (16.8%, n = 44) about their usual response to students who self-injure. Few felt extremely confident (4.2%, n = 11).

I always feel extremely confident when dealing with a situation like this. I know the protocol and standard methods of dealing with this and I am positive in the words I choose to use. So far, I have never had a negative outcome from a session where I have self-counselled a student on this matter (Pre-service teacher)

Varied - sometimes I was very uncomfortable because I knew the situation was beyond me but good processes were in place to ensure no adult worked alone with students and there was support there at all times (Mental health worker)

As I was simply required to delegate the management of the problem to trained professionals, I felt very confident. If ... I have no trained professionals within the school to call on, I would feel far less confident. I would have to trust that the teachers [in] student management positions would be able to refer the student on to the appropriate professional help (In-service teacher)

Participants who felt confident or somewhat confident responding to students who self-injure acknowledged that it was through their experience and training that they learnt how to respond to students who self-injure.

The first student was hard to comprehend why and to not respond negatively towards the action they had inflicted, but I have gained more advice and experience in my

responses to students and feel more confident in responding appropriately (Mental health worker)

Reasonably confident as I had just completed a fairly intense training course on selfharm (Mental health worker)

I don't feel confident but I know that I can make an informed and helpful response as

I have been teaching for a long time, and I have an awareness of a variety of mental

challenges (In-service teacher)

Others expressed feeling somewhat unconfident (21.4%, n = 56) or very unconfident (9.5%, n = 25) regarding their typical response to students who self-injure.

Not as confident as I would like. It is hard to conceal one's own feelings of shock or discomfort or fear (Mental health worker)

I don't feel confident. I really haven't been given enough training (In-service teacher)

Not very confident, it was my first experience with someone who self-injured (Inservice teacher)

Participants who spontaneously elaborated on reasons they felt unconfident responding to students who self-injure described the process as stressful and emotionally draining, and were concerned about the responses of parents and families.

There have been a few times that I would say the enormity of the situation [for] the student has been quite stressful (School leader)

Confident in myself but not so confident in the families that they would do what was necessary for their children (Mental health worker)

Not very. It is not a one size fits all situation and can be very emotionally draining (Mental health worker)

It was quite overwhelming because I wasn't sure if she was doing it for attention or if she was genuine (In-service teacher)

4. Strategies to respond differently to students who self-injure

Two thirds of the participants (69.9%, n = 144) who had experience of students who self-injure suggested they would respond differently, citing that they would no longer be afraid to broach the issue with students, but would discuss limits of confidentiality with students, and refer earlier to mental health professionals, or notify parents and colleagues.

Talk to the student first and try and find out the whole situation (what's going on at home, etc.). Be clear to the student from the start that I can't just keep a secret and have to refer on. Refer to the Student wellbeing co-ordinator (School leader)

I would probably refer on quicker now (Administrative and support worker)

Would make it clear to student that YES they could talk their problems through with me but I would later have to discuss these problems with the principal and [their] parents (Pre-service teacher)

The remainder suggested they would do nothing differently (30.1%, n = 62), because colleagues with more expertise respond to these students, or they are obligated to follow school policy.

Not very much -I would probably change things slightly depending on the complexity of the student's individual needs (Mental health professional)

I feel I do all I can within my 'power' - I am not an expert, I do not have any formal training in mental health, I basically use my experience, intuition and refer to fellow Pastoral Care Team members for collaboration and support (School leader)

I am dictated by School Policy to follow the procedure I followed (In-service teacher)

5. Barriers to responding to students who self-injure

When asked to identify barriers impeding their ability to respond to students who self-injure, participants cited several barriers, including a) inadequate knowledge and training towards NSSI, b) lack of school policies and resources addressing NSSI, and reactions of c) parents, d) colleagues, and e) students towards self-injury, including reluctance to seek help for the behaviour.

a) Participants (12.6%, n = 91) identified inadequate knowledge and training as barriers preventing school staff from responding effectively to students who self-injure.

The only barrier would be my own lack of training and knowledge (Pre-service teacher)

We are teachers and not trained to deal in depth with these issues, but as the students are in our classes we need some idea about the way to handle the situations (Inservice teacher)

b) Others perceived a lack of school policies and resources (11.8%, n = 91), including time and finances, and mentioned that existing mental health services in schools and the community are insufficient. Some were concerned about legal implications and litigation if they intervened.

Time, money and specialised resources are a huge barrier as many people perceive that these young people are attention seekers and not suffering a significant mental health episode (School leader)

...it would be good to have some discussion over a plan of action. In my role as reception to the students I wasn't aware if we have a certain protocol to follow regarding self-harm. I would like input into this if we have one or make one (Administrative and support worker)

...I feel that we as educators are hindered by the department and the legal system in that we feel that getting involved may get us into trouble or may be 'more hassle than it's worth' so it's easier to ignore the issue (Pre-service teacher)

c) Reactions of parents and their reluctance to seek help, or negative home environments were also emphasised as significant barriers by 7.4% (n = 57) of participants.

Sometimes the parents will not admit what is happening or do not want to know as it is really hard for them. I understand why they take that stance, but it doesn't help (Inservice teacher)

Parents/guardians reluctance to seek help for their children and children living in environments that exacerbate the self-harming behaviour (Mental health worker)

d) Negative attitudes or unhelpful reactions from colleagues were also described as stumbling blocks in response to students who self-injure (3.0%, n = 23).

Some staff are still hard to convince not to make a big deal in front of students in regard to self-harm concerns. Some people still believe it is just an attention seeking device!! (Mental health worker)

Some staff do see them as attention seekers and you have to work to dispel this myth (School leader)

e) Almost all participants (96.2%, n = 177) remarked on students' reluctance to seek or accept help when concerned about stigma and confidentiality, or negative reactions among parents, peers, or school staff which may exacerbate the behaviour.

The largest barrier is that of the student themselves if they do not want help then it is going to be very hard to help them get past their self-injury. Once a student decides that they want to stop help comes much easier (Pre-service teacher)

Confidentiality: Young people are concerned that health professionals may tell their parents/teachers/other students. Think that an adult won't understand them. Feel shame and the fear of being stigmatised. Fear the impact it may have on their family/friends (Administrative and support worker)

If they are doing it for attention and I give them attention I am giving them what they want (In-service teacher)

6. School personnel to provide help or advice

When asked to describe who they might turn to for help or advice if they encountered a student who self-injured, 36.4% (n = 285) suggested they would seek help from a school mental health worker, followed by a school leader (20.1%, n = 157), external psychologist or service (13.8%, n = 108), teacher (6.1%, n = 48), crisis hotline or online counselling service (4.5%, n = 35), and/or parent and guardian (4.1%, n = 32).

Having identified that pre- and in-service teachers and other school staff require training to respond confidently to students who self-injure, participants were asked to describe how they would prefer to be educated about self-injury. The three areas discussed

are: 1) the process of learning about self-injury, including the content and delivery of previous training; 2) strengths and limitations of previous training; and 3) directions for future training, including the preferred content and delivery of future training.

1. The process of learning about self-injury

Among participants who had received training in understanding and addressing self-injury (25.3%, n = 121), workshops were the most common method for learning about self-injury (62.7%, n = 74), followed by seminars and lectures (61.0%, n = 72), independent reading, workbooks and multimedia (18.6%, n = 22), and/or professional supervision and consultation (10.2%, n = 12). In training, participants learnt about the referral process and mental health services (70.9%, n = 83), risk assessment procedures (59.8%, n = 70), counselling and communication skills (53.0%, n = 62), and/or general information (36.8%, n = 43), such as how to identify and respond appropriately to students who self-injure. n = 12

2. Strengths and limitations of previous training

Participants (89.9%, n = 107) reported that they had derived considerable benefits from previous training in NSSI, which can be implemented into future training programs for self-injury, including acquiring practical strategies and confidence to talk to students who self-injure, clarification of roles and responsibilities when addressing self-injury in schools, and discrediting myths about self-injury.

It was very practical and gave me confidence in approaching mental health as a common issue, I did not realise how common self-injury was until this workshop.

¹² How to identify students who self-injure included understanding the warning signs and risk factors of NSSI, while how to respond appropriately encompassed knowledge about appropriate things to say and how to act when students disclose NSSI.

When the staff were asked if they knew anyone or were related to anyone who had self-harmed nearly every hand went up (Pre-service teacher)

Made me aware that it is more than attention seeking, that the student was experiencing mental health issues (School leader)

It helped me to recognise symptoms and signs, and to understand the illness aspect of mental health behavioural symptoms, as well as equipping me with both the understanding that I am not necessarily expected to fix the problem for the students, but that I can and should take action if severe enough, and that I feel equipped to broach the subject with the student to begin with. It took away a lot of fears about tackling such a big problem (Pre-service teacher)

To improve on previous training and provide directions for future educational programs, we also sought to understand limitations of previous training in the area. Although 89.9% (n = 107) of participants reported that previous training was beneficial, the remaining 10.1% (n = 11) had not benefited from prior training in NSSI, reporting that existing training was too brief and more is needed.

...it is always only a start. I think that we are foolish if we ever think we have all the answers or that there is only one best response... these change all the time. I don't think that my study was conclusive... teachers/schools need ongoing information about up-to-date responses and referral processes. Teachers also need support to debrief after they have dealt with these issues and this seems sorely lacking (Inservice teacher)

It did not provide much help for effective intervention (Mental health worker)

3. Directions for future training

Based on participants' accounts regarding further training, and additional free comments describing their experiences with students who self-injure, participants (70.9%, *n* = 139) acknowledged that while responding to students' mental health problems is not the traditional role of teachers, it could help for staff "on the ground" to be aware of self-injury, particularly in remote areas of Australia.

While you don't want every teacher to be playing the role of the School Psychologist it makes sense to have those who work on a daily basis with the student aware of danger signals and knowledgeable about processes for intervention and help (In-service teacher)

It is important to get as much information as possible, particularly being in a remote area with very few accessible resources (Mental health worker)

Participants (8.7%, n = 17) also suggested they require information to confidently identify and address self-injury in schools and fulfil their obligation to help students.

It's critical; it's my responsibility as a teacher to be able to help students who come to me (In-service teacher)

To understand why a young person would self-harm and learn how to help a young person who is self-harming. What help is available in the community for a young person who self-harms? (Administrative and support worker)

We're working in the dark here (In-service teacher)

It was also suggested that training has become more important due to the perception that prevalence of self-injury is increasing and schools need to be prepared to respond (7.7%, n = 15).

I feel as though these issues are becoming more and more common with secondary students, and I do want to be more prepared (In-service teacher)

It is becoming more difficult to identify but more prevalent (School leader)

The areas participants would like to receive training in included: how and where to refer students who self-injure (56.3%, n = 175), how to conduct a risk assessment (56.9%, n = 177), how to counsel and communicate with students (65.3%, n = 203), and/or general information about self-injury (29.9%, n = 93), such as how to identify and react appropriately to students who self-injure. Regarding the distribution of information about NSSI, workshops (67.9%, n = 212), seminars and lectures (53.2%, n = 166), and/or workbooks, multimedia and online e-resources (26.9%, n = 84) were the preferred methods for efficient delivery of training. Participants would like to receive training yearly (45.0%, n = 122), less than once a year (39.9%, n = 108) or biannually (11.8%, n = 32).

Interestingly, some participants (11.2%, n = 22) did not want training addressing NSSI, expressing concern about having limited time and resources to participate in training or respond to students who self-injure.

There are many things a teacher has to be across, it is a small % of students in class, and I cannot be the expert in all areas (In-service teacher)

Depend on the length of the training, its proximity and the cost involved (School leader)

It's really not my role - other than general awareness. While it is beneficial for teaching staff to be aware of a range of mental health issues, I would be wary of any training claiming to produce 'instant experts' and would prefer the students to be referred to staff with appropriate professional skills & training (In-service teacher)

Comparison of Theme Endorsement by Pre- and In-Service Teachers and Staff

In response to students who self-injure, school mental health professionals were more likely than other staff to personally intervene with students who self-injure (i.e., counselling or risk assessment), and to notify parents and guardians, while pre-service teachers were less likely to refer students to mental health professionals, and more likely to refer students who self-injure to school leaders and colleagues (Table 15). Teachers with more years of professional experience were less likely to refer students who self-injure to school leaders and colleagues than teachers with fewer years of experience (r = .21, p < .05). No other differences for teachers regarding years of professional experience were observed.

Significant differences were also found between role in schools and perceived effectiveness and confidence in response to students who self-injure. Post-hoc comparisons indicated that mental health professionals were more likely than pre- and in-service teachers to feel effective working with students who self-injure. Mental health professionals were also more likely to feel confident responding to these students than pre- and in-service teachers, and school leaders (Table 16). Pearson correlations indicated that staff with more years of professional experience felt less effective, r = -.14, p < .05, and confident, r = -.19, p < .01, when responding to students who self-injure.

Table 16

Perceived Efficacy and Confidence to Respond to Non-Suicidal Self-Injury in Schools

	Pre-service	In-service	School leaders	Mental health	Administrative/support			
	teachers	teachers		workers	staff			
	M(SD)	M(SD)	M(SD)	M (SD)	M(SD)	\overline{F}	p	η^2
Perceived	3.29 (.91)	3.54 (.95)	3.65 (.67)	3.91 (.71)	3.76 (.70)	3.37	<.05	.05
effectiveness								
Confidence	2.78 (1.20)	2.97 (1.19)	3.16 (.94)	3.57 (.85)	3.19 (1.29)	3.99	<.01	.06

Pre- and in-service teachers were more likely to suggest they would respond differently in future to students who self-injure than other staff, χ^2 (4, n = 206) = 14.24, p < .01, phi = .26, while in-service teachers were more likely to perceive their lack of knowledge and training as barriers in responding to students who self-injure, χ^2 (4, n = 383) = 10.35, p < .05, phi = .16. Mental health workers were more likely than other participants to identify parental commitment as a barrier to helping, χ^2 (4, n = 383) = 37.73, p < .001, phi = .31. School leaders would be more likely to seek advice from mental health professionals in future, χ^2 (4, n = 387) = 10.46, p < .05, phi = .16, while pre-service teachers would be more likely to seek advice from school leaders and colleagues, χ^2 (4, n = 387) = 37.73, p < .01, phi = .19.

Regarding training in NSSI, mental health workers were more likely than teachers and other staff to receive training in risk assessment and counselling skills, and more likely to have training delivered though workshops. Pre-service teachers were more likely to have received training through seminars and lectures. Mental health professionals were more likely than endorse further training delivered through workshops, and workbooks, multimedia, and e-resources (Table 15). In-service teachers were more likely to mention restricted time and resources as barriers to future training than other school staff, χ^2 (3, n = 196) = 15.19, p < .01, phi = .28.

Discussion

The aims of this study were to investigate the response and training needs of secondary pre- service teachers and school staff towards students who self-injure. Although our participants frequently respond to students who self-injure, there are concerns regarding how effective their response is, as well as concerns regarding a lack of training, resources, and school policies. Mental health workers were more likely than pre- and in-service teachers

to feel effective and confident responding to students who self-injure, while in-service teachers were more likely to comment on their lack of knowledge and training. Participants with more professional experience felt less confident and effective in response to students who self-injure than junior staff. However, in-service teachers with more experience were less likely to refer, and more likely to comment on barriers presented by a lack of time and resources, than in-service teachers with less experience. Arguably, more experienced staff have seen more students struggle with NSSI and are better equipped than junior staff to address the issue themselves. However, participants requested training and school policies which would facilitate professional help-seeking among young people and their parents. In line with prior international work (e.g., Carlson et al., 2005; Heath et al., 2006; Heath et al., 2011), our findings support development of broad-reaching training programs and policy guidelines for addressing NSSI in the school setting.

Consistent with North American studies, teachers and school staff in our sample lack sufficient education in self-injury (Carlson et al., 2005; Heath et al., 2006; Heath et al., 2011), leaving them to feel that they are "working in the dark" in response to these students and "emotionally drained." This could reduce teachers' willingness to intervene and students' intentions to seek help. Teachers' attitudes towards self-injury, such as the perception that it is attention-seeking, may partly account for teachers' reluctance to become involved. Equally, teachers' perception that they could be liable for any harm to students may account for this. Importantly, previous research indicates school input affects timing of help-seeking (Oldershaw et al., 2008), therefore education may mitigate teachers' aversion to assisting students who self-injure and improve how teachers react to the behaviour. However, despite international research calling for further education and policies addressing NSSI in schools (e.g., Carlson et al., 2005; Heath et al., 2006; Heath et al., 2011; Roberts-Dobie & Donatelle,

2007), it appears that very little progress has been made to evaluate the effectiveness of training programs and school policies regarding NSSI over the past 10 years.

Education for staff has the potential to also alleviate adolescents' fears regarding stigma and confidentiality. It is clear from participants' accounts that while they intend to talk non-judgmentally to students who self-injure and discuss limits of confidentiality, they would notify parents and school mental health professionals sooner than they have done in the past. Although it is promising for teachers to report students who self-injure to mental health professionals and school leaders, it is also concerning because they too may not have received self-injury training. The controversy surrounding parent contact also requires consideration in training and school policies. In Canada, best practice involves parental notification by the school mental health professional only following a primary assessment identifying the student to be at serious risk to themselves or others (Toste & Heath, 2010). In line with participants' comments, best practice in the US also recommends that school policy considers the "feedback loop," which, within confines of confidentiality, ensures that the referring staff member knows their report resulted in professional intervention (Walsh, 2012). It is possible that these approaches are also applied in Australian schools; however, work is needed to evaluate their effectiveness, not only in Australia, but internationally.

Participants' accounts suggested they are concerned about students' reluctance to seek professional help for NSSI and duty of care legislation, which may encourage them to report self-injury to parents prior to consulting with colleagues or informing students of their intentions to report. This could negatively impact students' future intentions to seek help, and may alienate students' from teachers and other staff who could be the adults they prefer to communicate with. Although participants' suggested they would contact parents of students who self-injure, interestingly, participants were concerned that unresolved family issues and poor family functioning might exacerbate self-injury. Teachers and school staff also indicated

that it is hard to resolve or negotiate relationship problems within families. These findings fit with the broader international trend showing parents struggle to make sense of or accept self-injury, and are reluctant to seek professional help (Byrne et al., 2008; Oldershaw et al., 2008; Raphael et al., 2006; Rissanen et al., 2009b).

Not surprisingly, participants' perceived that students would also pick up on parents' negative attitudes and reactions, suggesting students may be fearful of how parents will cope when informed of their child's self-injury. Negative and unhelpful reactions of colleagues were also mentioned by participants. Inappropriate reactions or judgemental attitudes of parents and school staff to disclosure can evoke scepticism regarding the seriousness of self-injury which may influence schools', parents', and adolescents' intentions to seek help. This response can increase family conflict and school disengagement, which might increase youth hopelessness and social isolation, and escalate suicidal behaviour. Mental health workers who regularly notify parents of their child's self-injury possibly need training to address parental ambivalence towards seeking help for NSSI, and strategies to strengthen families and educate parents about how they can best support their children (Heath et al., 2006).

Although pre- and in-service teachers, and other school staff had low self-perceived knowledge and skills to assist students who self-injure, exposure to these students and training increased their confidence to broach the issue with students, clarified their role and the process for dealing with students who self-injure, and discredited myths surrounding self-injury. Importantly, among the few who had received training, some reported that existing training was too brief and did not focus adequate attention on self-injury. At the very least, educational programs could inform pre- and in-service teachers and school staff how to respond to self-injury which will confirm for many that they have responded appropriately in the past, and will thus increase their confidence to respond in future. Results have implications for professional learning programs for pre-service teachers and school staff, as

well as school policy, which may supplement universal gatekeeper training for suicidal behaviour and increase teachers' identification of suicide-related behaviours (Wyman et al., 2008). School gatekeepers, along with medical and mental health professionals, could potentially prevent self-injury, and subsequent youth suicide.

Implications

Over the last ten years there has been a global movement to better understand and address NSSI, with considerable attention placed on NSSI among adolescents, and consequently on NSSI in school settings (e.g., Heath et al., 2006; Lieberman et al., 2009; Toste & Heath, 2010). At the same time, teachers and other school staff are increasingly asked to address mental health issues within their classrooms, in addition to teaching the curriculum (Reinke et al., 2011). Teachers are charged with identifying and addressing substance use, bullying, behavioural problems, and mental health issues, including anxiety, depression, and eating disorders (Commonwealth of Australia, 2009). The addition of NSSI into this increasingly resource-taxed environment has left many teachers and school staff feeling overwhelmed. The latest international snapshot by the Organisation for Economic Cooperation and Development (2013) highlighted recent funding cuts to educational institutions for all Organisation for Economic Co-operation and Development countries, increasing pressure on school staff and limiting available resources. It is thus no surprise that a consistent theme to emerge across the globe is that school staff are calling for greater awareness and skills in addressing NSSI among their students. The consistency in international findings regarding the nature and extent of NSSI in schools (Muehlenkamp et al., 2012; Swannell et al., 2014), and the lack of training for school staff (Carlson et al., 2005; Heath et al., 2006; McAllister et al., 2010) suggests our results have implications not only for school staff in Australia, but internationally, providing some direction for how school staff

might begin to address this complex issue within the school system and thus ease some of the burden on our teachers.

To address the training needs of pre- and in-service teachers, and other school staff, self-injury content could be included in already existing mental health teaching courses for pre-service teachers and professional development programs for in-service teachers and school staff. For example, self-injury staff training could be delivered alongside other maladaptive coping behaviours, such as substance abuse and suicide. In-house training is also an effective way to reduce demands on teachers' time (Rothi et al., 2008). Multimedia programs, websites, and e-resources could be another time and cost efficient strategy to improve staff access to helpful and accurate self-injury information. These have the additional benefit of being accessible to people residing in rural and remote areas, and distributed to countries and regions with limited resources for professional development. Distribution of information to teachers and school staff in the first instance could have possible flow on effects for parents who rely on schools for support and advice. Given students' reluctance to seek help from teachers (Fortune et al., 2008b), training may enhance teachers ability to identify and communicate with these students, while at the same time reduce stigma, and improve attitudes and intentions of students and their parents to seek help on a range of issues, including self-injury.

These findings could also help key stakeholders and policy makers in schools to develop their own policy and practices in relation to youth NSSI, or may encourage policy makers and stakeholders to re-examine existing policies addressing NSSI. School policies addressing NSSI are likely to improve knowledge and confidence among staff by informing them of their role and what is expected of them, leading to improved identification and referral of students who self-injure, and prevention of the behaviour. Although school policy will differ by country, region, and school (Toste & Heath, 2010), it is essential that

recommendations for policy are developed, and clearly communicated and readily accessible to schools. Given the lack of policies addressing self-injury in schools (Duggan, Heath, Toste, et al., 2011; Roberts-Dobie & Donatelle, 2007) these guidelines can then be used by schools to develop policies that are socially and culturally relevant to their school community. Implementation of school policy could foster collaboration in schools and ensure teachers and other staff do not carry the load alone, further encouraging them to intervene with students who self-injure, and improving the overall health and wellbeing of students who self-injure.

Overall, we found strong support for implementation of gatekeeper training programs and school policies to enhance the knowledge and confidence of school staff to identify and respond to self-injury in schools. Teachers and other school staff have a critical gatekeeper role in response to student suicide (Wyman et al., 2008), which could arguably be harnessed to address youth NSSI in schools. Education initiatives and resources for parents and students prompting them to seek professional help are also warranted to ease the burden felt by school staff in response to students who self-injure, and facilitate school-parent communication and collaboration, thereby linking home and school interventions for adolescents who self-injure.

Limitations

Since participants self-selected to complete the online questionnaire, it was not possible to determine the response rate and representativeness of participants. The low response rate of principals and university coordinators calls into question how broadly results can be generalised. Results may be subject to response or sampling bias as participants could be those who have witnessed or responded to students who self-injure and, therefore, the views of those without such experience may not be adequately represented. In addition, the sample size for some themes (e.g., referral to school leaders and colleagues) was small when

making comparisons; therefore, results should be interpreted with caution. Further research in this area might consider alternative sampling and data collection methods which ensure a representative sample (e.g., probability sampling).

Conclusion

Although pre-service teachers and school staff respond to students who self-injure, most reported being ill-equipped and lacking training to effectively and confidently address self-injury in schools. Education for pre-service teachers and school staff delivered through existing university teaching courses for pre-service teachers and school professional development programs for school staff are important strategies to foster early detection and intervention of self-injury in schools, and will improve the confidence and wellbeing of school staff as they continue to support the mental health and welfare of students who self-injure.

Chapter 10: Developing a Policy to Address Non-Suicidal Self-Injury in Schools

Aims and Outline of the Study

This chapter presents results of the final study of this thesis which aimed to establish the suitability of a new policy for responding to youth NSSI in schools, which was developed based on a review of the literature and results of Chapter 7 to Chapter 9 of this thesis.

Although guidelines for responding to NSSI in schools have increased in recent years (e.g., Bubrick et al., 2010; Onacki, 2005; Toste & Heath, 2010; Walsh, 2012), no prior study has investigated the utility of these policies for managing NSSI in the school setting.

Therefore, the primary aim of this study was to investigate the acceptability of a policy for responding to students who self-injure, including challenges to implementing such a policy, using the procedure for thematic analysis described in Chapter 3 (Table 2). Data for this study were drawn from a subset of teachers and other school staff from the Independent schools which participated in the studies presented in Chapter 7 to Chapter 9. Input from school staff was used to refine the policy and develop a flowchart for responding to and referring students who self-injure.

Declaration for Thesis Chapter 10

Monash University

In the case of Chapter 10, the nature and extent of my contribution to the work was the following:

Nature of contribution	Extent of contribution (%)
Study conceptualisation	90%
Data collection, data entry, and data cleaning	100%
Statistical analyses and interpretation of the results	90%
Writing the paper for publication	90%

The following co-authors contributed to the work. If co-authors are students at Monash University, the extent of their contribution in percentage terms must be stated:

Name	Nature of contribution	Extent of contribution		
		(%) for student co-		
		authors only		
Penelope Hasking	Study conceptualisation, assistance with	n/a		
	statistical analyses and interpretation, and			
	editing			
Andrea Reupert	Study conceptualisation, assistance with	n/a		
	qualitative analyses and interpretation,			
	and editing			

The undersigned hereby certify that the above declaration correctly reflects the nature and extent of the candidate's and co-authors' contributions to this work.

Candidate's signature: Date: 09/09/2014

Main supervisor's signature: Date: 09/09/2014

Abstract

Background: Non-suicidal self-injury (NSSI) is an increasing and serious concern in schools. The purpose of this study was to determine the suitability of a new policy for responding to NSSI in schools. Methods: Teachers and other school staff (including year level coordinators, psychologists, and counsellors, *N* = 48) reviewed a policy for addressing NSSI in schools and provided written feedback. Results: The majority of staff worked in schools without a policy regarding NSSI, or were unsure whether their school had such a policy. Participants were generally positive about the presented policy and supported its implementation in schools. Perceived challenges to policy implementation included a lack of knowledge about NSSI among staff and limited referral services available to students who self-injure. Suggested changes included developing a flowchart of the referral process, and increasing collaboration between school staff, changes which were subsequently implemented. Conclusion: Awareness and education for school staff regarding NSSI combined with school policies for responding to adolescents who self-injure are recommended to enhance management of NSSI in schools, and improve the health and wellbeing of adolescents who self-injure.

Key words: mental health; injury prevention; protocols.

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Introduction

Non-suicidal self-injury (NSSI), the deliberate destruction of body tissue without suicidal intent (Nock & Favazza, 2009), typically begins between 12 and 14 years of age (Jacobson & Gould, 2007), and includes skin cutting, burning, and self-battery (Ross & Heath, 2002). Approximately 10 to 23% (G. Martin et al., 2010; Muehlenkamp et al., 2012; Muehlenkamp & Gutierrez, 2007) of youth self-injure, and it is equally common among males and females (Jacobson & Gould, 2007). Less than one in ten adolescents seek medical attention for the behaviour (Hasking et al., 2010), even though self-injury is a risk factor for further, more severe self-injury and completed suicide (D. Owens et al., 2002; Whitlock et al., 2013), and is associated with mental illness (Nock et al., 2006). While many teachers are not trained mental health professionals, and it is not suggested that they acquire clinical skills, research suggests that teachers and school-based mental health professionals are most likely to identify young people who self-injure and are in an ideal position to encourage them to seek professional help (Oldershaw et al., 2008; Roberts-Dobie & Donatelle, 2007), preventing escalation of the behaviour and later suicide (Heath et al., 2011).

Although teachers and school-based mental health professionals are increasingly likely to encounter young people who self-injure, school staff tend to lack knowledge about NSSI (Best, 2005, 2006; Carlson et al., 2005; Heath et al., 2006; Heath et al., 2011; Roberts-Dobie & Donatelle, 2007), and misinterpret self-injury as attention-seeking and manipulative (Carlson et al., 2005; Heath et al., 2011). School staff report having received little training regarding NSSI, and are unsure how to respond to the behaviour in schools (Best, 2005, 2006; Carlson et al., 2005; Heath et al., 2006; Heath et al., 2011). Together, negative attitudes and misconceptions about NSSI can be detrimental to the quality of care provided to and service use among adolescents who self-injure (Gagnon & Hasking, 2012; Hadfield et al., 2009; McAllister & Estefan, 2002; Patterson et al., 2007b). Consequently, programs have

been implemented in schools to educate staff and students about NSSI (Muehlenkamp et al., 2010; Robinson et al., 2008). However, while training programs can improve staff knowledge about self-injury and confidence to intervene with young people who self-injure (Robinson et al., 2008), researchers suggest that education alone may not increase staff communication with and referral of students (Wyman et al., 2008). Appropriate management of self-injury in schools requires clear policies and response protocols informing teachers and other school staff how they can effectively respond to and refer adolescents who self-injure (Toste & Heath, 2010; Walsh, 2012).

Although education and policy together may exert the greatest impact on staff knowledge and practice when responding to adolescents who self-injure, school staff in the US and Canada report working in schools without policies addressing youth NSSI, or are unsure whether their school has a specific self-injury policy (Duggan, Heath, Toste, et al., 2011; Roberts-Dobie & Donatelle, 2007). As counsellors working in schools with a suicide policy are more likely than counsellors working in schools without such a policy to recognise the warning signs of suicide, and are more organised in their approach to youth suicide (Malley, Kush, & Bogo, 1994), the same may also hold for NSSI. Mirroring suicide policy (King, 2001a, 2001b), school policies addressing NSSI should improve the consistency of care provided to self-injuring youth, and increase staff knowledge and skills when responding to these adolescents, while also formally recognising self-injury prevention as a priority in the school setting.

While guidelines for responding to self-injury in schools have increased in recent years (Bubrick et al., 2010; Onacki, 2005; Toste & Heath, 2010; Walsh, 2012), limited research has investigated the utility of these policies, and the needs of teachers and other school staff regarding development of policies addressing youth NSSI. What has emerged from the literature is that school staff are dissatisfied with existing school policies regarding

self-injury (McAllister et al., 2010), which are limited compared to policies for other health related issues, such as suicide attempts, alcohol abuse, and physical and sexual abuse (Roberts-Dobie & Donatelle, 2007). Furthermore, previously developed school policies and guidelines addressing NSSI include protocols for responding to suicidal behaviour (Toste & Heath, 2010; Walsh, 2012). Although self-injury is a recognised risk factor for suicide (D. Owens et al., 2002), self-injury is often not associated with suicidal intent (Nada-Raja et al., 2004), and differences in methods and severity of these two behaviours (Muehlenkamp, 2005) suggests distinct policies targeting NSSI and suicide should be available in schools. However, there is little empirical guidance for developing and implementing effective school self-injury policy.

In response to the perceived need for a policy addressing NSSI, we developed one based on a review of the literature (Bubrick et al., 2010; Onacki, 2005; Toste & Heath, 2010; Walsh, 2012) and our own previous research which demonstrated a need and desire for such a policy (Berger et al., 2014). The purpose of putting plans down in writing is to create a standard against which to hold the school community accountable when making judgements and changes (Schwartz et al., 2012). Specifically, this policy aimed to outline best practice procedures for responding to and referring students who self-injure, and provide guidelines for schools to consider when developing their own NSSI policy. However, while teachers and other school staff strongly support introduction of NSSI policies in schools (Berger et al., 2014; Duggan, Heath, Toste, et al., 2011; Roberts-Dobie & Donatelle, 2007), school nurses in Australia suggest that widespread implementation of such policies requires support from stakeholders within the education system (McAllister et al., 2010). Given that acceptability of a policy among school staff is likely to increase implementation of the policy in schools, the purpose of this study was to determine the suitability of our policy for managing incidents of NSSI in secondary schools. Feedback from teachers and other school staff was then used to

refine the policy for use in the school setting and develop a flowchart of the referral process. The resultant template will assist schools to develop their own self-injury policy, while also informing decisions about the effectiveness of existing policies and practices in relation to youth NSSI, and providing directions for future revisions of policies addressing NSSI in schools.

Method

Participants

Forty eight teachers and other school staff (60.4% female; M age= 43.60, SD = 9.93) participated in the study. The sample included teachers (41.7%; n = 20), school-based mental health professionals, including counsellors and psychologists (25.0%; n = 12), school leaders, including year level coordinators and heads of years levels (25.0%; n = 12), and other school staff, including school nurses and chaplains (8.3%; n = 4). Participants were recruited from 18 Independent (i.e., non-government) secondary schools (catering for students aged 12-18 years) in five Australian states. The proportion of teachers who participated in the study (41.7%) was lower than the proportion of teaching staff working in the 18 Independent schools sampled (59.3% teaching staff, 40.7% non-teaching staff).

Instruments

School Policy. The school policy was developed based on a review of the literature (Bubrick et al., 2010; Onacki, 2005; Toste & Heath, 2010; Walsh, 2012) and our own previous research examining the training needs of teachers and other school staff regarding youth NSSI (Berger et al., 2014). Although school policies for NSSI will need to differ by region and school (Toste & Heath, 2010), central issues were considered when developing the current NSSI policy (Table 17). School policies addressing NSSI guide identification,

assessment, and referral of students who self-injure, outline conditions requiring immediate medical attention from the school nurse or hospital emergency department, define the roles and responsibilities of staff members, and provide strategies for managing student contagion of NSSI (Bubrick et al., 2010; Onacki, 2005; Toste & Heath, 2010; Walsh, 2012). When describing the roles and responsibilities of staff members, the school principal and stakeholders may designate a point person, such as the school counsellor or psychologist, to receive referrals and conduct risk assessments with students who self-injure (Bubrick et al., 2010; Walsh, 2012).

School policies for NSSI also guide the initial risk assessment, and indicate when students who self-injure should be referred to external mental health professionals, and when their parents should be informed (Bubrick et al., 2010; Onacki, 2005; Toste & Heath, 2010; Walsh, 2012). Existing school policy guidelines for NSSI recommend that the point person contact parents when students are at high risk to themselves (Bubrick et al., 2010; Walsh, 2012). When the risk assessment suggests students are at low risk for severe physical injuries, death, and co-occurring mental health problems, then parental notification may not be required provided the point person has the training and resources to intervene with these students and monitor their risk (Bubrick et al., 2010; Toste & Heath, 2010; Walsh, 2012). Guidelines for identifying students at low, moderate, and high risk for further self-injury and death were drawn from previous literature in the area (Andrews et al., 2013; Toste & Heath, 2010; Whitlock, Muehlenkamp, & Echenrode, 2008). A feedback loop may also be included in the policy, outlining circumstances when the referring staff member is notified of the outcome of their referral within the confides of confidentiality (Walsh, 2012).

Table 17
Steps to Developing the Policy for Managing Non-Suicidal Self-Injury in Schools

Step	Title	Description
1	Overview	Purpose of the policy outlined
2	Definitions	• Key terms used in the policy defined, including NSSI and
		contagion
		• Overview of the prevalence, risk factors, and functions of
		NSSI
		• NSSI is differentiated from suicide
3	Roles and	• Responsibilities of school staff members outlined
	responsibilities	• Conditions requiring immediate medical attention from the
		school nurse or emergency department
		• Education for staff to identify and respond to NSSI
		• Assign a school point person with self-injury training to
		manage incidents of NSSI
4	Identification	 Warning signs to identify NSSI described
5	Internal referral	• Referral of student to point person
6	Initial assessment	 Risk assessment conducted by point person
		• Feedback provided to referring staff member within confines
		of confidentiality
7	External referral	• Possible referral of low risk student to external mental health
		professional
		• Referral of moderate to high risk student to external mental
		health professional
8	Follow-up	• Follow-up risk assessment conducted by point person
	assessment	
9	Parental	• Circumstances requiring parental notification defined
	notification	
10	Contagion	 How to manage contagion of NSSI among students
	management	
11	Self-care	 Self-care practices of staff detailed

Feedback. A brief 14-item measure on a 5-point Likert scale (from not at all – very, very much) assessed the perceived effectiveness of the policy in the school setting. Participants also provided written comments to four open-ended prompts regarding the acceptability of the policy in its presented form, challenges to implementing the policy in schools, the need for a school policy addressing youth NSSI, and any other suggested changes staff would make to the policy (Appendix F)

Procedure

After obtaining ethical approval, school principals who agreed to participate in an earlier study investigating the knowledge and training needs of school staff towards youth NSSI were mailed information about the project in mid November 2013 and asked to distribute copies of the information sheet (Appendix E), school policy, and questionnaire to six members of staff working at their school, including teachers, year level coordinators, psychologists, and counsellors. These staff members were then invited to review the school policy and complete the anonymous questionnaire within two weeks of receiving the project materials. Participants were reminded on information sheets that participation was voluntary and they could withdraw from the study prior to submitting the questionnaire. Of the 192 teachers and other school staff contacted to participate, 48 returned completed questionnaires to the researchers (25% response rate).

Data Analysis

Descriptive analyses were used to evaluate how well the recently developed school policy addressed the needs of teachers and other school staff when responding to youth NSSI. Thematic analysis was then used to analyse responses to the open-ended prompts addressing the acceptability of the policy in schools. Themes were developed based on the process described by Braun and Clarke (2006). Specifically, responses were coded by the first author

according to key themes, and where necessary, responses were recoded according to newly developed or merged themes established during the coding process. These themes were then cross-checked by the second author. Any discrepancies were settled through discussion between the two authors. However, while the definition for NSSI by Nock and Favazza (2009) was provided at the beginning of the questionnaire, participants still referred to self-harm in response to the open-ended prompts.

Results

Descriptive Statistics

Existing NSSI policies. A third of participants (33.3%, n = 16) reported working in schools with a NSSI policy, while 37.5% (n = 18) worked in schools without a policy addressing youth NSSI, and 29.2% (n = 14) were unsure whether their school had such a policy. Of participants working in schools without a policy, 94.4% (n = 17) reported that their school needed a policy regarding NSSI, while one participant (5.6%) reported that such a policy was unnecessary in their school. Of participants working in schools with a NSSI policy, 25.0% (n = 4) reported that their school's policy was inadequate, while one participant (6.3%) was unsure whether their school's policy was effective, and 68.7% (n = 11) reported that their school's policy was very effective in addressing youth NSSI.

Recently developed NSSI policy. All participants were asked to indicate whether they would implement the recently developed NSSI policy in their school, with 70.8% (n = 34) reporting that they would implement the policy, 14.6% (n = 7) suggesting they would not implement the policy, and 8.3% (n = 4) unsure whether they would implement the policy in their school. When asked to indicate how well the recently developed policy addressed their needs in responding to students who self-injure, 4.2% (n = 2) reported that the policy partially addressed their needs, 12.8% (n = 6) were unsure about how well the policy responded to

their needs, and 83.0% (n = 39) indicated that the policy addressed their needs in responding to youth NSSI. Finally, when asked how confident they would be recommending the recently developed policy to other staff working in the secondary education system, 6.6% (n = 3) indicated that they would not recommend the policy to others, 11.1% (n = 5) were unsure whether they would recommend the policy, and 82.2% (n = 37) reported that they would recommend the policy to others working in the secondary education sector. To further investigate participants' perceptions of the policy addressing youth NSSI, percentages and means were calculated for the remaining Likert scale items, which indicated that participants were generally satisfied with how well the policy addressed their needs and prepared them to respond to students who self-inure. Some participants were unsure whether the policy adequately addressed how to identify and react to students who disclose NSSI, and how to notify parents and prevent contagion in schools (Table 18).

Table 18

Percentage Distributions and Mean Scores of Likert Scale Questionnaire Items

		Response (%)				
		Not	A	Unsure	A	Very,
Question	M	at	little		lot	very
	(SD)	all	bit			much
How well do you think the policy addresses you	ur needs	in the	e follov	ving area	s:	
1. When school staff should report students	4.17	0.0	6.4	4.3	55.3	34.0
suspected of self-injury	(0.79)					
2. To whom school staff should report students	4.15	2.1	4.3	6.4	51.1	36.2
suspected of self-injury	(0.88)					
3. Which school staff member should conduct	4.09	0.0	4.3	8.5	61.7	25.5
the initial risk assessment with students	(0.72)					
4. When students should be referred to external	4.13	0.0	4.3	6.4	61.7	27.7
mental health professionals	(0.71)					
5. When students should be referred to	4.23	0.0	2.1	6.4	57.4	34.0
emergency mental health services	(0.67)					
6. Which school staff member should conduct	4.13	0.0	2.1	8.5	63.8	25.5
the follow-up assessment with students	(0.65)					
7. When parents should be notified about the	3.72	0.0	12.8	23.4	42.6	21.3
self-injury	(0.95)					
8. Identifies the roles and responsibilities of	3.91	2.1	4.3	17.0	53.2	23.4
each member of the school staff team	(0.88)					
9. How to prevent contagion or the spread of	3.64	0.0	19.1	14.9	48.9	17.0
self-injury among students	(0.99)					
How well do you think the policy could prepare staff at your school to:						
10. Identify students who self-injure	3.57	2.1	17.0	10.6	61.7	8.5
	(0.95)					
11. React towards students who self-injure	3.57	2.1	19.1	14.9	46.8	17.0
	(1.06)					
12. Refer students who self-injure to the point	4.17	2.2	4.3	8.7	43.5	41.3
person	(0.93)					

Thematic Analysis

Key themes were identified to summarise participants' perceptions of the recently developed NSSI policy. Exemplary quotes for each theme are included in Table 19.

Suggested changes were addressed in the revision of the policy (Table 20; Appendix G).

Table 19

Themes and Example Quotes from Participants on the Non-Suicidal Self-Injury Policy

Theme	Example exerts
Perceived	It is a big concern amongst students today and staff need a policy to deal with
need	[NSSI] (teacher)
	It depends on decision makers and the importance they place on this sort of
	issue (coordinator)
	My concern is that if this policy is implemented where do we stop. Mental
	health in adolescence is a huge issue and having one policy on managing
	mental health should suffice (teacher)
	we really haven't broached this subject as far as I know, this may well mean
	that it is not an issue (all boys school) - I know boys are less likely to self-
	harm than girls (teacher)
Perceived	It would be able to be implemented in our school very effectively
acceptability	(psychologist)
	A fantastic framework that can be easily adapted to particular school and
	staffing arrangements (head of house)
	I will be pushing very strongly for the policy to be adopted (school nurse)
	this policy would supplement our existing policies (teacher)
Content and	The clear separation of suicidal attempts and self-injury (teacher)
format	It is clear and provides well thought out plans of action (teacher)
	it is empowering for staff and students (teacher)
	Sets out the roles and responsibilities well (psychologist)
	Too much detail for general teacher/staff (head of year)
	It is perhaps too long [and] too detailed for staff to easily pick up and read,
	and the formatting of the paragraphs makes the information dense (school
	chaplain)
	Some definitions are obvious (e.g., staff member, principal) that they could
	be left [out] (teacher)
	it should be accompanied by a flow chart for a quick go-to reference (head
	of middle school)
	It may be good to have a visual diagram of the referral process (psychologist)

Changes to F	Perhaps too prescriptive in terms of the roles and responsibilities (deputy
the roles h	head of senior school)
ר	The point person is responsible for way too much. In a school our size they
r	may have a dozen or more students to monitor (counsellor)
	a point person is essential but I know of many kids who do not want to
s	speak to the counsellorthe policy should address and allow for this
f	flexibility (teacher)
	parents/guardians should be advised at all times of any self-harm even if
C	deemed minor (school nurse)
I	Does not make legal obligations clear (teacher)
Inadequate I	Key staff members need to have a clearer understanding of difference
knowledge b	between NSSI and suicide and that not all behaviours require breach of
and training c	confidentiality (counsellor)
ľ	More training needed for staff to identify and respond to students (head of
h	house)
I	I think schools need to ensure adequate training - pertaining to their role in
ť	the school - is provided to staff (psychologist)
	training for staff [is needed] to correctly implement this sort of policy
((coordinator)
Inadequate I	It is no use having a policy without the means to enact it (teacher)
resources I	I think there would be no point person at our school which puts a lot of the
F	process on the teachers shoulders (teacher)
7	We do not have a full time counsellor here so [we] would need to look at
t	time frames or [have] a range of people equipped to do assessments
((counsellor)
I	It requires an investment of time to ensure follow through (guidance
C	counsellor)
S	Some schools/regions may not have the resources to deal with such an issue
i	in a timely manner and to make it policy will set these schools up for failure
((teacher)

Perceived need. Participants' acknowledged that there is a need for such policies in schools, but suggested that implementation of the policy would require widespread support from executive staff within schools. Others questioned whether such a policy was needed since policies addressing other mental health concerns are already available in schools. One participant was unsure whether NSSI was occurring in their school because they worked at an all boys school, highlighting a common misconception that NSSI is a female problem.

Perceived acceptability. Participants were positive in their response to the policy and found that the policy would be acceptable to the school community. Participants' suggested that they would implement the policy in its presented form, but mentioned that the policy could also be tailored to meet the needs of schools. Participants working in schools with an existing self-injury policy commented that while their school would not implement the policy, they would include aspects of the recently developed policy in future policy revisions.

Content and format. A key theme to emerge regarding the content of the policy was the suitability of the definition for NSSI, which made it clear to school staff that adolescents self-injure for several reasons, and NSSI is often not associated with suicide. Participants also commented that the policy format and content was comprehensive and suitable, providing a clear response protocols for school staff to follow when responding to students who self-injure. The policy was also perceived as empowering for staff when responding to students who self-injure, while also outlining appropriate roles and responsibilities for school staff. School staff suggested shortening the word length and omitting definitions that are self-evident among staff, and incorporating a flowchart or diagram of the referral process for quick reference.

Changes to the roles. While participants perceived the roles and responsibilities outlined as appropriate, they suggested that they may be too prescriptive and a more

collaborative approach is needed encouraging teachers to communicate with students who self-injure. Although staff appreciated the specialised mental health role of the point person, participants agreed that the policy in its presented form could overload the point person and would be inappropriate for schools without an identifiable point person. Some participants also commented that parents of students who self-injure should *always* be notified of their child's self-injury regardless of whether the student is at high or low risk to themselves, and that legal obligations should be clearer.

Inadequate knowledge and training. Participants reported that a lack of knowledge about NSSI and training among staff could impede implementation of the policy within schools. Training addressing how to identify and respond to students who self-injure, and outlining staff roles and responsibilities was recommended to improve implementation of the policy.

Inadequate resources. Participants mentioned that limited resources and referral options for schools could also impede implementation of the policy within schools and timely responses to students who self-injure. Staff suggested that the policy in its original form placed too much pressure on teachers working in schools without a suitable point person, and schools required greater access to school- and community-based mental health services.

Table 20

Changes to the Policy Proposed by Participants

Changes

- 1. Policy shortened and definitions for "principal" and "school staff" removed to address format concerns
- 2. Flowchart included to summarise the referral process
- 3. Inclusion of a school crisis team as an alternative to the point person to increase staff collaboration and referral options for staff
- 4. Clarification that the process for notifying parents should be decided at the school level and reviewed against state and territory laws, and relevant department of education and catholic education policies (if any)
- 5. Included details about training programs and e-resources to address inadequate training among staff and resources in schools
- 6. Specified that NSSI can be equally common among males and females to address the misconception that NSSI occurs more frequently in females

Discussion

We aimed to determine the suitability of a recently developed policy for responding to NSSI in schools. The majority of participants worked in schools without a policy addressing youth NSSI or were unsure whether their school had such a policy, consistent with previous research (Duggan, Heath, Toste, et al., 2011; Roberts-Dobie & Donatelle, 2007). Almost all participants reported their school needed a policy regarding youth NSSI and would implement the recently developed policy in their school. The discrepancy between staff who reported that the new policy addressed their needs (83.0%) and those who would implement the policy (70.8%) could be attributed to the inclusion of teaching staff in the sample, who may believe that it is not the role of teachers to implement school policy. Although participants were generally positive in their response to the policy and clearly identified a

need for it, a lack of knowledge about NSSI among school staff, and limited referral services available to adolescents who self-injure challenged successful implementation of the policy in schools. Consistent with early research (McAllister et al., 2010), according to participants, widespread support from key stakeholders within the education system would also improve uptake of the policy in schools. Consequently, simply having a policy template for NSSI does not guarantee that it will be implemented in schools.

Practical suggestions from participants to increase acceptability of the policy included shortening the length of the policy, and incorporating a flowchart to help staff familiarise themselves with the policy and swiftly respond to students who self-injure (Appendix H; Figure H1). A more collaborative approach between school staff members was suggested to ensure that the point person, or teachers working in schools without a suitable point person, share the responsibility of responding to students who self-injure. It may be that instead of designating one point person, schools could appoint a school crisis team with several members of staff (e.g., counsellor, psychologist, welfare coordinator, nurse, year level coordinators, and teachers) who are trained to manage incidents of NSSI in schools (Bubrick et al., 2010). Other foreseeable challenges to implementation of the policy included referring students who self-injure to a point person they may not know or want to speak to about their behaviour. This finding supports the assertion that teachers and other school staff need additional training addressing how to identify and communicate appropriately with students who self-injure (Best, 2005, 2006; Carlson et al., 2005; Heath et al., 2006; Heath et al., 2011; Roberts-Dobie & Donatelle, 2007), specifically around encouraging students to accept professional support. Designating a school crisis team rather than one point person may also help to address this issue by increasing the number of referral services and carers available to young people who self-injure. In addition, this approach could increase acceptability of the

policy in Government schools (i.e., public schools), which may not have a full-time psychologist or counsellor (Australian Psychological Society, 2013).

Concern was also expressed regarding the parental notification step of the policy, suggesting that parents of young people who self-injure should always be notified regardless of the student's level of risk to themselves. Although the literature mandates parental notification only when students require external intervention and are at high risk for cooccurring mental health problems, severe self-injury, and completed suicide (Toste & Heath, 2010; Walsh, 2012), participants reported that more flexibility should be built into the policy allowing for schools to decide when parents should be notified about their child's self-injury. These concerns seem to be out of step with adolescents' views of what teachers can do to help adolescents who self-injure, who have suggested that teachers should talk to them about the behaviour and refer students who self-injure to mental health professionals (Berger, Hasking, & Martin, 2013). In line with this issue, participants also reported that mandatory reporting regulations should be included in the policy. Although school staff have legal and ethical mandates to ensure the health and safety of students (Malley et al., 1994), these mandates can vary by state and territory, and each school's policy regarding parental contact and engaging external professionals will need to be crafted in accordance with these regulations (Bubrick et al., 2010).

In Australia, state and territory laws mandate that teachers have duty of care and must take reasonable steps to protect students from foreseeable harm (Newnham, 2000), however, guidelines in relation to student self-injury and suicide tend to be developed by school principals, and respective state and territory departments of education and catholic education offices. For example, one state education department overseeing government schools advises staff to refer students who disclose intent to self-injure (referred to as self-harm) or attempted suicide to school support services officers and inform the principal (Department of Education

and Early Childhood Development, n.d.). In comparison, the Catholic Education Office in the same state suggests that procedures for responding to critical incidents of emotional distress and death should be developed by schools (Catholic Education Office, 2013). Regardless, policies ensure that all staff members are clear on how to manage parental notification, and students should always be advised in advance and given the opportunity to be present when their parents are contacted.

Limitations

Although the open-ended questions provided a detailed exploration of the policy, use of interviews may have highlighted additional insights regarding the acceptability of the policy and perceived challenges to its implementation in schools. However, asking teaching staff who may not have training in the area of NSSI to respond to questions about the suitability of a policy addressing youth NSSI may be a limitation of this study.

Furthermore, the sample was a small convenience sample and participants were self-selected from Independent (i.e., non-government) schools which participated in a previous study on the perceptions of teachers and other school staff towards youth NSSI, and the results may not reflect the attitudes and needs of staff working in Government schools. The distribution of teaching and non-teaching staff who participated was also not representative of the 18 Independent schools surveyed.

Research evaluating implementation of the policy in schools, and whether staff attitudes and school resources predict school-level implementation and practices is warranted. Whether school policies for NSSI impact student behaviour and the mechanism by which this occurs also warrants consideration. Finally, for effective policy to be developed and implemented in schools, the views of parents and students should also be included to improve

acceptance of the policy among parents and students, and outcomes for adolescents who self-injure.

Implications for School Health

In order for school staff to respond effectively to students who self-injure, schools need to implement systematic procedures and in-service training regarding youth NSSI. The most important aspect of staff training is learning how to identify the warning signs of selfinjury and react towards students who disclose NSSI, and then refer students who self-injure or are suspected of self-injuring for assessment and treatment. It is also important for staff to recognise the full range of self-injurious behaviours and be aware that although NSSI and suicide are often not associated, students who self-injure might be at increased risk for suicide (Bubrick et al., 2010). Consequently, the point person or members of the school crisis team should be trained to conduct suicide risk assessments with students who self-injure, and if suicidality is detected, the point person/team should refer to the school's suicide policy (Bubrick et al., 2010). The point person/team should also learn how to work with parents of children who self-injure, and educate parents regarding appropriate reactions to their child's self-injury and the importance of seeking treatment from an external mental health professional. When local mental health resources are lacking, it is important that staff know in advance what level of support can be provided by the school and what access parents have to local mental health services or e-resources for self-injury, particularly in rural and remote areas.

Although the point person and crisis team are responsible for talking to students who self-injure and assessing their level of risk, teachers and other school staff should also be trained to communicate appropriately with students who disclose their own, or a peer's, self-injury. Awareness of the school's self-injury policy is also important, including conditions

requiring immediate medical attention, who the designated point person or members of the crisis team are within schools, when parents of children who self-injure should be notified, and how to prevent social contagion of self-injury in schools. While previous guidelines have suggested that staff should discourage students from talking to other students about engaging in self-injury or from openly displaying their scars at school (Walsh, 2012), students will often communicate with peers about self-injury (Evans et al., 2005; Fortune et al., 2008b) and training should focus on preparing staff to support close friends of students who self-injure. However, educating students about signs of distress in themselves and others and the importance of seeking help, while also teaching them positive coping skills (Muehlenkamp et al., 2010; Toste & Heath, 2010) could also be vital to minimise risks of suicide and psychiatric disorders associated with the behaviour. Together, training and policies for school staff and education for peers will promote self-confidence among staff, and increase the health and wellbeing of students who self-injure, thereby fostering a more supportive school environment.

Conclusion

Although school staff were generally positive about the recently developed policy and supported its implementation in schools, many acknowledged that a lack of knowledge among staff and limited resources in schools could impede implementation of the policy in schools. Together, in-service training and orientation to the school policy on NSSI will ensure that teachers and other school staff respond consistently and appropriately to students who self-injure, while increasing collaboration among staff and awareness of external services available to adolescents who self-injure.

Chapter 11: Overall Discussion

Introduction to the Overall Discussion

In this chapter, the aims and rationale of the thesis will be restated, followed by a review of the key findings. The implications of the findings for school-based prevention and early intervention initiatives, and policy guidelines regarding NSSI will then be discussed. Finally, the strengths and limitations of the reported program of research will be outlined, followed by suggestions for future research and a concluding statement of the thesis.

Summary of the Thesis Aims and Rationale

The research reported in this thesis furthered understanding of how teachers and other school staff view NSSI and identified their training needs. This was an essential first step in providing targeted and effective education and training programs to teachers and other school staff, who are in a prime position to identify warning signs that may signal NSSI and provide early intervention to young people at risk (Heath et al., 2011). Despite increasing concern among school staff regarding youth NSSI (Heath et al., 2006), the adverse outcomes and increased suicide risk for adolescents who engage in the behaviour (Whitlock et al., 2013), and the significant hospitalisation costs associated with NSSI (G. Martin et al., 2010), empirically validated school-based detection and early intervention programs for NSSI are lacking. Training programs for school staff and prevention initiatives in schools are particularly important as NSSI usually begins in adolescence (Jacobson & Gould, 2007), and adolescents who self-injure tend to conceal the behaviour and avoid professional help (Fortune et al., 2008b). A review of the literature suggests that adolescents prefer to seek help from peers and online friends, rather than parents and teachers (Fortune et al., 2008b; Mitchell & Ybarra, 2007). Therefore, prevention of youth NSSI is, in part, dependent on the

ability of peers and adults to identify adolescents at high risk and offer prompt and effective intervention by referring them to mental health professionals for treatment.

Although researchers have assumed that adolescents who self-injure have similar ideas about what peers and adults could do to help youth overcome NSSI (e.g., Fortune et al., 2008a), this thesis was the first to examine what adolescents believe peers, online friends, parents, and teachers could actually do to help youth who engage in NSSI. In particular, limited attention has been paid to the role of online friends in helping those who self-injure, which is surprising given young people's preference to seek online help for NSSI (Whitlock, Powers, et al., 2006). To date, most studies of adolescents' views of and help-seeking for self-injury have focused on young people presenting to hospital following an episode of DSH. However, given that the majority of young people who engage in NSSI do not present to hospital, public health strategies are an essential component of self-injury prevention (Fortune et al., 2008a). It was also important to include both the views of adolescents who have self-injured and those who have not as many adolescents are exposed to peers who engage in NSSI, and this factor is known to increase adolescents' risk of self-injuring in future, particularly in the presence of accumulating negative life events (Fortune et al., 2008a; Hasking et al., 2013). Therefore, this thesis strengthened research on adolescent help-seeking for NSSI by exploring what adolescents who have and have not self-injured believe peers and online friends, and parents and teachers could do to help young people who engage in NSSI.

Despite not seeking help from teachers for DSH (Fortune et al., 2008b), teachers and other school staff tend to be the first to refer young people who self-injure to mental health professionals (Roberts-Dobie & Donatelle, 2007), or to encourage parents of children who self-injure to seek professional treatment (Oldershaw et al., 2008). Therefore, gatekeeper training for school staff to improve their knowledge about NSSI, as well as their ability to recognise and appropriately intervene with adolescents who self-injure could potentially

increase access to treatment for NSSI. However, teachers and other school staff have reported a lack of formal training in NSSI (Carlson et al., 2005; McAllister et al., 2010), leading to a lack of knowledge regarding NSSI, and skills to efficiently and confidently respond to youth who self-injure (Carlson et al., 2005; Heath et al., 2006). Teachers and other school staff may also misinterpret the main motivations of NSSI as manipulative or attention-seeking (Carlson et al., 2005; Heath et al., 2011).

The communication of these negative attitudes and misconceptions about NSSI may be detrimental to future help-seeking among adolescents, while negative attitudes and a lack of confidence among school staff may limit how responsive teachers and other school staff are when helping students who self-injure. However, no prior study has examined the influence of these factors on how school staff indicate they respond to youth NSSI. Two seminal theoretical models (e.g., TPB and Social Cognitive Theory; Ajzen, 1991; Bandura, 1989) and previous literature show that attitudes and self-efficacy (i.e., one's confidence in their ability to enact change) are linked to performance of health-related behaviour (e.g., Armitage & Conner, 2001; Bilic, 2005), suggesting attitudes and perceived confidence are viable targets for intervention.

This thesis was the first step in identifying whether a lack of knowledge and confidence among school staff, and attitudes towards NSSI are related to how teachers and other school staff respond to students who self-injure. The research reported here will go some way to ensuring that pre-service teachers and school staff receive targeted and effective education and training programs for NSSI by establishing their level of knowledge and training needs. Such an understanding provides an opportunity for improved early detection and intervention for young people who self-injure, thereby potentially improving their mental wellbeing, decreasing their chances of repeating NSSI, and the chances that they will attempt suicide. Understanding barriers which prevent school staff from responding to students who

self-injure may also enhance implementation of training programs and guidelines which are sensitive to the challenges faced by school staff when responding to NSSI in schools. This thesis was also innovative in including a qualitative investigation into adolescents' views regarding the respective role of peers, online friends, parents, and teachers in helping youth who engage in NSSI.

Based on the review of the literature (Chapter 2), the aims of this thesis were to: 1) investigate what adolescents believe peers, online friends, parents, and teachers could do to help young people who self-injure; 2) evaluate the knowledge, attitudes, and confidence of pre-service teachers and school staff regarding youth NSSI; 3) explore how school staff currently respond to students who self-injure, how effective they believe their response to be, and perceived barriers to management of NSSI in schools; 4) evaluate the training needs of pre-service teachers and school staff towards youth NSSI; and 5) develop a school policy for responding to NSSI based on input from school staff. The results presented in this thesis arise from six studies derived from three phases of research, including: a) exploration of adolescents' views of help for NSSI; b) investigation into the knowledge and training needs of pre-service teachers and school staff towards youth NSSI; and c) evaluation of a new policy for addressing NSSI in schools. The following section of this thesis will describe key findings from each phase of the research and synthesis across all phases.

Key Findings of the Thesis

Adolescents' Perspectives of Help for Non-Suicidal Self-Injury

Chapter 4 and Chapter 5 presented the findings from qualitative studies investigating adolescents' views regarding the role of peers and online friends, and parents and teachers, respectively, in helping young people who self-injure. Given that adolescents who engage in DSH turn to peers, rather than parents and teachers for help (Fortune et al., 2008b), and the

increasing salience of online relationships among young people who self-injure (Whitlock, Powers, et al., 2006), these studies sought to explore what adolescents believe each group could do to help youth who self-injure. Based on differences in help-seeking for self-injurious behaviour according to age (Heath et al., 2010), gender (Evans et al., 2005; Fortune et al., 2008b), exposure to peer DSH (Fortune et al., 2008b), and a personal history of DSH ideation and behaviour (Evans et al., 2005), these studies also aimed to evaluate differences in adolescents' views regarding strategies to help youth who engage in NSSI in relation to these variables. Findings from Chapter 4 and 5 align with previous studies on DSH (Fortune et al., 2008b) showing that almost half of the adolescents who had engaged in NSSI told a friend about their behaviour (43%), over one in ten told a parent (16%), or health care professional (including mental health professionals; 13%), and less than one in twenty told a teacher about engaging in NSSI (2%). These findings suggest that adolescents who self-injure are about three times more likely to seek help from friends, compared to parents and professionals, and that less than three percent seek help from teachers for the behaviour.

Chapter 4 presented themes which highlighted the need for peers and online friends to talk and listen, give advice, and encourage youth who self-injure to approach a supportive and trusted adult for help (e.g., parent, family member, or teacher), or to access professional help and services. Adolescents also suggested that peers and online friends could engage young people who self-injure in activities to encourage supportive peer interactions and public awareness about NSSI, and reduce stigma and bullying attributed to the behaviour. Finally, adolescents' considered that it may be difficult for peers and online friends to help young people who self-injure, or that nothing could be done by peers and online friends to prevent youth from engaging in NSSI. Although online friends were regarded as a group with whom young people who self-injure could confidentially discuss their problems, an important finding from this thesis was that adolescents' were generally more certain about the role of

peers in helping young people who self-injure, compared to online friends. Specifically, while about three quarters of adolescents commented that peers could communicate with young people who self-injure (73%), and half encouraged online friends to do the same (50%), over a third emphasised that online friends could do nothing to help (35%). These findings highlight the importance of examining online friends as distinct from offline friends in future help-seeking research related to NSSI.

In line with these findings, results of Chapter 5 suggested that adolescents' believe parents and teachers who talk non-judgmentally to young people who self-injure, listen to their concerns, and refer them to known adults (e.g., family members or teachers) or mental health professionals are fundamental to helping young people overcome NSSI. Adolescents reflected that parents may contribute to youth NSSI by expressing negative reactions towards the behaviour and through conflict in families, while family activities and love were thought to help young people who self-injure. On the other hand, teachers were thought to exacerbate NSSI by disregarding the potential impact of academic and social pressures in school settings, including exams and assessments. Bullying was another factor that young people believed exacerbated NSSI. Addressing NSSI in schools was linked to education for students regarding positive coping strategies and help-seeking skills, and training for teachers about NSSI. Although these approaches are self-evident, they are also straightforward and candid strategies that, with little guidance or support, parents and teachers could apply with adolescents who self-injure. However, similar to results of Chapter 4, while three quarters of adolescents suggested that parents talk and listen to youth who self-injure (74%), just over half mentioned this role in relation to teachers (58%), and about one in five comments from adolescents reflected uncertainty regarding teachers' role in helping young people who selfinjure (20%).

Younger adolescents aged approximately 13 to 14 years of age seemed more unsure than older adolescents about the role of peers and online friends in helping youth who self-injure, despite being more likely to suggest that peers talk to young people who self-injure, and seek adult or professional help on behalf of these adolescents. Mid-adolescents (aged between 14 and 15 years) were more likely to comment that teachers could communicate with youth who self-injure, while being more likely to view help-seeking from online friends and teachers as useless, as did older adolescents aged approximately 15 to 16 years. Although the results of this thesis cannot be related directly to the broader help-seeking literature, it appears that older adolescents may view help-seeking from teachers for NSSI more negatively than younger adolescents, consistent with previous research (Heath et al., 2010). The finding that older adolescents (15-16 years of age) were also more likely to suggest that peers and teachers reduce stigma attributed to NSSI may mean that education programs targeting teachers and students should focus on promoting help-seeking among these adolescents, and encouraging reactions from teachers that avoid exacerbating adolescents' fears surrounding stigma.

Also in line with previous studies (e.g., Evans et al., 2005; Nada-Raja et al., 2003; Rossow & Wichstrom, 2010; Sen, 2004; Ystgaard et al., 2009), females were more positive about the role of peers and online friends, citing the need for them to communicate with young people who self-injure, and suggesting that peers and online friends could involve parents, family members, and other adults in helping adolescents overcome NSSI (despite increased concern regarding stigma and confidentiality associated with NSSI). Females were also more likely to indicate that parents and teachers should communicate with young people who self-injure, while suggesting that teachers could refer these youth to parents and family members, and educate students about NSSI. Males, on the other hand, expressed more uncertainly about the role of peers and parents in helping young people who self-injure than

females, and suggested that peers and online friends could do nothing to help these adolescents. Education for students concerning NSSI should challenge these assumptions, particularly among males, and help both male and female students to identify appropriate support for NSSI.

Another important finding was that adolescents exposed to peer NSSI, or with a history of NSSI thoughts and behaviour, were more unsure or suggested that nothing could be done by parents and teachers to help young people overcome NSSI (cf. Evans et al., 2005; Fortune et al., 2008a). Adolescents who self-injure were also unsure about the role of peers and online friends, citing that stigma and bullying from peers, and stigma from online friends could prevent both groups from being able to adequately help young people who self-injure. Those not exposed to the behaviour were more likely to suggest that parents and teachers should talk to young people who self-injure, and refer them to mental health professionals. However, this latter group was also less likely to mention family conflict as a contributing factor to youth NSSI, which may underlie scepticism among adolescents who self-injure towards seeking help from parents. This trend helps to validate quantitative research suggesting that adolescents who self-injure are reluctant to seek adult help for NSSI (e.g., Fortune et al., 2008b), but also increases understanding about why adolescents may not seek help from parents and teachers for the behaviour. This may reflect a relationship between NSSI and optimism about help, with adolescents who self-harm generally less optimistic than those who have not self-harmed (O'Connor, Rasmussen, Miles, & Hawton, 2009), or a helpnegation effect between NSSI and help-seeking (similar to the inverse relationship between suicidal ideation and help-seeking intentions; Deane et al., 2001).

Taken together, although adolescents recognised the role of peers, online friends, parents, and teachers in helping young people who self-injure, those exposed to NSSI were more unsure how these groups could support youth who self-injure, suggesting that their

capacity to help is limited, and that youth who self-injure have fewer people with whom they feel able to turn to for help and advice. Findings emphasise the need for prevention programs in schools that encourage young people to access help for peers or themselves for NSSI, and that teach adolescents what to expect when seeking help (Muehlenkamp et al., 2010), while also highlighting the importance of education for teachers so they have the knowledge and skills to identify students not seeking help for NSSI and refer them to services. This next section of the thesis will describe results of Chapter 7 to Chapter 9 which collectively aimed to inform development of education programs and resources for teachers and other school staff regarding youth NSSI.

Knowledge and Training Needs of Pre-Service Teachers and School Staff Regarding Non-Suicidal Self-Injury

Collectively, findings from Chapter 7 and Chapter 8 demonstrated that although preservice teachers and school staff are reasonably knowledgeable about the common methods and functions of NSSI, and the age of onset, school staff tend to underestimate the prevalence of NSSI among adolescents (as less than 5%; Heath et al., 2006). Furthermore, one in five inservice teachers and other school staff (20%), and over one in five pre- and in-service teachers (22%), respectively, reported that adolescents engage in NSSI to generate attention from and/or to manipulate others. However, Australian data has indicated that only around 5% of people who self-injure do so to communicate with or to influence others (G. Martin et al., 2010). This could lead some teachers and other school staff to ignore adolescents who disclose NSSI or to react negatively towards this group of students, which does not align with students' need for non-judgmental teachers to talk to about NSSI (as indicated by results of Chapter 5). Therefore, the relative importance of this function compared to other motivations for engaging in NSSI should be addressed in staff training and resources.

This finding appears to correspond with adolescents' views reported in Chapter 5 that young people who self-injure encounter judgemental and unhelpful reactions from parents and teachers in response to NSSI, making youth hesitant to disclose NSSI to the adults in their lives. Again, this highlights the importance of evaluating education programs and resources that encourage teachers and other school staff to monitor their reactions to youth NSSI, and promote awareness among staff about how negative responses to NSSI can affect youth when seeking help for the behaviour. However, findings of Chapter 4 indicated that judgmental attitudes and stigma towards NSSI are not limited to adults, with peers and online friends also suggested to display these reactions towards adolescents who self-injure. In line with the NIMH prevention framework (Mrazek & Haggerty, 1994), a whole school approach to self-injury prevention and early intervention could enhance empathic attitudes towards NSSI, and reduce stigma and barriers towards help-seeking for the behaviour among youth, while taking care not to normalise or endorse NSSI.

Other studies have also found that teachers misjudge the prevalence of youth NSSI, and lack knowledge about the functions of the behaviour and how to respond appropriately (Carlson et al., 2005; Heath et al., 2006; Heath et al., 2011). Consequently, teachers and other school staff may require training and resources on the prevalence, functions, risk factors, and warning signs of youth NSSI, to help them identify students who may not voluntarily seek help for NSSI. This is particularly important given findings from Chapter 7 and Chapter 9 suggesting that almost three quarters of teachers and other school staff had responded to at least one self-injuring student (69%), despite school mental health workers (23%) and other staff (80%) lacking training in NSSI. Results of Chapter 8 also indicated that a greater proportion of pre- and in-service teachers had responded to students who self-injure (59%) compared to those with training in NSSI (15%).

After controlling for the contribution of age and length of professional experience in the secondary education system, which were negatively related to knowledge about NSSI, the relationships between gender, occupation, experience and training with students who self-injure, and knowledge, attitudes, and confidence towards NSSI were explored. The former two variables were examined in light of theoretical models suggesting that these factors are core contributors of behaviour (Ajzen, 1991; Bandura, 1989). Knowledge was explored based on the assertion that health professionals and school staff experienced with those who self-injure are more knowledgeable and confident than those without such experience (e.g., Carlson et al., 2005; Gagnon & Hasking, 2012). Studies have also found that healthcare professionals with training in the area are more knowledgeable and confident, and hold more positive attitudes (Friedman et al., 2006; Patterson et al., 2007a; Wheatley & Austin-Payne, 2009), but findings of an association between age, gender, years of professional experience, and these variables are mixed.

After controlling for age and length of professional experience, in the studies reported here, gender was unrelated to knowledge, attitudes, and confidence regarding youth NSSI, despite earlier analyses suggesting that females had greater confidence and knowledge. School mental health workers and other school staff with training in NSSI were more confident in dealing with students who self-injure and had higher self-reported knowledge about NSSI than their colleagues (see Chapter 7). While initial examination of the relationships between knowledge, confidence, attitudes, and experience with students who self-injure revealed significant differences between those with and without experience with students who self-injure on all three variables, after statistically controlling for age and length of teaching experience these differences did not remain. A similar finding was reported in Chapter 8, with experience no longer related to confidence in responding to students who self-injure when age and years of teaching experience were entered as covariates. This is

consistent with previous research (De Stefano, Atkins, Noble, & Heath, 2012), suggesting that initial experiences with students who self-injure provide new but incomplete learning for responding to youth who self-injure in the long-term.

School staff with training in NSSI, and greater knowledge and confidence towards NSSI were also more likely than other staff to intervene with students who self-injure through communicating with them about the behaviour and/or conducting risk assessments. Findings from Chapter 8 with pre- and in-service teachers also found that training in NSSI was associated with greater knowledge and confidence among teaching staff when responding to students who self-injure, while school staff with training in NSSI were more likely to contact parents of students who self-injure, as outlined in Chapter 7. These findings are consistent with previous research documenting the effectiveness of a training program on the knowledge and confidence of school welfare staff towards youth DSH (Robinson et al., 2008). In addition, findings support the important relationship between self-efficacy and behaviour, in accordance with theoretical models of behaviour (Ajzen, 1991; Bandura, 1989). However, unlike theories of behaviour change, attitudes towards youth NSSI were unrelated to how school staff respond to students who self-injure, which could be attributed to the low internal consistency of the measure used to assess attitudes. Alternatively, there could be other meaningful models or factors which warrant further investigation, such as staff burnout, social norms, and perceived responsibility for identification and referral of at-risk youth.

Although the results presented in this thesis suggested that pre-service teachers and school staff were concerned about youth NSSI, expressed compassion for students who self-injure, and were willing to help these students, many acknowledged their need for continued education and school policies addressing youth NSSI, and improved access to school-based resources and community services. Participants' desire for further training in NSSI could be driven by their concerns about the apparent increase in prevalence and contagion of youth

NSSI in schools. The perception among school staff of an increase in the prevalence of NSSI could enhance teachers' recognition of the behaviour among youth, but may also result in panic and false positives if appropriate information and guidelines are not provided in schools. Previous self-injury training was shown to increase the likelihood that teachers and other school staff would intervene with students who self-injure, suggesting the gatekeeper surveillance model for suicide prevention, which involves training all teachers and other school staff to detect and refer at-risk students (Wyman et al., 2008), has promise to prevent NSSI in the school setting. However, further research which does not rely on self-report data is needed to clarify whether improvements in knowledge and confidence as a result of training bring about *actual* changes in staff behaviour in response to students who self-injure, and to understand the mechanisms by which this occurs.

Chapter 9 evaluated teachers' and other school staff views about what issues should be addressed in staff training for NSSI, and how such training should be delivered. Teachers and other school staff were also asked to describe how they typically respond to students who self-injure, and to detail any barriers that may prevent teachers and other school staff from responding to NSSI in schools. The study outlined in Chapter 9 was the first to evaluate teachers' training needs using qualitative methods, providing a broad understanding of the level and nature of training required by school staff, and how this information could be delivered in the secondary education sector. Together with the qualitative findings of Chapter 4 and 5, which investigated the needs of adolescents, findings of Chapter 9 could be used to inform future development of prevention and early intervention initiatives for NSSI in schools which are geared towards the needs of both school staff and students.

An important theme from Chapter 9 reflected the lack of perceived efficacy and confidence among teachers and other school staff in response to students who self-injure, which staff attributed to their lack of training, resources, and school policies. Teachers and

other school staff with experience and training in NSSI reported more confidence responding to and communicating with students who self-injure. In terms of barriers impeding the ability of teachers and other school staff to respond to students who self-injure, staff suggested that their lack of training and knowledge, limited resources and policies in schools, inappropriate reactions of parents and colleagues towards students who self-injure, and students' own reluctance to seek help for NSSI were significant barriers to appropriately addressing youth NSSI in schools.

Parents were also thought to advertently and inadvertently contribute to adolescents' self-injury by expressing ambivalence towards seeking professional treatment and services for their child's self-injurious behaviour. Together with findings from Chapter 5, these findings emphasise the importance of parental involvement in treating NSSI, and suggest that parents would benefit from support and advice to develop effective communication skills with their children, and seek professional treatment on their behalf. Results of Chapter 9 also revealed that barriers identified by school staff and adolescence align, with a lack of resources and inappropriate reactions of parents identified by both groups. However, the impact of teachers and other school staff beliefs on the level of assistance they offer to adolescents who self-injure requires further research. It is possible that the help-seeking behaviour of participants for health-related conditions may also act as barriers to helping young people who self-injure and encouraging professional help-seeking.

Taken together, the results presented here are consistent with findings from previous literature suggesting that pre-service teachers and school staff are calling for education and policies to improve their knowledge, confidence, and skills to respond to students who self-injure (Carlson et al., 2005; McAllister et al., 2010). In particular, results of Chapter 7 and 8 suggest that training regarding NSSI may increase staff confidence and knowledge to recognise warning signs and risk factors of youth NSSI, and improve the likelihood that staff

will communicate with students about NSSI. These results confirm that staff desire training in how to identify warning signs that may signal youth NSSI and refer students who self-injure, and in risk assessment processes, counselling and communication skills, and appropriate reactions towards youth NSSI. Staff indicated that such training could be delivered through workshops, lectures, and seminars, or self-directed learning, such as training booklets and online resources. These recommendations for training in NSSI are consistent with what staff had already received, with many staff commenting that such training was highly effective (90%), and increased their confidence and skills to address youth NSSI in schools. However, teachers were more likely than other staff to perceive their lack of knowledge and training in NSSI, while also being more concerned that limited resources and time in schools could prevent them from participating in such training.

Policy for Responding to Non-Suicidal Self-Injury in Schools

The final empirical chapter presented results of a study aimed at determining the suitability of a new policy for responding to NSSI in schools, which was developed based on a review of the literature and results of Chapter 4 to Chapter 9 demonstrating a need and desire for such a policy in schools. Although guidelines for responding to self-injury in schools have increased in recent years (Bubrick et al., 2010; Onacki, 2005; Toste & Heath, 2010; Walsh, 2012), limited research has investigated the utility of these policies for managing NSSI in the school setting. Therefore, findings of Chapter 10 build upon existing literature and indicate that the majority of participants who volunteered to provide feedback on a draft policy work in schools without such a policy (37%), or are unsure whether their school has a policy targeting NSSI (29%; Duggan, Heath, Toste, et al., 2011; Roberts-Dobie & Donatelle, 2007). Together with findings of Chapter 7 to Chapter 9, results of Chapter 10 suggest that teachers and other school staff are responding to students who self-injure without policies addressing NSSI and/or training in the area. Of participants working in a school

without a policy regarding youth NSSI, most reported that their school needed such a policy (94%).

About three quarters of participants were generally positive about the presented policy and supported its implementation in their school (70%), indicating that the policy addressed their needs in response to youth NSSI (83%), and they would recommend the policy to others working in the secondary education sector (82%). Participants working in a school with an existing policy on NSSI (33%) were also positive about the new policy and reflected that it could be tailored to meet the needs of their school, and they would consider including aspects of the new policy in future revisions of their existing policy. Perceived challenges associated with introducing the new policy in schools included teachers' and other school staff lack of knowledge about and training in NSSI, and limited school- and community-based referral services available to adolescents who self-injure. Attaining widespread support from stakeholders within the education system was also highlighted as imperative to improve school uptake of the policy, similar to previous findings with Australian school nurses (McAllister et al., 2010).

Suggested variations and additions to the policy reported by participants included developing a flowchart of the referral process, and increasing collaboration between teachers and other school staff to minimise the burden on school mental health professionals, and encourage teachers to communicate with and refer students who self-injure. Responses to quantitative questions also suggested that about a third of participants were unsure or did not believe that the new policy addressed their needs in terms of notifying parents of children who self-injure (36%), and contagion in schools (34%). In particular, participants' reflected that parents should always be notified about their child's self-injury, even if the student is not at risk for further self-injury and severe injuries, which is the criterion for contacting parents reported in the literature (Toste & Heath, 2010). This feedback from school staff was used to

refine the policy and develop a flowchart for responding to and referring students who selfinjure in the school setting, and to provide guidelines for schools to consider when developing their own NSSI policy, taking into consideration respective state and territory laws, department of education and catholic education office policies, and relevant professional standards and ethical guidelines.

Implications of the Thesis

The purpose of this thesis was to advance prevention and early intervention of youth NSSI in schools by informing the development of targeted education programs and training tools, and policy guidelines to better equip school staff to identify at-risk youth, and provide early intervention and referral for students who self-injure, reducing their risk for further NSSI and suicide. The following section of this thesis will outline how findings could be used to inform development of universal and selective prevention programs for NSSI in the school setting, and policies for responding to adolescents who self-injure.

Universal Approaches for Non-Suicidal Self-Injury

Results of this thesis have important implications for the development of universal and selective school-based prevention initiatives for NSSI, identified by the NIMH prevention model (Mrazek & Haggerty, 1994) and the LIFE framework (Commonwealth of Australia, 2008). Specifically, findings of Chapter 4 and Chapter 5 support implementation of universal prevention programs in schools to educate students about how to communicate with and support peers and online friends who self-injure, how to identify trusted adults and access professional help for peers, or themselves, and what to expect when seeking help for NSSI. Adolescents with experience of or exposure to NSSI may require additional education in these areas, given their increased reluctance to seek help. However, previous studies suggest that universal prevention programs should focus on reducing risk factors and enhancing

protective factors across the entire student body, such as by improving students' emotion regulation skills and adaptive coping behaviours (e.g., Muehlenkamp, 2006; Nock et al., 2007).

Although several treatments have been proposed for NSSI involving emotion regulation, functional assessment, and problem solving techniques, few have been evaluated with adolescents who self-injure (Klonsky et al., 2011), and most have been examined in the context of patients with BPD, or have targeted DSH and suicidal behaviours, rather than focusing exclusively on NSSI (Brausch & Girresch, 2012; Muehlenkamp, 2006). Therefore, studies evaluating the effectiveness of these treatments to reduce NSSI are warranted. However, since schools may not have the resources or trained staff to implement indicated treatments, universal and selective prevention approaches addressing NSSI are needed to assist teachers and other school staff to manage youth NSSI in the school setting.

In Australia, the National Mental Health Strategy (Commonwealth of Australia, 2009) emphasises that universal mental health promotion interventions should be implemented in schools. Several such programs operate in Australian schools, including MindMatters, the FRIENDS programs, the Aussie Optimism program, Beyondblue's Secondary School and SenseAbility programs, The Best of Coping program, the New South Wales School-Link initiative, the Adolescents Coping with Emotions program, the Adolescents Coping with Depression Course (Australian version), the Penn Prevention Program (Australian version), the Problem Solving for Life program, and the Resourceful Adolescent Program. However, while a review of several of these programs demonstrated moderate reductions in anxiety and depression among adolescents in Australian schools (Neil & Christensen, 2007), and although aspects of these interventions could be transferred to universal programs for NSSI, the effectiveness of these prevention programs in reducing youth NSSI is yet to be explored.

For example, MindMatters, which is arguably the most widely used universal mental health promotion and suicide prevention program administered in Australian schools, recommends practices and policies for intervening with adolescents who attempt suicide and engage in self-harm. However, these resources do not clearly differentiate suicidal behaviour from NSSI, and instead combine school-based strategies for responding to and preventing suicidal and self-harming behaviours among students (e.g., MindMatters, 2005). Therefore, distinct prevention approaches and policies for addressing NSSI and suicide are not provided to schools participating in this program. However, to date, few school-based universal interventions and resources for NSSI have been evaluated. In the absence of empirically tested resources for NSSI, it is important to examine universal and selective approaches to suicide prevention in schools. One such program for preventing suicide among youth is the Sources of Strength program.

The Sources of Strength program is a school-based universal suicide prevention initiative developed in the US in which students (known as peer leaders) from different social cliques, including adolescents from at-risk groups, are trained to change the help-seeking norms and behaviours of suicidal peers by delivering well-defined messaging activities with adult mentoring. The aims of the Sources of Strength program are to modify students' perceptions of "typical" adolescent behaviour and of the social consequences for demonstrating positive coping behaviours. Peer leaders are trained to model and encourage friends to name and communicate with "trusted adults," to reinforce and create an expectation that peers will seek adult help for suicidal friends, and to identify and use interpersonal and formal coping resources. Training of peer leaders using the Sources of Strength program in the US has been shown to improve positive coping behaviours among adolescents, to enhance adolescents' connectedness to adults and foster supportive behaviours among peers, and improve help-seeking attitudes and norms (Wyman et al., 2010).

Based on findings of Chapter 5 suggesting that one in five adolescents do not feel comfortable talking to teachers about NSSI and that almost one in two adolescents who self-injure turn to friends to disclose NSSI, a modified version of the Sources of Strength program may be particularly suited to prevention of NSSI. NSSI-specific training could be implemented into existing peer leadership programs in schools to educate adolescents about the warning signs and risk factors of NSSI, strategies to communicate with self-injuring peers and online friends, and how to identify "trusted adults," and refer at-risk peers and online friends to adults and professionals for treatment. Such a program will also need to offer support to peer leaders through adult mentoring. The use of peer leaders is also sensitive to adolescents' developmental need for independence from adults and peer interaction for identify formation (Christie & Viner, 2005).

In contrast, previous literature has suggested that adolescents who self-injure should be discouraged from talking to peers about NSSI based on the potential for contagion of NSSI in schools, particularly among vulnerable adolescents (Toste & Heath, 2010; Walsh, 2012). However, results of Chapter 4 indicate that adolescents who self-injure may actively seek out peers and online friends to disclose NSSI, and thus universal prevention programs should focus on encouraging adolescents to seek adult help for friends who self-injure, or to communicate the importance of seeking adult and professional help, while also preparing teachers and other school staff to support and respond to the questions of friends of students who self-injure.

Similar results in the literature (e.g., Fortune et al., 2008a) have lead researchers to argue that when discussing NSSI with students, teachers and other school staff should contextualise NSSI as one of many maladaptive coping behaviours among youth, similar to substance abuse and maladaptive eating, which adolescents should seek adult support for if they or a friend has engaged in these behaviours (Toste & Heath, 2010). Such findings have

also lead researchers to argue for universal and selective prevention programs and resources for NSSI in schools, to encourage youth help-seeking for NSSI, and ensure that teachers and other school staff have the necessary knowledge and skills to get involved in the youth "conversation" about NSSI, and create an open dialogue with students about NSSI (Evans et al., 2005; Heath et al., 2010; Muehlenkamp et al., 2010; Nixon & Heath, 2009; Toste & Heath, 2010). However, talking to adolescents about self-injury can be complex and challenging, and training also needs to encourage teachers and other school staff to seek professional help and advice when responding to incidents of NSSI.

The Signs of Self-Injury (SOSI) program is one such program, which was developed in the US to build upon the SOS program and provide universal and selective prevention training to students and school staff regarding NSSI (Jacobs et al., 2009). The four aims of the SOSI program, which has two target audiences (i.e., students and school staff), are to: 1) increase staff and student knowledge about NSSI warning signs and symptoms; 2) improve attitudes among staff and students towards youth NSSI, and skills to respond to and refer adolescents who self-injure; 3) increase help-seeking among adolescents for peers, or themselves, for NSSI; and 4) decrease incidents of NSSI among youth (Muehlenkamp et al., 2010). Therefore, the SOSI program may be appropriate for students and school staff in Australia, as it focuses on many of the strategies identified by adolescents as important in helping young people who self-injure (see Chapter 4 and Chapter 5), and addresses the training needs of teachers and other school staff (see Chapter 7 to Chapter 10).

While the module for school staff is yet to be evaluated, an evaluation of the SOSI program with at-risk students in the US observed that the program did not produce introgenic outcomes among students, but increased students' accurate knowledge of NSSI, and improved their help-seeking attitudes and intentions, while the program was rated as user-friendly by school staff (Muehlenkamp et al., 2010). However, research is needed to replicate

these findings and evaluate the teacher module of this program in Australian schools. Furthermore, because few studies have examined the potential negative effects of universal interventions with students regarding NSSI, and because of staff concerns about the rising prevalence of youth NSSI and contagion of the behaviour among students (see Chapter 7), future research could incorporate NSSI content into already existing universal mental health promotion programs in schools, and implement a measure of distress and iatrogenic effects both before and after implementation of the NSSI related content (Muehlenkamp et al., 2010;

Robinson et al., 2013).

Based on the lack of prevention programs targeting NSSI in Australian schools, the Centre for Suicide Prevention Studies (http://www.suicidepreventionstudies.org/) published three booklets, one targeting school staff (G. Martin, Hasking, Swannell, Lee, et al., 2013), one for parents and families (G. Martin, Hasking, Swannell, & McAllister, 2013), and the other for young people (G. Martin, Hasking, Swannell, McAllister, & Kay, 2013), to educate these groups about NSSI and how to respond to adolescents, or peers, who self-injure. Two additional booklets have recently been published for family doctors (G. Martin, Swannell, Hasking, & McAllister, 2014) and emergency staff (G. Martin, Swannell, McAllister, & Hasking, 2014).

S.A.F.E Alternatives (http://www.selfinjury.com/) has also developed a manual for school professionals preparing them to identify and respond to students who engage in NSSI (S.A.F.E. Alternatives, 2008). However, while these resources could supplement universal and selective programs for NSSI in schools, these resources are yet to be evaluated among school staff, parents, and adolescents. Selective prevention programs to educate teachers and other school staff about NSSI could also be effective to increase staff recognition of and communication with students who self-injure, and may remove hesitation among students around seeking help from teachers for NSSI.

Selective Approaches for Non-Suicidal Self-Injury

The results presented in this thesis indicate that pre-service teachers and school staff request training to increase their general knowledge about NSSI, to improve their sensitivity to the warning signs and risk factors of the behaviour, and build their confidence and skills when communicating with, and referring students who self-injure on to appropriate individuals. Education programs for pre-service teachers and school staff could also promote more sympathetic attitudes towards students who self-injure, and knowledge of the adverse impact of negative reactions towards youth NSSI. Overall, findings of Chapter 7 to Chapter 10 support integration of self-injury content and resources into existing teacher education courses and mental health promotion activities for pre-service teachers, and designated professional development days for teachers and other school staff addressing mental health, suicide, and maladaptive coping among youth.

However, similar to universal prevention programs, selective approaches to educate teachers and other school staff about NSSI are limited, and integration of self-injury content into existing suicide education programs for school staff may optimise use of limited time and resources in schools (see Chapter 7 to Chapter 9). It is also possible that existing programs targeting suicide provide a strong foundation for future interventions which address the education needs of Australian school staff and students regarding NSSI. By combining information about self-injury and suicide in selective programs, school staff may learn about how these behaviours are related, but also distinct from each other. The QPR program may be particularly suited to prevention of youth NSSI because it incorporates aspects of training which teachers and other school staff identified as important (see Chapter 9), including strategies to identify, communicate with, and refer at-risk youth.

Similar to the SOSI program, the QPR program developed in the US provides a process for responding to suicidal students and is one of the most widely used and recognised forms of suicide prevention training for gatekeepers. The QPR process involves teaching gatekeepers to recognise the warning signs of suicide, to actively *Question* people about their suicidal behaviour and establish a dialogue to *Persuade* them to accept professional help, followed by taking appropriate steps to *Refer* the suicidal person for treatment (Reis & Cornell, 2008). Reis and Cornell (2008) found that while the QPR program increased the knowledge and self-reported confidence of teachers and school counsellors in the US towards youth suicide, and their involvement in making no-harm contracts with suicidal students, teachers and school counsellors were reluctant to question students about suicide following the training.

However, in comparison to teachers, school counsellors demonstrated greater knowledge of suicide risk factors, and reported questioning and referring more suicidal students than teachers (Reis & Cornell, 2008). This finding appears to be consistent with results of Wyman et al. (2008) who found that while the QPR program increased staff knowledge about suicide and self-reported confidence to respond to suicidal students over a follow-up period of one year, the training only increased communication with suicidal students among staff with previous experience in the area. Results presented in Chapter 7 and Chapter 9 also indicate that school mental health professionals were more confident and knowledgeable towards youth NSSI, and more likely to intervene with students who self-injure by talking to them and consulting with their parents, than other school staff. Together, these findings provide support for the development and delivery of tailored gatekeeper training programs, designed to address the specific needs of school-based mental health professionals and other school staff.

Psychoeducation for teachers and other school staff is needed regarding general information about self-injury, how to approach and talk appropriately to students who self-injure, and how to refer students who self-injure for treatment (see Chapter 9). Additionally, results from Chapter 9 and 10 indicated that school mental health professionals would also benefit from education regarding how to question students about self-injury and conduct risk assessments, strategies for talking to parents of students who self-injure, how to manage ethical dilemmas associated with responding to students who self-injure (e.g., students' right to confidentiality and parents' right to be informed), and how to develop school policies addressing youth NSSI.

However, it is interesting that in Chapter 7 response to students who self-injure was independent of occupation. This suggests that although school mental health workers may be more knowledgeable and confident to provide counselling to students based on their previous training, other school staff are also conducting risk assessments and counselling students who self-injure if they feel confident doing so. Given that confidence may increase the likelihood of school staff responding to students who self-injure, what is expected of teachers and other non-clinically trained staff in the education sector should be addressed in training. School policies and protocols could also help distinguish the roles and responsibilities of school mental health professionals and other school staff when responding to students who self-injure.

The findings presented in Chapter 5 suggest that school mental health professionals could also be educated about appropriate websites available for adolescents who self-injure, and strategies to discuss safe online help-seeking, including discussion of moderated online discussion forums and pathways to offline help-seeking. Results presented in Chapter 5, and Chapters 7 to 9, indicate that information and resources could also be developed and delivered for parents and carers of young people who self-injure to educate them about how

to communicate with their children, how and where to access professional help, and strategies for parenting youth who self-injure. Parents could also be educated about adolescents' preference to seek online help and how to create an open dialogue with their children about safe online help-seeking for NSSI.

Furthermore, teacher education students may also benefit from training during their pre-service training to prepare them for their future gatekeeper role. However, teacher education programs in Australia vary considerably regarding how much training teachers receive to promote mental health among students and intervene with at-risk students (Graham et al., 2011). Since 2000, ResponseAbility (http://www.responseability.org/), an initiative of the Australian Government, has provided free multimedia resources and practical support for Australian universities and teacher educators, addressing how pre-service teachers can promote the social and emotional health of adolescents. However, similar to resources provided by MindMatters, information referring to self-harm does not clearly acknowledge the distinction between self-injury and suicidal behaviour, defining self-harm as a deliberate act to physically harm oneself, such as cutting, burning, or ingesting harmful substances (ResponseAbility, 2012). This may undermine teachers' responses to students who self-injure.

Education programs and policies that discuss NSSI in the context of suicide and suicidal behaviour may discourage teachers and other school staff from talking to students who self-injure, and inadvertently lead to inappropriate responses to youth NSSI (e.g., insisting that students who self-injure are hospitalised or suspended from school until their wounds have healed). Responding to episodes of NSSI in the same fashion as a suicide attempt could also alienate students who self-injure, and discourage them from seeking help from teachers or other adult for the behaviour in future. School-based prevention programs may also inadvertently create harmful effects for adolescents who self-injure, such as

increasing their feelings of hopelessness, guilt, and shame if teachers and other school staff transfer negative attitudes about NSSI to students.

However, while existing gatekeeper training programs to educate teachers and other school staff about DSH and suicide have been shown to improve staff knowledge towards and self-reported confidence to intervene with students who self-injure (Robinson et al., 2008; Wyman et al., 2008), no study has demonstrated improvements in staff practice and student-level outcomes. Results of Chapter 7 to Chapter 9 also suggest that barriers such as a lack of time and school resources, including limited access to school-based mental health professionals, may impede implementation of face-to-face training programs and workshops in schools, which tend to be time consuming, expensive, and require travel and trained professionals to facilitate training, especially for school staff in regional and remote areas of Australia. Interactive online gatekeeper training programs and information modules to educate teachers and other school staff about NSSI may overcome these barriers, and ensure optimal dissemination of accurate and up-to-date information and resources for addressing youth NSSI in the school setting.

Over the past 30 years, several websites have been developed to provide information and support for people who self-injure, friends and family of people who self-injure, and the teachers and healthcare professionals who service people who self-injure. For example, as mentioned in Chapter 2, *S.A.F.E. Alternatives* (http://www.selfinjury.com/), developed in 1986, provides information, support, and education to families, healthcare professionals, and school staff interested in learning more about NSSI and how to manage the issue. Likewise, *LifeSIGNS: Self-Injury Guidance and Network Support* (http://www.lifesigns.org.uk/), founded in 2002 in the UK, offers resources for people who self-injure and those exposed to the behaviour, including teachers and healthcare professionals, and a moderated discussion forum for those who self-injure.

The Cornell Research Program on Self-injury and Recovery (CRPSIR; http://www.selfinjury.bctr.cornell.edu/), launched one year later in 2003, presents a number of resources and guidelines for parents, friends, and teachers to support young people and adults who self-injure. In addition, Self-Injury Outreach and Support (SiOS; http://sioutreach.org/) provides information and resources about NSSI to people who self-injure and those who support people who self-injure, including friends and family, school staff, and healthcare professionals. However, the effectiveness of these resources in improving the knowledge, confidence, and responses of school staff towards students who self-injure warrants further research. Yet to be evaluated is the only Australian NSSI website (Shedding Light on Self-Injury; http://www.self-injury.org.au) which was recently developed,

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with results of this thesis informing the section for school staff.

Findings of Chapter 10 corroborate anecdotal evidence from Chapter 7 to Chapter 9 suggesting that teachers and other school staff desire policies to inform their response to students who self-injure. As reported in Chapter 5 adolescents believe teachers could talk to students about NSSI, which contradicts many policies in Australian schools that explicitly discourage open discussion of NSSI due to fears of contagion (McAllister et al., 2010). Results of Chapters 7 and 9 also suggest that some school staff fear communicating with adolescents about NSSI and are concerned about the perceived rising prevalence of NSSI among youth. Therefore, policies and training for school staff regarding NSSI should address contagion management practices, and legal and ethical guidelines regarding when and how to notify parents of children who self-injure, to remove ambiguity and ensure that all school staff are on the same page and can make informed choices regarding duty of care for students who self-injure. This may also help to address concerns about how to manage the sometimes negative and unhelpful reactions of parents' to their child's self-injury.

Based on findings of Chapter 10, when developing a policy to address youth NSSI schools should: 1) define NSSI and distinguish the behaviour from suicidal behaviour; 2) outline the roles and responsibilities of staff members; 3) identify a school point person or convene a school crisis team with training to manage referrals from staff for students who self-injure; 4) describe the procedure for school staff when a student discloses NSSI or is suspected of self-injuring; 5) describe the specific criteria for the school point person or crisis team to assess the student's risk for further self-injury and accidental death; 6) outline the process for referring students who self-injure to external mental health professionals and services; 7) describe the process and timing for notifying parents about their child's self-injury; and 8) outline strategies for managing contagion of self-injury among students. In particular, school policies for responding to students who self-injure should be distinguished from policies addressing youth suicide to orientate teachers and other school staff towards distinguishing between these two behaviours and encouraging responses appropriate for NSSI.

Strengths and Limitations of the Thesis

In addition to the limitations noted in each study of this thesis, certain limitations across the entire research program should be considered when interpreting the findings of this thesis. An important limitation was that adolescents absent from school did not participate, and findings may not be representative of school absentees' perceptions of help for young people who self-injure. Adolescents absent from school may be at increased risk for self-injury (Ribakoviene & Puras, 2002), leading to a possible over-estimation of the extent to which adolescents believe that parents and teachers can help young people who self-injure. This over-estimation may have been exacerbated by the overrepresentation of adolescent females compared to adolescent males in this thesis. The open-ended questions used with adolescents in the studies presented here could also be strengthened with the use of

interviews and focus groups. However, ethical issues when conducting interviews and focus groups regarding NSSI with adolescents in the school setting requires further consideration and evaluation of possible iatrogenic effects. This will add to existing literature in the area indicating that no iatrogenic consequences come about from asking students about NSSI (Muehlenkamp et al., 2010), and that asking young people about NSSI may result in positive lifestyle changes among those who self-injure (Hanley, Pietrusza, Gluck, & Whitlock, 2011).

Similarly, the pre-service teachers and school staff who participated in this thesis were self-selected and potentially biased towards people interested in NSSI based on personal or professional experience. It is also possible that teachers and other school staff with knowledge regarding NSSI and confidence responding to students who self-injure were more likely to review and provide feedback on the policy. However, staff without a school policy may have been more interested and curious to examine the policy, and thus more likely to complete the questionnaire than those with an existing policy. Similar to the adolescent studies, use of interviews and focus groups with pre-service teachers and school staff may have strengthened results of this thesis. However, feedback from school principals suggested that time constraints prevented teachers and other school staff from participating in interviews and focus groups. The use of self-report data is also susceptible to recall and response bias, with participants possibly not remembering how they have responded to students who self-injure, or answering questions about their typical response in a way which they believe is desirable to the researchers. Future research could overcome this by gathering data from a third party, while approaches to minimise the amount of missing data associated with online questionnaires, such as telephone interviews and postal questionnaires (S. Johnson et al., 2014), are warranted.

Finally, school principals may have considered the knowledge and skills of school staff regarding NSSI before providing their consent, potentially biasing the sample towards

teachers and other school staff with training and experience in the area of NSSI.

Unfortunately, the response rate and representativeness of pre-service teachers and school staff could not be gauged from the anonymous online questionnaires. However, the low response rate of 25% in the last study of this thesis may reflect a response bias, despite the response rate being consistent with earlier research in Australian schools (Hasking et al., 2010). Furthermore, although principals who agreed to participate in an earlier stage of the thesis also consented for their school to provide feedback about the policy, the use of two distinct samples of teachers and other school staff limits interpretations about the suitability of the policy.

A final limitation of this thesis was the low internal consistency of the Teachers' Knowledge and Beliefs about Self-Injury questionnaire, which at the time of writing this thesis was the only measure of attitudes, knowledge, and confidence towards NSSI developed specifically for teachers. The use of only three items to measure teachers' attitudes towards NSSI may not have accurately reflected attitudes among teachers towards adolescents who self-injure. Further research is needed to explore a broader range of attitudes among teachers, and the relationship between teachers' attitudes towards NSSI, teachers' responses to adolescents who self-injure, and student-level outcomes. A major limitation of this thesis is the cross-sectional design and lack of information about the temporal relationship between attitudes, confidence, and responses towards youth NSSI.

However, since writing this thesis, an additional measure of attitudes, and perceived knowledge and confidence towards self-injury has been developed (Muehlenkamp et al., 2013) incorporating items from the Teachers' Knowledge and Beliefs about Self-Injury questionnaire (Heath et al., 2006; Heath et al., 2011), the Attitudes towards Deliberate Self-Harm Questionnaire (McAllister et al., 2002), and the Self-Harm Antipathy Scale (Patterson et al., 2007a). Although validation of this measure with healthcare professionals

demonstrated adequate internal consistency (Muehlenkamp et al., 2013), further research evaluating the reliability of this measure with school staff is warranted.

Although this thesis demonstrated an association between teachers' confidence when responding to youth NSSI and their actual responses to students who self-injure, this thesis did not directly evaluate this relationship in the context of a theoretical model of behaviour (e.g., TPB), or prospectively test the relationship between knowledge, attitudes, and behaviour toward students who self-injure. Further work is needed to address problems regarding the effectiveness of the TPB, and conditions impacting on the relationship between intentions and behaviour. In particular, the time interval between teachers' intentions to respond to students who self-injure and when they actually respond to these students, poor measurement of variables contributing to the model, difficulties identifying and measuring the multitude of alternative behaviours involved in responding to students who self-injure (i.e., talking to and referring students), and other factors influencing teachers response (e.g., lack of skills and resources, parent cooperation, existing school policies, and limited school-and community-based referral sources) may negatively impact on the ability of intentions to predict behaviour (Armitage & Conner, 2001; Bilic, 2005; Sheppard, Hartwick, & Warshaw, 1988).

However, the work presented here did identify variables which are likely to impact on the behaviour of school staff in response to youth NSSI, such as knowledge and confidence responding to students who self-injure, and students' reluctance to seek professional help for NSSI. Accordingly, this thesis provides a perspective for evaluating the association between attitudes and confidence, behavioural intentions, and behaviour in response to students who self-injure. Further research investigating the impact of additional variables, such as burnout, traumatic experiences with students who self-injure, and existing school policies and

procedures in relation to youth NSSI on the attitudes and behaviour of teachers and other school staff towards NSSI is warranted.

Future research could also determine how to maximise uptake of training programs and school policies in Australian schools, while minimising the burden on schools. In particular, research could explore whether specific training modules targeting NSSI are necessary or whether NSSI material could be incorporated into existing mental health promotion interventions and curricula in schools to increase program uptake and adherence. Findings of Chapter 9 suggested that staff with training in NSSI were positive about the experience, suggesting that promotion of existing programs and resources in school may be enough to improve uptake of training packages in school, and thus increase staff confidence and knowledge. Although school staff commented that they want training and school policies for responding to students who self-injure, having training programs and policies in place does not guarantee that they will be implemented by stakeholders. Furthermore, although staff indicated that their school does not have a policy addressing NSSI does not mean there isn't one, with almost a third of staff unsure whether their school has such a policy. Finally, teachers were among the last people that students said they would disclose their NSSI to, therefore for any resultant training program and policy to be effective, research needs to evaluate the impact of staff and student education on student-level outcomes, including helpseeking intentions and behaviour, perspectives regarding stigma attributed to NSSI, and knowledge about what teachers can do to help those who self-injure.

This thesis also has considerable strengths and has contributed significantly to the understanding of adolescents' perceptions of help for self-injury, and the knowledge and training needs of pre-service teachers and school staff regarding youth NSSI. This information could be used to inform the development of prevention and early intervention initiatives for NSSI in the school setting, thus improving support and help-seeking for NSSI

in schools. The findings presented in this thesis could also be used to inform future research by providing evidence of the reliability and validity of measures, which could be used as a baseline for evaluating the effectiveness of training programs and online resources for school staff regarding NSSI. Further research is needed to evaluate adolescent help-seeking for NSSI and explore the suitability of measures of teachers' knowledge, attitudes, and confidence towards youth NSSI.

The findings of this thesis provide important insights into help-seeking among adolescents for NSSI, and describe strategies which adolescents believe are important in helping youth overcome NSSI. This thesis was innovative in distinguishing online friends from offline friends in a study of youth perceptions, which is important given the increasing salience of online relationships in the lives of adolescents, and the potential for adolescents' online behaviour to influence their offline behaviour (Bradley, 2005). These studies further understanding of how peers and adults can respond to NSSI from an adolescent perspective, and evaluated differences across distinct groups of adolescents, potentially forming the basis of targeted education programs which can encourage the most appropriate methods of responding to self-injury in the Australian secondary school system.

This research program was also significant because it was the first to evaluate and compare the knowledge, attitudes, and confidence of pre-service teachers and school staff, including school principals, teachers, psychologists, and nurses towards youth NSSI. This information could be used to inform the development of tailored education programs and training tools for pre-service teachers and school staff regarding youth NSSI in the school setting. Based on findings of this thesis, tailored education resources could also be developed for different groups of students, such as males and adolescents exposed to self-injury, to encourage appropriate help-seeking for peers, or themselves. Future research evaluating

whether the benefits of targeted education programs for students are sustained across groups and over time is warranted.

Finally, the work presented here has contributed to our understanding of appropriate prevention and early intervention initiates for NSSI in the school setting, and factors which are likely to influence successful implementation of these programs and policies in the Australian education system. Factors such as limited time and resources to implement training programs and policies for responding to students who self-injure in schools may inform future research which rethinks teacher' preparation and training, and school policies regarding youth NSSI. The findings of this thesis suggest incorporating self-injury content into already existing mental health training courses for both pre-service teachers and school staff, and providing online resources to school staff regarding youth NSSI, which are easily accessible to those with the required technology.

Future Recommendations

In light of the implications and limitations of this thesis, for teachers and other school staff to confidently respond to students who self-injure, universal and selective prevention programs, and school policy guidelines regarding best practice in addressing NSSI need to be developed and evaluated in schools. In particular, online professional development tools and training modules should be developed for teachers and other school staff, and evaluated to monitor changes in staff knowledge, skills, and responses towards students who self-injure over time. However, it is important to note that when asked how they would like to be educated about youth NSSI, few teachers and other school staff mentioned online training, relative to workshops and seminars. Therefore, while time constraints and limited resources may impede implementation of face-to-face training in some schools and regions of

Australia, the option to participate in workshops and seminars instead of, or in addition to, online training should be available to teachers and other school staff wherever possible.

Future research, possibly using focus groups or interviews, is required to evaluate the effectiveness of these programs and online tools from the perspective of teachers and other school staff. Further research evaluating the potential utility of school policies regarding NSSI, and barriers which may challenge their implementation in schools is also warranted. The perceived effectiveness of these programs and resources is likely to influence implementation of these tools and policies by stakeholders in the school setting, and may also impact on the fidelity of these programs in the long term. Programs and resources which are judged as user-friendly and suitable for the school setting are more likely to be implemented in schools than programs which are perceived as irrelevant and incompatible with the needs of school staff and students. It is also likely that school mental health professionals' baseline knowledge about self-harm may be higher than among teaching staff given that basic selfharm and risk assessment training may be included in tertiary (i.e., university or college) training for mental health professionals. Therefore, for education to have a significant impact on teachers and mental health professionals, it must be carefully tailored to address areas where teaching and healthcare professionals are misinformed about particular aspects of selfinjury.

As two key stakeholder groups, parents and students could also be asked to evaluate programs and resources addressing youth NSSI. Consulting with parents and students, and including them as partners when developing prevention programs and school policy may improve collaboration in response to youth NSSI across the school community. Future research investigating the long-term utility and outcomes of school policy and programs addressing youth NSSI is also warranted to provide evidence-based recommendations to schools regarding the development of such policies and programs. This is also likely to

improve teacher engagement with and implementation of policies and programs regarding youth NSSI. However, given that a lack of knowledge about NSSI and training among school staff may challenge implementation of NSSI policies in schools, school policies addressing youth NSSI should supplement training programs for teachers and other school staff regarding NSSI.

While results of this thesis suggested that over 80% of teachers and other school staff desire a policy addressing youth NSSI, only 70% indicated that they would implement the template policy in their school. This discrepancy could be attributed to the inclusion of teaching staff in the sample, who may believe that it is not their role to implement school policy. This highlights an important issue that while teachers and other school staff may believe that they need a policy and training to manage youth NSSI in the school setting, simply having a policy template and training program available does not guarantee that they will be implemented in the school setting. Therefore, further work investigating how to encourage school staff to implement training programs and policies, and strategies to minimise the burden on school staff is warranted. It is likely that self-injury training at the pre-service level will increase the probability that these practices will be integrated into teachers' everyday practice, and may encourage future participation in professional development programs regarding NSSI. However, as this was the first study to investigate the knowledge and training needs of pre-service teachers toward youth NSSI, further research in this area is warranted.

This thesis also did not examine the availability of mental health services and resources in schools which is likely to have an impact on adolescents and teachers perceptions of what can be done to help young people who self-injure. Higher rates of professional help-seeking would be expected in geographical areas where there are more comprehensive and accessible community- and school-based services for those who self-

injure. Similarly, based on comments from teachers and other school staff, greater implementation of programs and policies in schools is likely to be impacted by the availability of mental health services in schools. Future research would benefit from evaluating the impact of service accessibility, perceived social support, normative influences, and prior help-seeking on adolescents and teachers responses to youth NSSI.

Future research could also explore how adolescents who self-injure use the internet and how adolescents who self-injure can harness online resources to help them overcome the behaviour, while avoiding the potential pitfalls of online help-seeking for NSSI. Further evaluation of what school staff, family members, and peers could do to help prevent youth NSSI, how a lack of social support in the home or at school could be bolstered by increasing support in other areas, and how services could be integrated is warranted. Although the findings of this thesis provide some important insights into how parents might respond to their child's self-injury, further research exploring parents' views of their child's self-injury, including barriers faced by parents when responding to adolescents who self-injure, and what support and resources they need from school staff and professionals in responding to and managing youth NSSI in the home is also warranted.

Conclusion to the Thesis

In summary, this thesis evaluated adolescents' perceptions of help for NSSI, and the knowledge and training needs of teachers and other school staff towards youth NSSI, and found strong support for the development and implementation of training programs and policies addressing NSSI in the Australian secondary education sector. Results suggested that the majority of pre-service teachers and school staff have not received training regarding NSSI, and most acknowledged that to provide quality care to adolescents who self-injure, they require further training and policies in the area of youth NSSI. In particular, teachers and

other school staff suggested that they are unprepared and "working in the dark" when assisting students who self-injure, and that many schools lack policy on how to address and manage youth NSSI in the school system.

Results of this thesis also suggested that there is a disconnect between what adolescents need from teachers when responding to youth NSSI, and what teachers feel that they can offer students who self-injure based on their limited knowledge and training in the area of NSSI. Although students would like teachers to talk to them about NSSI, many teachers are ill-equipped to discuss self-injury with students, and while teachers may refer students who self-injure to school-based mental health professionals, they too may not have training to respond to youth NSSI. Results also suggested a disconnect between the frequency at which school staff respond to students who self-injure, their level of training, and the availability of school policies informing their response to youth NSSI.

However, while teachers and other school staff need prevention programs and policies to respond to students who self-injure, limited time, resources, and support from key stakeholders in the education system may be barriers to their implementation. Therefore, integration of self-injury content into existing university teaching courses for pre-service teachers and professional development programs for in-service teachers and school staff, may minimise the burden placed on schools with limited resources and time, and enhance the knowledge and confidence of current and future teachers, and other school staff to detect and refer students who self-injure. However, face-to-face workshops are time consuming, expensive, and require travel, especially for school staff in rural and remote areas. Therefore, interactive online training tools are needed to overcome these barriers, and ensure optimal dissemination of self-injury related information and resources, and to increase positive outcomes for more youth who self-injure.

Based on findings of this thesis, it appears that such training programs and resources will not only improve staff knowledge and confidence when responding to students who self-injure, but may also increase their likelihood of intervening with youth who self-injure. Training in NSSI can assist teachers and other school staff to identify and respond confidently to students who self-injure, creating a more rapid response and improving pathways to care for the most at-risk students. Implementation of prevention programs with adolescents in the school setting may also increase the likelihood of adolescents recognising and seeking appropriate help for peers and friends who self-injure. Ultimately, a whole-school approach to training that prepares students, parents, and school staff to respond to youth NSSI could improve recognition of at-risk youth and timely referral of students who self-injure to mental health professionals, which in turn could decrease incidents of NSSI and future suicide, and improve wellbeing of students who self-injure.

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Appendices

Appendix A

Adolescent Questionnaire





COPING WITH EMOTIONAL PROBLEMS



Dr. Penelope Hasking School of Psychology and Psychiatry Monash University

Professor Graham Martin, OAM Department of Psychiatry University of Queensland Thank you for agreeing to do this survey. We appreciate your time.

Please answer each question as best you can and be honest in your answers. There are no right or wrong answers and no one in your school or your parents will be allowed to see or know your answers. Your responses are private and confidential.

However if, when we look at your answers, we believe that you are at risk in some way – for instance your life is in danger – then we will discuss our conclusions with the Principal of your school, to ensure that you are provided with help.

If you wish to stop doing the survey at any time, please just raise your hand and a researcher will collect the survey. You may also just hand in a survey, even if you decide not to finish it.

Some of the questions may seem quite similar, but it is important that you answer as many as you can. Please read the instructions for each section of the questionnaire carefully and provide the most honest response you can. Do not take too long on any one question. If you have any questions please raise your hand and a researcher will be happy to answer them.

Before we get started you will need to create a code that is unique to you. This code will be used so that we do not know who you are when we analyse the data, and so that when we come back next year we will know that we are talking to the right person. To create your code, answer the following questions and place your answers in the box provided.

	Υ	0	7	Α	G
		N	My code would be:		
4.	What is the	e last letter of your la	ast name?	-	<u>G</u>
3.	What is the	e first letter of your n	nother's name?	-	<u>A</u>
2.	What mon	th is your birthday (i	n numbers from 0°	1-12)?	<u>07</u>
1.	What is the	e last letter of your fi	rst name?	-	<u>Y</u>
<u>Exam</u>	ı ple: My nan	ne is Penny Hasking	ı. My birthday is in	July. My mother's	name is Annette.
4.	What is the	e last letter of your la	ast name?		
3.		e first letter of your n		-	
2.		th is your birthday (i		1-12)?	
_		e last letter of your fi			

Your code is:

This section asks you to tell us some information about you and your family. Please read each question carefully and tick or write your response in the spaces provided.

1. Male Female	e (tick one)	
2. Age		
3. Postcode		
4. Year/Form at school		
5. What country were you bo	rn in?	
6. What country was your mo	ther born in?	
7. What country was your fath	ner born in?	
8. Are you part of an ethnic g If you answered yes ,	-	No 🗆
9. Do you identify as:		
a. Aboriginal	Yes N	o 🗆
b. Torres Strait Island	er Yes 🗌 N	o 🗆
	which religion do you pra	es No actice?ervice or group meeting?
		at school, how would you describe etc)
12. Are your parents:		
Married Divorc	ed Separate	ed Widowed
Never married	other (please	e write)
13. Which of your parents wo full time or part-time (i.e.,		ey do for a living and tick if they work
Mother	_ Full-time	Part-time
Father	Full-time	Part-time
Neither		
14. Please write the number of	of brothers or sisters you	have in the spaces below:
Younger brothersYounger sisters		Brothers the same age Sisters the same age

Next we are interested in how you see yourself, your friends and your parents. Please circle the number that corresponds to your answer for each question.

		Strongly Disagree	Disagree	Agree	Strongly Agree
1.	On the whole I am satisfied with myself	1	2	3	4
2.	At times I think I am no good at all	1	2	3	4
3.	I feel that I have a number of good qualities	1	2	3	4
4.	I am able to do things as well as most people	1	2	3	4
5.	I feel I do not have much to be proud of	1	2	3	4
6.	I certainly feel useless at times	1	2	3	4
7.	I feel that I'm a person of worth, at least on an equal plane with others	1	2	3	4
8.	I wish I could have more respect for myself	1	2	3	4
9.	All in all, I am inclined to feel I am a failure	1	2	3	4
10.	I take a positive attitude towards myself	1	2	3	4

		Not at all true	Hardly true	Moderately true	Exactly true
1.	I can always manage to solve difficult problems if I try hard enough	1	2	3	4
2.	If someone opposes me, I can find the means and ways to get what I want	1	2	3	4
3.	It is easy for me to stick to my aims and accomplish my goals	1	2	3	4
4.	I am confident that I could deal efficiently with unexpected events	1	2	3	4
5.	Thanks to my resourcefulness, I know how to handle unforseen situations	1	2	3	4
6.	I can solve most problems if I invest the necessary effort	1	2	3	4
7.	I can remain calm when facing difficulties because I can rely on my coping abilities	1	2	3	4
8.	When I am confronted with a problem, I can usually find several solutions	1	2	3	4
9.	If I am in trouble, I can usually think of a solution	1	2	3	4
10.	I can usually handle whatever comes my way	1	2	3	4

When answering the following questions think about the parent/caregiver you feel closest to:

		Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1.	My parent only seems to notice me when I am angry	1	2	3	4	5
2.	I'm confident that my parent will listen to me	1	2	3	4	5
3.	I enjoy helping my parent whenever I can	1	2	3	4	5
4.	I often feel angry with my parent without knowing why	1	2	3	4	5
5.	I'm confident that my parent will try to understand my feelings	1	2	3	4	5
6.	I feel for my parent when he/she is upset	1	2	3	4	5
7.	I get annoyed at my parent because it seems I have to demand his/her caring and support	1	2	3	4	5
8.	I talk things over with my parent	1	2	3	4	5
9.	It makes me feel good to be able to do things for my parent	1	2	3	4	5

When answering these questions which parent did you	ou think about?
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For the next questions:

Circle the 1 if you Very Strongly Disagree
Circle the 2 if you Strongly Disagree
Circle the 3 if you Mildly Disagree
Circle the 4 if you are Neutral

Circle the 5 if you Mildly Agree

Circle the 6 if you Strongly Agree

Circle the 7 if you Very Strongly Agree

There is a special person who is around if I am in need	1	2	3	4	5	6	7
There is a special person with whom I can share my joys and sorrows	1	2	3	4	5	6	7
My family really tries to help me	1	2	3	4	5	6	7
4. I get the emotional help and support I need from my family	1	2	3	4	5	6	7
I have a special person who is a real source of comfort to me	1	2	3	4	5	6	7
6. My friends really try to help me	1	2	3	4	5	6	7
7. I can count on my friends when things go wrong	1	2	3	4	5	6	7
8. I can talk about my problems with my family	1	2	3	4	5	6	7
9. I have friends with whom I can share my joys and sorrows	1	2	3	4	5	6	7
There is a special person in my life who cares about my feelings	1	2	3	4	5	6	7
11. My family is willing to help me make decisions	1	2	3	4	5	6	7
12. I can talk about my problems with my friends	1	2	3	4	5	6	7

Please be as honest and accurate as you can throughout. Try not to let your response to one statement influence your responses to other statements. There are no 'correct' or 'incorrect' answers. Answer according to your own feelings rather than how you think 'most people' would answer.

	l disagree a lot	l disagree a little	Neither agree nor disagree	I agree a little	l agree a lot
In uncertain times, I usually expect the best	1	2	3	4	5
2. It's easy for me to relax	1	2	3	4	5
3. If something can go wrong for me it will	1	2	3	4	5
4. I'm always optimistic about my future	1	2	3	4	5
5. I enjoy my friends a lot	1	2	3	4	5
6. It's important for me to keep busy	1	2	3	4	5
7. I hardly ever expect things to go my way	1	2	3	4	5
8. I don't get upset too easily	1	2	3	4	5
I rarely count on good things happening to me	1	2	3	4	5
Overall, I expect more good things to happen to me than bad	1	2	3	4	5

Below is a list of ways in which people your age cope with problems. Please indicate how you cope with problems by circling the appropriate number.

		Don't do it	Not used very often	Sometimes used	Often used	Used a great deal
Talk to other people help me sort it out	e about my concern to	1	2	3	4	5
Work at solving the my ability	problem to the best of	1	2	3	4	5
3. Work hard		1	2	3	4	5
4. Worry about what v	vill happen to me	1	2	3	4	5
Spend more time w	rith boy/girl friend	1	2	3	4	5
Improve my relation	nship with others	1	2	3	4	5
7. Wish a miracle wou	ıld happen	1	2	3	4	5
8. I have no way of de	aling with the situation	1	2	3	4	5
9. Find a way to let of cry, scream, drink,	f steam (for example, take drugs etc)	1	2	3	4	5
Join with people wheeler	no have the same	1	2	3	4	5
11. Shut myself off from can avoid it	n the problem so that I	1	2	3	4	5
12. See myself as bein	g at fault	1	2	3	4	5
13. Don't let others kno	w how I am feeling	1	2	3	4	5
14. Pray for help and g everything will be a		1	2	3	4	5
15. Look on the bright so of all that is good	side of things and think	1	2	3	4	5
16. Ask a professional	person for help	1	2	3	4	5
17. Make time for leisu	re activities	1	2	3	4	5
18. Keep fit and healthy	1	1	2	3	4	5

In the next survey there are phrases describing people's behaviours. Please use the rating scale below to describe how accurately each statement describes *you*.

	Very false for me	Somewhat false for me	Somewhat true for me	Very true for me
A person's family is the most important thing in life	1	2	3	4
2. Even if something bad is about to happen to me I rarely experience fear or nervousness	1	2	3	4
3. I go out of my way to get things I want	1	2	3	4
4. When I am doing well at something I love to keep at it	1	2	3	4
5. I am always willing to try something new if I think it will be fun	1	2	3	4
6. How I dress is important to me	1	2	3	4
When I get something I want I feel excited and energised	1	2	3	4
Criticism or scolding hurts me quite a bit	1	2	3	4
When I want something I usually go all out to get it	1	2	3	4
10. I will often do things for no other reason than they might be fun	1	2	3	4
11. It is hard for me to find the time to do things such as get a haircut	1	2	3	4
12. If I see a chance to get something I want I move on it right away	1	2	3	4
13. I feel pretty worried or upset when I think or know somebody is angry at me	1	2	3	4
When I see an opportunity for something I like I get excited right away	1	2	3	4
15. I often act on the spur of the moment	1	2	3	4
16. If I think something unpleasant is going to happen I usually get pretty worked up	1	2	3	4
17. I often wonder why people act the way they do	1	2	3	4
When good things happen to me it affects me strongly	1	2	3	4
19. I feel worried when I think I have done poorly at something	1	2	3	4
20. I crave excitement and new sensations	1	2	3	4
21. When I go after something I use a no holds barred approach	1	2	3	4
22. I have very few fears compared to my friends	1	2	3	4
23. It would excite me to win a contest	1	2	3	4
24. I worry about making mistakes	1	2	3	4

We are interested in two aspects of your emotional life. One is your <u>emotional experience</u> or what you feel like inside. The other is your <u>emotional expression</u> or how you show your emotions in the way you talk or behave. Although some of the following questions may seem similar to one another they differ in important ways. For each item please use the following scale:

1	45		6-				7	7
str	ongly disagree neutral			str	ong	gly	agr	ee
1.	When I want to feel more <i>positive</i> emotion (such as joy or amusement), I change what I'm thinking about	1	2	3	4	5	6	7
2.	I keep my emotions to myself	1	2	3	4	5	6	7
3.		1	2	3	4	5	6	7
4.	When I am feeling positive emotions, I am careful not to express them	1	2	3	4	5	6	7
	When I'm faced with a stressful situation, I make myself think about it in a way that helps me stay calm	1	2	3	4	5	6	7
6.	I control my emotions by not expressing them	1	2	3	4	5	6	7
7.	When I want to feel more positive emotion, I change the way I'm thinking about the situation	1	2	3	4	5	6	7
8.	I control my emotions by <i>changing the way I think</i> about the situation I'm in	1	2	3	4	5	6	7
9.	When I am feeling <i>negative</i> emotions, I make sure not to express them	1	2	3	4	5	6	7
	When I want to feel less <i>negative</i> emotion, I <i>change the way I'm</i> thinking about the situation	1	2	3	4	5	6	7
	Have you ever seen a mental health professional (e.g. counsellor, to get help for personal problems? Yes No If you ticked Question 3 2a. How many visits did you have with the mental health profess 2b. Do you know what type of mental health professional(s) you their titles (e.g. counsellor, psychologist, psychiatrist) 2c. How helpful was the visit to the mental health professional? extremely unhelpful 1 2 3 4	sion ve	o, pland al? see	eas n?	e go	o, pl	eas	
	are you currently receiving treatment from a mental health profession		•	•				
1	osychologist, psychiatrist)? Yes L. No L. If you ticked no , p	lea	se g	go to	o P a	age	7	
	3a. What is the name you have been given for the problem(s) you treatment for?	ou a	are o	curr	entl	y re	ceiv	/ing
	3b. How many visits with the mental health professional(s) have treatment?	yo	u re	ceiv	/ed	this		
	3c. Do you know what type of mental health professional(s) you list their titles (e.g. counsellor, psychologist, psychiatrist)	are	se	eing	g? If	[:] SO,	ple	ase
	3d. How helpful are your visits to the mental health professional extremely unhelpful	? (F		se (tren		•	pful	1
	1 2 3 4		-,				5	

Below is a list of people who you might seek help or advice from if you were experiencing a personal or emotional problem. **Tick** any of those who you have gone to for advice or help in the **past 2 weeks** for a personal or emotional problem and briefly describe the type of problem you went to them about.

	Yes	Briefly describe the problem
1a. Boyfriend or girlfriend		
1b. Friend (not related to you)		
1c. Online Friend (e.g. on Facebook, not related to you)		
1d. Parent/caregiver		
1e. Other relative / family member		
1f. Mental health professional (e.g., school counsellor,		
psychologist, psychiatrist)		
1g. Phone help line (e.g., Lifeline, Kids Help Line)		
1h. Websites (e.g., Reachout, Kids Help Line)		
1i. Family doctor / GP		
1j. Teacher (year advisor, classroom teacher)		
1k. Someone else not listed above (please describe who this		
was)		
11. I have not sought help from anyone for my problem		

Please circle the number that shows **how likely is it** that you would seek help from each of these people for a personal or emotional problem during the **next 4** weeks?

	Extremely unlikely			Extremely likely			
1a. Boyfriend or girlfriend	1	2	3	4	5	6	7
1b. Friend (not related to you)	1	2	3	4	5	6	7
1c. Online Friend (e.g. on Facebook, not related to you)	1	2	3	4	5	6	7
1d. Parent/caregiver	1	2	3	4	5	6	7
1e. Other relative / family member	1	2	3	4	5	6	7
1f. Mental health professional (e.g., school counsellor, psychologist)	1	2	3	4	5	6	7
1g. Phone help line (e.g., Lifeline, Kids Help Line)	1	2	3	4	5	6	7
1h. Websites (e.g., Reachout, Kids Help Line)	1	2	3	4	5	6	7
1i. Family doctor / GP	1	2	3	4	5	6	7
1j. Teacher (year advisor, classroom teacher)	1	2	3	4	5	6	7
1k. Someone else not listed above (please describe who this is)	1	2	3	4	5	6	7
1l. I would not seek help from anyone	1	2	3	4	5	6	7

How many times to?	nave you deliberately s	set fire to something th	at you weren't supposed
0 times \square	1-2 times \Box	3-5 times \Box	6 or more times \square
2. How many times property?	nave you deliberately s	set a fire resulting in da	mage to someone's
0 times \square	1-2 times	3-5 times \square	6 or more times \square

Well done you're half way there!



The following sections of the survey contain questions that some students may find upsetting. Remember you can choose to stop doing the survey at any time. If you become upset at any stage, please stop doing the survey and contact a teacher or one of the researchers.

We are now interested in your experiences with drugs or alcohol.

If you have **never** smoked a cigarette, **never** tried a drug and **never** tried alcohol please skip this section and **go to page 10**.

Remember no-one except the researchers will see your answers to these questions.

1. How often do you have a drink containing alcohol?							
Never \square Monthly or less \square Once a week or less \square 2-4 times a week \square 5+ times a week \square							
If you ticked never , go to Que	stion 8						
2. How many standard drinks of	do you have on	a typical day who	en you are drin	king?			
1 🗆 2 🗆 3	3-4 □	5-6		7 or more \square			
3. How often do you have six of	or more standard	d drinks on one o	occasion?				
Never \square Less than monthly \square Monthly \square Weekly \square Daily or almost daily \square							
4. Have you ever felt you shou	ld cut down on y	our drinking?	Yes 🗌 🛛	lo 🗆			
5. Have people annoyed you b	y criticising you	r drinking?	Yes 🗌 N	lo 🗌			
6. Have you ever felt bad or gu	uilty about your o	drinking?	Yes 🗆 N	lo 🗆			
7. Have you ever had a drink fi to steady your nerves or to	•	•	Yes 🗌 N	lo 🗆			
8. Have you ever smoked ciga If yes , how old were you		•	. •	to Question 10			
9. Do you currently smoke cig If yes , how many cigarett If no , how old were you w If no , please tell us a little	tes do you smok vhen you quit? _	ce in a typical da					
10. Have you ever tried an ille	gal drug? Yes	s □ No □ <i>I</i>	f you ticked nc	o, go to Page 10			
If yes , how old were you	when you tried	your first drug? _					
11. Do you currently use illega	•						
If no , please tell us a little	e bit about wny y	ou stoppea usir	ng arugs:				
Please tick any of the following dr	,			-			
	Tried at least once	How old were you when you first tried this drug?	How often have you used this drug?	Have you used this drug in the last month?			
Cannabis/Marijuana (pot, weed)							
Ecstasy							
Heroin/opium/morphine							
Speed/Ice/Amphetamines LSD/Acid							
Cocaine							
Inhalants (e.g. chroming,							
sniffing glue)							
Others (not including							
medication) Please list them.							

Over the past few weeks have you

	·	More so than usual	Same as usual	Less than usual	Much less than usual
1.	Been able to concentrate on whatever you are doing?	1	2	3	4
2.	Felt that you are playing a useful part in things?	1	2	3	4
3.	Felt capable of making decisions about things?	1	2	3	4
4.	Been able to enjoy your normal day-to-day activities?	1	2	3	4
5.	Been able to face up to your problems?	1	2	3	4
6.	Been feeling reasonably happy, all things considered?	1	2	3	4
		Not at	No	Rather	Much
		all	more than usual	more than usual	more than usual
7.	Lost much sleep over worry?	1	2	3	4
8.	Felt constantly under strain?	1	2	3	4
9.	Felt that you couldn't overcome your difficulties?	1	2	3	4
10.	Been feeling unhappy and depressed?	1	2	3	4
11.	Been losing confidence in yourself?	1	2	3	4
	Been thinking of yourself as a worthless person?		2	3	4

		Never	Yes, more than a year ago	Yes, in the past 12 months
1.	Have you had problems keeping up with schoolwork?			
2.	Have you had difficulty in making or keeping friends?			
3.	Have you had any serious arguments or fights with friends?			
4.	Have you had any serious problems with a boyfriend or a girlfriend?			
5.	Have you been bullied at school?			
6.	Have your parents separated or divorced?			
7.	Have you had any serious arguments with either or both of your parents?			
8.	Have your parents had any serious arguments or fights?			
9.	Have you or any member of your family had a serious illness or accident?			
10.	Have any close friends had a serious illness or accident?			
11.	Have you been seriously physically abused			
	Have you been in trouble with the police?			
13.	Has anyone among your immediate family (mother, father or sibling) died?			
14.	Has anyone close to you died?			
15.	Has anyone among your family or friends committed suicide?			
	Has anyone among your family attempted suicide or deliberately harmed themselves?			
17.	Has anyone among your close friends attempted suicide or deliberately harmed themselves?			
	Have you had worries about your sexual orientation (i.e. that you may be gay, lesbian or bisexual?)			
19.	Has anyone forced you (i.e. physically or verbally) to engage in sexual activities against your will?			
20.	Has any other distressing event occurred involving you, your family or close friend?			

Next, we are interested in learning more about the ways in which you or your friends may have hurt yourself on purpose without trying to kill yourself.

1. Have any of your friends ever hurt themselves on purpose? a. If you answered yes , how many of your friends have hurt themselves?
b. How did they hurt themselves?
c. Why do you think they hurt themselves on purpose?
2. Have you ever thought seriously about harming yourself but not actually engaged
in the act of self-injury? Yes No If no , please go to Question 4
3. Have you ever told anyone about these thoughts? a. If yes , who did you tell? (e.g. teacher, parent, doctor, etc)
4. Have you ever hurt yourself on purpose? Yes No If no , please go to Question 6 a. If yes , what did you do? b. Why do you think you hurt yourself on purpose?
c. Approximately how many times did you do this?
d. Approximately when did you first do this to yourself? (write your age)
e. When was the last time you did this to yourself?
1- 3 weeks 1 month 2-6 months 7-12 months 12+ months
f. Have you ever told anyone that you had done these things? Yes No If yes , who did you tell? (e.g. teacher, parent, doctor etc)
g. Have you ever needed to see a doctor after doing these things? Yes \square No \square
5. Please circle how serious the wound usually is when you hurt yourself
Not at all Needs first-aid Needs medical Life threatenin serious (e.g. bandage) attention (hospital)
6. Have you ever thought about ending your life? a. If yes , when was the last time you thought this? (write your age)
7. Did you ever try to end your life? a. If yes , when was the last time you did this to yourself? (write your age) b. If yes , how did you try to end your life?
Since this is a very serious matter it is important you talk to your parents, school counsellor or doctor about these thoughts or behaviours.

This survey lists specific reasons that people sometimes have for living and **not** ending their Please indicate how important these reasons for living are to you using the scale below:

1=not at all important	2=quite unimportant	3=somewhat unimportant
4=somewhat important	5=quite important	6= extremely important

r		_	_			
I am concerned about what others would think of me	1	2	3	4	5	6
2. I believe only God has the right to end a life	1	2	3	4	5	6
I believe I can find other solutions to my problems	1	2	3	4	5	6
4. My family depends upon me and needs me	1	2	3	4	5	6
5. I am afraid of death	1	2	3	4	5	6
Other people would think I am weak and selfish	1	2	3	4	5	6
7. My religious beliefs forbid it	1	2	3	4	5	6
8. I believe everything has a way of working out for the best	1	2	3	4	5	6
I love and enjoy my family too much and could not leave them	1	2	3	4	5	6
10. I am afraid of the unknown	1	2	3	4	5	6
11. I would not want people to think I did not have control over my life	1	2	3	4	5	6
12. I consider it morally wrong	1	2	3	4	5	6
13. I have the courage to face life	1	2	3	4	5	6
14. It would hurt my family too much and I would not want them to suffer	1	2	3	4	5	6

We want to learn more about what you think about people who hurt themselves on purpose

1. List three words you would use to describe someone who nurts themselves on purpose 1 2 3
2. Describe how you feel about people who hurt themselves on purpose
3. What do you think teachers could do to help young people who hurt themselves on purpose?
4. What do you think parents could do to help young people who hurt themselves on purpose?
5. What do you think people your age could do to help young people who hurt themselves on purpose?
6. What do you think online friends (e.g. on Facebook) could do to help young people who hurt themselves on purpose?

For each of the items below, please rate how well the item describes you

		ot at rell	all					ery
1.	I find that my mind often goes over things again and again	1	2	3	4	5	6	7
1.	Tillia tilat my milia oiten goes over tilligs again and again	'	_	3	4	5	0	'
2.	When I have a problem, it will gnaw on my mind for a long time	1	2	3	4	5	6	7
3.	I find that some thoughts come to mind over and over throughout the day	1	2	3	4	5	6	7
4.	I can't stop thinking about some things	1	2	3	4	5	6	7
5.	When I am expecting to meet someone, I will imagine every possible scenario and conversation	1	2	3	4	5	6	7
6.	I tend to replay past events as I would have liked them to happen	1	2	3	4	5	6	7
7.	I find myself daydreaming about things I wish I had done	1	2	3	4	5	6	7
8.	When I feel I have had a bad interaction with someone, I tend to imagine various scenarios where I would have acted differently.	1	2	3	4	5	6	7
9.	When trying to solve a complicated problem, I find that I just keep coming back to the beginning without ever finding a solution	1	2	3	4	5	6	7
10.	If there is an important event coming up, I think about it so much that I work myself up	1	2	3	4	5	6	7
11.	I have never been able to distract myself from unwanted thoughts	1	2	3	4	5	6	7
12.	Even if I think about a problem for hours, I still have a hard time coming to a clear understanding	1	2	3	4	5	6	7
13.	It is very difficult for me to come to a clear conclusion about some problems, no matter how much I think about it	1	2	3	4	5	6	7
14.	Sometimes I realise I have been sitting and thinking about something for hours	1	2	3	4	5	6	7
15.	When I am trying to work out a problem, it is like I have a long debate in my mind where I keep going over different points	1	2	3	4	5	6	7
16.	I like to sit and think about pleasant events from the past	1	2	3	4	5	6	7
17.	When I am looking forward to an exciting event, thoughts of it interfere with what I am working on	1	2	3	4	5	6	7
18.	Sometimes even during a conversation, I find unrelated thoughts popping into my head	1	2	3	4	5	6	7
19.	When I have an important conversation coming up, I tend to go over it in my mind again and again	1	2	3	4	5	6	7
20.	If I have an important event coming up, I can't stop thinking about it.	1	2	3	4	5	6	7

		No	Yes, likely	Yes, definitely
1.	Some people believe that their thoughts can be read. Have other people ever read your thoughts?	0	1	2
2.	Have you ever had messages sent just to you through the television or radio?	0	1	2
3.	Have you ever thought that people are following you or spying on you?	0	1	2
4.	Have you ever heard voices other people cannot hear?	0	1	2

Thank you for answering our questions so far. We are interested in what you thought about this survey. If you have time, please answer these final questions.

Did you enjoy completing this survey? Why or why not?	Yes 🗌	No 🗆
Did anything in this survey worry or upset you? If you ticked yes , what was it that worried or upset you?	Yes 🗌	 No □
If you ticked yes , how do you plan to deal with these feelings?		
ould you like to talk to someone about these concerns?	Yes 🗌	No 🗌
arrange a meeting with someone who might be able to help you?	incipal to	
What was the worst thing about doing this study?		
How many research studies have you ever been in (including this of	one)?	studies
Do you think anything in this survey will make you think about yours Yes \square No \square	self differentl	y?
If you ticked yes , please explain in what way you will think about you	ourself differe	ently?
Did you learn anything by doing this study? If you ticked yes , what did you learn?	Yes 🗌	No 🗆
Would you be interested in doing more studies like this one? Why or why not?	Yes 🗌	No 🗆
	Did anything in this survey worry or upset you? If you ticked yes , what was it that worried or upset you? If you ticked yes , how do you plan to deal with these feelings? ould you like to talk to someone about these concerns? If you ticked yes , would you like the researchers to contact your prarrange a meeting with someone who might be able to help you? Yes \(\) No \(\) What was the best thing about doing this study? What was the worst thing about doing this study? How many research studies have you ever been in (including this concerns) or you think anything in this survey will make you think about yourseld yes \(\) No \(\) If you ticked yes , please explain in what way you will think about you bid you learn anything by doing this study? If you ticked yes , what did you learn?	Did anything in this survey worry or upset you? If you ticked yes , what was it that worried or upset you? If you ticked yes , how do you plan to deal with these feelings? If you ticked yes , would you like the researchers to contact your principal to arrange a meeting with someone who might be able to help you? Yes No What was the best thing about doing this study? What was the worst thing about doing this study? How many research studies have you ever been in (including this one)? Do you think anything in this survey will make you think about yourself differently Yes No If you ticked yes , please explain in what way you will think about yourself differently you ticked yes , what did you learn? Would you be interested in doing more studies like this one? Yes Yes Would you be interested in doing more studies like this one?

All done!

Thank you for taking the time to complete this questionnaire



Appendix B

Information Sheets and Consent Forms for Parents and Students





PARENT/GUARDIAN INFORMATION SHEET

Coping with Emotional Problems

Dr. Penelope Hasking (Monash University)
Professor Graham Martin, OAM (University of Queensland)

1. Your Consent

This Participant Information Sheet contains detailed information about the research project, in which your child is invited to participate. Its purpose is to explain to you as openly and clearly as possible all the procedures involved in this project before you decide whether or not to take part. Please read this Participant Information carefully. Feel free to ask questions about any information in the document.

Once you understand what the project is about, you will be asked to sign the Consent Form. By signing the Consent Form, you indicate that you understand the information and indicate your consent for your child to participate in the research project, or a refusal to participate. You may keep this Participant Information Sheet for your records.

2. Purpose and Background

Prevention of mental health problems in young people has been a national priority for the past 10 years. Understanding the nature and extent of emotional problems in Australian teenagers will improve the care given to those with emotional problems and improve their well-being. This study will look at risk and protective factors associated with different forms of emotional problems. The results will be used to improve National and State mental health programs aimed at enhancing the quality of life of Australian teenagers.

This study will test a theoretical model proposing relationships between predisposing factors, resilience and emotional problems, using data collected over 3 years. The project will clarify risk and protective factors to be utilised in prevention and early intervention programs which aim to improve the quality of life of Australian adolescents. This study is being conducted in secondary schools across Australia. Across all sites a total of 2,500 adolescents aged between 12 and 19 years will participate in this project. In the first year, students aged 12-16 years will be invited to participate.

Your child is invited to participate in this research project as he or she fits this age range and is enrolled in a secondary school that has agreed to participate. Participating schools have been selected to ensure a representative sample. Your school's participation does <u>not</u> mean that these students are at greater risk. Funding for this project has been provided by the Australian Research Council.

3. Procedures

Participation in this project will involve your child completing a questionnaire which will ask them to list any previous psychiatric conditions, report their personal history of self-injury and substance use, and complete questionnaires assessing personality, psychological distress, coping strategies, relationship to parents and friends and their ability to manage emotions. The questionnaire has been designed to be completed in a single class and will be completed at school. Please contact your school if you wish to look though a copy of the questionnaire prior to providing consent for your child to participate in this project.

Students will be provided with their own version of the information sheet to read. Students will be asked to complete the questionnaires at school, in the presence of a researcher and/or teacher. At 12 and 24 month follow-ups, all adolescents for whom data were collected in the first year of the study will be invited to complete the questionnaires a second and a third time. The administration procedure will be the same as during year one.

4. Possible Benefits

While neither you nor your child may benefit personally from this project, the results of this study will lead to better focused programs to improve the care given to young people and improve their mental well-being. Students who participate in this study will receive a 'showbag' full of educational resources about maintaining good mental health. Provision of these resources will allow your child to access appropriate services if they require them at any time in the future.

5. Possible Risks

Our earlier work in this area, using the same questionnaire, has suggested that most young people enjoy completing the questionnaire and found it helpful to express their thoughts and feelings. While no foreseeable risks will result from participation in this project it is possible that your child may become distressed as a result of the issues raised while completing the questionnaire. Should this occur, we suggest talking with your child about these issues, or referring your child to the qualified counsellors who work at KidsHelpline (1800 55 1800).

We recognise that it is important to promote mental health and to provide pathways to care. All responses will be confidential with one exception: participants will be provided with a unique identifier, and questionnaires coded within one week of administration. Participants at serious risk of mental health problems will be identified to school principals who will refer the young person to appropriate services in accordance with school policies. A mental health professional will be available on the day of questionnaire administration, a talk will be offered to the entire student body, and a 'show bag' will be distributed to all students.

Finally, your child may choose to withdraw from this study, without comment or penalty, should they feel distressed at any time. This may be achieved by simply raising their hand to indicate they no longer wish to complete the questionnaire, returning an incomplete questionnaire to the researchers, or contacting the researchers after they submit their questionnaires to request we destroy them.

6. Alternatives to Participation

Should you choose for your child not to participate, they will be given the option of doing an alternate activity while the other students complete the questionaries.

7. Privacy, Confidentiality and Disclosure of Information

The results of the study will be published and/or discussed based on group findings. This means that neither you nor your child will be identified and no personal information will be revealed. Consent forms will be stored separately from the completed questionnaires. These consent forms will then be destroyed upon completion of the data collection phase of the project. Only the researchers involved in this study will have access to the consent forms or the questionnaires. Questionnaires will be stored in a locked filing cabinet, accessible only by the research team, for a period of thirteen years, in accordance with University guidelines. Questionnaires will then be shredded and disposed of. Data may be used for future research purposes, however all data will be anonymous and de-identified.

This study is being conducted over a three-year period. In order for us to maintain contact with you over this time, please provide your contact details as well as those of a close relative or friend. This information will remain confidential, accessible only by the researchers, and will only be used in the event that your child moves to a new school during the course of the study. Please discuss this project with an appropriate relative or friend, and gain their permission to disclose their contact details.

8. Participation is Voluntary

Participation in any research project is voluntary. If you do not wish your child to take part you are not obliged to. If you decide to take part and later change your mind, you are free to withdraw from the project at any stage. Your decision whether to take part or not to take part, or to take part and then withdraw, will not affect your relationship with your child's school.

Before you make your decision, a member of the research team will be available to answer any questions you have about the research project. You can ask for any information you want. Sign the Consent Form only after you have had a chance to ask your questions and have received satisfactory answers.

9. Results of Project

Outcomes of the project will be communicated to participating schools and parents/guardians via a written report. We will also offer to provide a presentation to you and the student body if the school principal requests one. We will maintain contact with you each year through annual study outcome

newsletters. Each newsletter will include additional resources to provide you and your child with additional ways of maintaining good mental health.

10. Further Information or Any Problems

If you require further information or if you have any problems concerning this project, you can contact either of the researchers.

Dr. Penelope Hasking School of Psychology & Psychiatry Monash University Clayton, VIC, 3800 Professor Graham Martin, OAM Royal Brisbane and Women's Hospital K Floor, Mental Health Centre Herston, QLD, 4029

11. Other Issues

Should you have any complaint concerning the manner in which this research is conducted, please do not hesitate to contact the ethics committee at Monash University or the University of Queensland.

Monash University Executive Officer, Human Research Ethics The Standing Committee on Ethics in Research involving Humans (SCERH) Building 3E Research Office Monash University Wellington Road, Clayton Victoria 3800

12. Ethical Guidelines

This project will be carried out according to the *National Statement on Ethical Conduct in Research Involving Humans* (June 1999) produced by the National Health and Medical Research Council of Australia. This statement has been developed to protect the interests of people who agree to participate in human research studies.

This project has been approved by the Human Research Ethics Committees of Monash University and University of Queensland. The principal of your school has also granted approval for this project to be conducted in your school.

Thank you for taking the time to read this Information Sheet. Your child has also received an Information Sheet which outlines the general aims of this study and the requirements of participants. Please complete the attached consent form and return it to your child's school.

Please note:

Even if you do not wish for your child to participate please complete the attached form and return it to your child's school.





PARENT/ GUARDIAN CONSENT FORM

Coping with Emotional Problems

Dr. Penelope Hasking (Monash University)
Professor Graham Martin, OAM (University of Queensland)

NOTE: Signed written consent will remain with the researchers for their records. Please tick the box that best matches your consent for your child to participate in this study and complete the rest of this form. I agree that ______(insert full name of child) may take part in the above research project. I do not agree that ______(insert full name of child) may take part in the above research project. The project has been explained to _____ (insert full name of participant) and to me and I have read the Information Sheet, which I keep for my records. I understand that agreeing to take part means that I am willing to allow _____ (insert full name of participant) to answer questions regarding their personal history of self-injury and substance use, and complete questionnaires assessing personality, psychological distress, coping strategies, relationship to parents and friends and their ability to manage emotion. I understand that my child's participation is voluntary, that he/she can choose not to participate in part or all of the project and that he/she can withdraw at any stage of the project without being penalised or disadvantaged in any way. I understand that if my child is at thought to be at risk of severe mental health problems he/she will be identified to the school principal who will do their best to ensure my child's welfare in accordance with school policies. I understand that any personal information I provide will be used for the sole purpose of attempting to contact me in the event that my child moves to a new school during the study. I confirm that I have gained the permission of the relative or friend I am nominating as a contact, to disclose their contact details for the purpose of this project. I understand that any data that the researcher extract from the survey for use in reports or published findings will not, under any circumstances, contain names or identifying characteristics. Child's Name: Contact details of a Relative or Friend who Child's Grade: ____ does not live with you: _____ Relative/Friend Name: _____ Parent/Guardian's Name: _____ Relationship to Child: Relationship to your child: Phone Number: _____ Contact Details of Relative/Friend: Your Address: _____ Email Address: Parent/Guardian's Signature:





PARTICIPANT INFORMATION SHEET

Coping with Emotional Problems

Dr. Penelope Hasking (Monash University)
Professor Graham Martin, OAM (University of Queensland)

Please read this Participant Information Sheet carefully. Feel free to ask questions about anything in the document. We are interested in how young people deal with emotion and what we might do to help young people with emotional problems. This project goes for 3 years so we will be asking you to complete the same survey next year and in two years time. You are invited to participate in this research project because you meet our criteria of adolescents aged between 12 and 16 years, enrolled in a secondary school that has agreed to participate in this project.

If you choose to take part in this study, you will be asked to fill out a number of surveys. The surveys will ask about:

- any emotional or behavioural problems you might have;
- whether you have ever hurt yourself on purpose;
- your relationships with your parents and friends;
- how you cope with stress and how you deal with your emotions.

The questionnaire will take approximately 50-60 minutes to complete and will be completed at school. Neither your parents nor your teachers will know what you write on the questionnaires – only the researchers will see your responses.

The only time we will tell someone what you write is if we think you might have a severe emotional problem. In this case we will tell your principal, who will do everything they can to give you the support you need.

If you become upset while filling out the surveys we suggest talking with your parent/guardian about these issues, or calling KidsHelpline You will also receive a show bag with some useful resources. You may choose to stop filling out the surveys if you feel upset at any time. You can do this by not finishing the survey, or contacting us after you hand in your questionnaire.

When we write up our results no one will know who you are. Only the group data will be published and no personal information about you will be revealed. Questionnaires will be stored in a locked filing cabinet that only the research team can access, for a period of thirteen years, in accordance with University guidelines. Questionnaires will then be shredded and disposed of. We will let your parents/guardians and your school know the general outcomes of the study each year.

if you want more information of if you have ar	ly questions, you can contact the researchers.
Dr. Penelope Hasking	Professor Graham Martin, OAN

If you have any complaints concerning the manner in which this research is conducted, please do not hesitate to contact the ethics committee at Monash University or the University of Queensland.

Monash University	University of Queensland
Executive Officer, Human Research Ethics	Ethics Officer

Your decision whether to take part or not to take part will not affect your relationship with your school. Thank you for taking the time to read this Information Sheet. Your parent/guardian has also received an Information Sheet which outlines the general aims of this study.

Useful Resources

If you or anyone you know is facing problems, it is important to talk to your parents or school counsellor. If you do not feel comfortable talking to your parents or counsellor, try calling one of the following numbers or visit a web-site. These resources are not just for people with problems, but also provide information on issues facing every young person. We suggest placing this list in a visible place (such as above your desk or on the fridge) just in case you need it.

Kids Helpline

Free and confidential telephone counselling service for children and young people. Kids Helpline is a 24 hour counselling service for young people. The staff at Kids Helpline help young people with all kinds of problems, and are happy to talk to you even if you just want someone to talk to.

www.kidshelpline.com.au

ReachOut!

ReachOut! Is a service that helps young people get through tough times. ReachOut! is a website designed for young people. The website provides information on all kinds of issues young people might encounter, including relationships, friendships, drugs and alcohol, eating problems, depression, self-injury, violence, and a number of issues relevant to every teenager.

www.reachout.com.au

Youthsafe

Youthsafe work with young people and communities in NSW to prevent injury to young people. Resources for young people are available on their website

www.youthsafe.org

YBBLUE

YBBlue is part of a national depression initiative, and is a site specifically designed for helping young people with depression.

www.youthbeyondblue.com

Teen Health

The Teen Health website has lots of information for teenagers on health, wellbeing and having fun.

http://www.cyh.com/SubDefault.aspx?p=159





PARTICIPANT CONSENT FORM

Coping with Emotional Problems

Dr. Penelope Hasking (Monash University)
Professor Graham Martin, OAM (University of Queensland)

NO.	TE: Signed written consent will remain with the researchers for their records.
	ase tick the box that best matches your consent to participate in this study and applete the rest of this form.
	I agree to take part in the above research project.
	I do not agree to take part in the above research project.
•	The project has been explained to me, and I have read the Information Sheet, which I will keep
•	I understand that agreeing to take part means that I am willing to answer questions regarding my personal history of self-injury and substance use, and answer questions about my personality, emotional problems, how I cope with stress, my relationships with parents and friends and how I deal with emotion.
•	I understand that I do not have to do the questionnaire and that I can stop the questionnaire at any time
•	I understand that if the researchers think I am at risk of severe emotional problems they will notify the school principal who will do everything they can to make sure I am safe.
•	I understand that I will be asked to do the survey again in one and two years time
•	I understand that any data that the researcher extracts from the survey for use in reports or published findings will not, under any circumstances, contain names or identifying characteristics.
Full	Name:
Sign	nature: Date:

To participate in this project you will need to create a code that is unique to you. This code will be used so that we do not know who you are when we analyse the data, and to make sure from year to year that we have the right person. To create your code answer the following questions and place your answers in the box provided at the end of this page.

1. 2.		last letter of you	r first name? (in numbers from 01	-12)?	
3. 4.		first letter of you last letter of you			
	Please	write your code	e in the box below m	narked <u>Your co</u>	ode is
		Use th	ne following as an exa	ample.	
Exam	ple: My namo	e is Penny Haskir	ng. My birthday is in J	uly. My mother's	name is Annette.
1. Wh	nat is the last	letter of your firs	t name?	Y	
2. Wł	nat month is	your birthday (in ı	numbers from 01-12)	?07	
3. Wh	nat is the first	t letter of your mo	ther's name?	A	
4. Wh	nat is the last	letter of your las	t name?	G	
For ex	cample my co	ode would be:			
	Y	0	7	Α	G
			Your code is:		

Appendix C

School Staff Questionnaire

MONASH University



Knowledge and experiences of school staff towards mental health and self-injury



Researchers

Emily Berger
Faculty of Education
Monash University

Dr Penelope Hasking
School of Psychology and Psychiatry
Monash University

Dr Andrea Reupert
Faculty of Education
Monash University

Teryn Callaway
Faculty of Education
Monash University

Thank you for agreeing to do this survey. We appreciate your time.

Many of the questions relate to deliberate self injury which is defined as the deliberate, self-inflicted destruction of body tissue without suicidal intent and for reasons that are socially unacceptable (International Society for the Study of Self-injury [ISSS], 2007).

Please answer each question as best you can and be honest in your answers. There are no right or wrong answers and no one will be able to link your name to the answers you provide.

Your participation is voluntary and you are not obligated in any way to complete this questionnaire. If you wish to stop doing the questionnaire at any time, please feel free to do so. If you choose not to complete the questionnaire, it will not be necessary to send your answers back to the researchers.

Please read the instructions for each section of the questionnaire carefully and provide the most honest response that you can. Do not take too long on any one question. Please do not write your name anywhere on the questionnaire.

The following questions ask you to describe your qualifications and experience working in secondary schools. Please read each question carefully and tick or write your response in the space provided.

1.	Gender: Male	I	Female	(please tick)						
2.	How old are you:									
3.	What is your home postcode:									
4.	What is your race/ethnicity:									
5.	What is the name of the	sch	ool in which	you work?						
6.	How many years have y	ou l	oeen workin	g in the secondar	у ес	lucation sector?				
	years									
7.	List the roles you have I	neld	in your time	working in the se	ecor	dary education sector?				
						tor)				
8.	,	e in	.	•	ion s	sector? (tick one <u>or</u> more)				
	Principal		Teachers A	ide		Social/Welfare Worker				
	Deputy Principal		School Cou	nsellor		School Nurse				
	Teacher		School Psy	chologist		Other				
	9. How many years have you been working in your current role in the secondary education sector? years 10. Are you a qualified secondary school teacher? Yes No If no, please go to question 11 10a. If yes, how many years have you been a qualified secondary school teacher? years 10b. If yes, what is the highest level of tertiary education you have completed in the secondary education sector?									
			` '			h or have you taught in the				
11	secondary education Do you have any formal									
• • •				-						
			to question							
	11a. If yes , please t				•					
	Certificate in psychology,			•		·				
	Diploma in psychology, so			_						
	Bachelor degree in psych	ology	y, social work	, counselling or rel	ated	mental health discipline				
	Masters degree in psycho	•		•		•				
	Doctoral degree in psycho	logy	, social work	counselling or rela	ated	mental health discipline				
	Other (please specify)									

12	12. Have you ever dealt directly with students who have emotional or behavioural							
	problems? Yes \square No \square If No , please go to question 13							
	12a. If yes, approximately how many students with emotional or behavioural							
	problems have you dealt with directly?							
	12b. If yes, how often are you asked or called on to respond to students with							
	emotional or behavioura	al pro	blems?	•				
	Daily	E	ery 2-	2-3 Months			Less than Once a Year	
	Weekly	E	Every 6	Months			Never	
	Monthly		Once a `	Yea	ır		Other	
	J							
	• •		•				atch your usual response to	
	students with emotional Individual Counselling	or b	ehaviou	ıral				
	marviada Codrisening			Discuss with School Principal				
	Discuss with School Counse	ellor		Refer to School Principal				
	Refer to School Counsellor			Provide Mental Health Resources				
	Discuss with Mental Health Worker			Refer to Counselling Service (e.g., Kids				
				Helpline)				
	Refer to Mental Health Worker			Other: please specify				
	Contact Parent/Guardian							
13. Please tick all of the emotional or behavioural issues among students you have seen during your work in secondary schools (please tick one <u>or</u> more)								
	Depression		Dysle	••	_	<u></u>	Personality Disorders	
	ADD/ADHD Eatir		g D	g Disorders		Learning Difficulties		
	Suicidal Thoughts/Attempts				nol or Substance		Autism/Asperser's Disorder	
			Abus	е	€			
	Anger Problems		Anxie	ety Other: please specify			Other: please specify	
	Schizophrenia		Phob	ias	as			
	Relationship Problems Deliberate Self Injury							
1			1					

On this page there are statements describing how you may feel about students who deliberately self injury, which is defined as the deliberate, self-inflected destruction of body tissue without suicidal intent and for reasons that are socially unacceptable (ISSS, 2007). Please read each statement carefully and circle the number that best matches your answer for each question.

	carcially and choice the number that best mat	Strongly disagree	Disagree	Agree	Strongly agree
1.	Overall, I am satisfied with the control I have in dealing with students who deliberately self injure	1	2	3	4
2.	There is really no way I can help solve some of the problems of students who deliberately self injure	1	2	3	4
3.	I often feel helpless in dealing with the problems of students who deliberately self injure	1	2	3	4
4.	Sometimes I feel used by the education system	1	2	3	4
5.	I feel useful when working with students who deliberately self injure	1	2	3	4
6.	The way the education system works encourages repetition of deliberate self injury behaviours	1	2	3	4
7.	Students who self injure just clog up the system	1	2	3	4
8.	Knowledge of referral sources is important when dealing with students who deliberately self injury	1	2	3	4
9.	Dealing with students who self injure is a waste of an educators time	1	2	3	4
	I deal effectively with students who deliberately self injure	1	2	3	4
11.	The education system impedes my ability to work effectively with students who deliberately self injure	1	2	3	4
12.	Students who deliberately self injure have been hurt and damaged in the past	1	2	3	4
13.	Ongoing education and training would be useful in helping me deal appropriately with students who deliberately self injure	1	2	3	4
14.	Risk assessment is an important skill for me to have	1	2	3	4
	School staff should not discuss deliberate self injury with students	1	2		4
16.	Sometimes, when all other actions have failed, I feel the need to go to extremes when dealing with students who deliberately self injure	1	2	3	4
17.	I have the appropriate knowledge and counseling skills to help students who deliberately self injure	1	2	3	4
18.	Referral of students who deliberately self injure to external consultant services for further assessment or treatment is an effective course of action	1	2	3	4
19.	Students who self injure are just using ineffective coping mechanisms	1	2	3	4
20.	I have the appropriate knowledge in communication skills to help students who deliberately self injure	1	2	3	4
21.	Providing students who deliberately self injure information about community support groups is a good idea	1	2	3	4
22.	Students who self injure are victims of some other social problems	1	2	3	4
23.	Students who deliberately self injure are in desperate need of help	1	2	3	4
	The legal system impedes my ability to work effectively with students who deliberately self injure	1	2	3	4
	Students who self injure are just attention seekers	1	2	3	4
	I feel that students who self injure are treated less seriously by medical staff than those with medical problems	1	2	3	4

In this next section, please indicate to what extent you agree with the following statements about deliberate self-injury among students. Please be honest in your answers. Strongly Disagree Unsure Agree Strongly In students... disagree agree Self injury is a form of communication Self injury is a manipulative act Self injury is a coping strategy Self injury is a sign of madness Students who self injure will 'grow out of it' eventually 6. Self injury can obtain feelings of euphoria Self injury is a release for anger Self injury is a 'girl's problem' 9. Self injury helps students to deal with problems 10. Students who self injure have been sexually abused 11. Self injury provides a way of staying in control 12. Self injury is a failed suicide attempt 13. Self injury is attention-seeking 14. Everybody who self injures suffers from Munchausen's Disease (self-inflicted injuries which are calculated to produce specific symptoms that will lead to medical hospital admission) 15. Self injury provides distraction from thinking 16. Self injury occurs mainly among students of certain social groups, such as emo, gothic 17. Self injury is an expression of emotional 18. Students who self injure should be kept in psychiatric hospitals 19. Self injury helps students maintain a sense of identity 20. Self injury provides an escape from depression 21. Students who self injure should be kept home from school until their wounds heal 22. Students who self injure are likely to injure others 23. Self injury is contagious in students, often spreading from student to student 24. The best way to deal with students who self injure is to make them stop

The following questions relate to how you feel about students who deliberately self-injure. Please answer each question according to how you feel.							
		Strongly disagree	Disagree	Unsure	Agree	Strongly agree	
1.	I would feel comfortable if a student spoke to me about deliberate self injury	1	2	3	4	5	
2.	I feel confident that I would know how to respond if a student in my class and/or school or under my care appeared to be performing acts of deliberate self injury	1	2	3	4	5	
3.	I feel knowledgeable about the area of deliberate self injury	1	2	3	4	5	
4.	I believe I would know how to identify deliberate self injurious behaviours	1	2	3	4	5	
5.	Self injury is a symptom of a mental disorder	1	2	3	4	5	
6.	Students who self injure are almost always girls	1	2	3	4	5	
7.	Students who self injure are usually suicidal	1	2	3	4	5	
8.	Students who self injure often have eating disorders	1	2	3	4	5	
9.	Students who self injure are most often from middle to upper-middle class homes	1	2	3	4	5	
10.	Students who deliberately self injure are of average or below average intelligence	1	2	3	4	5	
11.	I find the idea of students cutting or burning their skin horrifying	1	2	3	4	5	
12.	Students who self injure are just trying to get attention	1	2	3	4	5	
13.	Students who self injure are doing it to manipulate others	1	2	3	4	5	
14.	I feel that deliberate self injury is on the increase in students	1	2	3	4	5	
15.	Self injury is a serious problem in the school(s) that I work	1	2	3	4	5	
16.	I feel confident that students would want my help for their self injurious behaviours	1	2	3	4	5	
17.	I feel that I have a responsibility to help students who deliberately self injure	1	2	3	4	5	
18.	I feel that self injury is not serious because it is self-inflicted	1	2	3	4	5	
19.	I feel that students who self injure could stop if they wanted to	1	2	3	4	5	
20.	I feel that if the wounds are not "bad enough" to require medical treatment, then the self injury is not serious enough to warrant psychiatric treatment or counselling	1	2	3	4	5	

Response to young people who deliberately self injure

1.	Have you ever dealt with a student who has exhibited deliberate self injury?
	Yes \square No \square If no , please go to question 2
	1a. If yes , how many students are your dealing with, or have you dealt with that self injured? students
	1b. If yes , please describe what you did to assist the student(s) who self injured.
	1c. If yes , please describe how effective you think this response was in helping the student(s) who self injured.
	1d. If yes , please describe how confident you felt in helping the student(s) who self injured.
2.	Please describe what you might do or do differently to help students who deliberately self injure.
3.	Please describe any barriers you perceive to helping students who deliberately self injure.
4.	Please describe who you might go to for help or advice if you encountered a student who has deliberately self injured.

The following statements ask you to describe your knowledge and experience with people who deliberately self-injure. No one will know of your answers.

1.	Do you personally	y know anyone who h	as deliberated self injured	? (e.g., yourself, family			
	relative, work colleague, student) Yes \square No \square If no , please go to question 2						
	_ more)	<u> </u>	no has deliberately self inju	,			
	Myself	Work Co	olleague C	lient			
	Family Member	An Acqu	aintance	ther			
	Friend	Student					
	1b. If yes , how many people do you know or have you known that have deliberately self injured (not including yourself)?						
2.		ollowing methods of c 1 (most common) to 8	deliberate self injury used b	y young people in the			
	Cutting	Pinching	Punching, hitting or s	slapping self			
	Burning	Scratching	Hitting a part of the b	oody on a hard surface			
	Biting	Skin Picking	Other				
3.	What is the age of in deliberate self		ould say people in the comm	munity begin to engage			
	5-9 years	18-24 years	35-44 years	55+ years			
	10-17 years	25-34 years	45-54 years	Other			
4.	What is the age community?	category when you be	lieve self injury is most ofte	en used by people in the			
	5-9 years	18-24 years	35-44 years	55+ years			
	10-17 years	25-34 years	45-54 years	Other			
5.	5. What percentage of secondary school students do you believe have engaged in deliberate self injury?						
	0-1%	6-10%	16-20%	26-30%			
	2-5%	11-15%	21-25%	30+ %			
				Other			
6.	Why do you think	s secondary school stu	udents would deliberately s	self injure?			

This page asks you to describe training or information you may have received or would like to receive in the area of deliberate self-injury.

•	How have you learnt about self injury? (e.g., tertiary education, workshops, conferences training programs, professional or personal experience, professional journals, media)
	Have you ever received any training or information in how to manage deliberate self
	injury in secondary school students? Yes \(\subseteq \text{No} \subseteq \text{If \$no\$, please go to question 3} \) 2a. If \$yes\$, please describe the content of the training or information (e.g., risk assessment, counselling skills, referral process) and how it was delivered (e.g., semina workshop, CD-Rom, workbook).
	2b. If yes , do you believe the training or information was effective in increasing your knowledge and understanding of deliberate self injury in students?
	Yes Unsure No 2c. Why or why not?
•	As someone who works in a secondary school would you be willing to undertake training or receive information in the area of student deliberate self injury? Yes No No
	3a. Why or why not?
ı	As someone who works in a secondary school do you feel you need training or information in how to manage student deliberate self injury? Yes No No
	4a. Please describe your preferred content of the training or information (e.g., risk assessment, counselling skills, referral process) and how you would prefer to receive this training or information (e.g., seminar, workshop, CD-Rom, workbook)

We would like to learn more about what you feel and think about people who deliberately self-injure and what you think can be done to help young people who hurt themselves on purpose.

List three words you would use to describe young people who deliberately self injure. 1
Describe how you feel about young people who deliberately self injure.
What do you think teachers could do to help young people who deliberately self injure
What do you think parents could do to help young people who deliberately self injure?
What do you think peers could do to help young people who deliberately self injure?
What do you think online friends (e.g., Facebook) could do to help young people who deliberately self injure?
As someone who works in a secondary school is there anything you want us, as researchers in this area, to know about your experiences with self injury in students?
ank you for completing this survey. As part of this project, school staff, including, teach nurses, psychologists and counsellors are also invited to take part in an interview to elaborate on their knowledge and experiences of mental health issues and self-injury amongst students. If you would like to participate in an interview, or if you require further

Thank you for your time in completing this survey!

If you would like to enter a draw to win a double pass Gold Class movie voucher, please
provide your contact details below. Your personal information will be immediately removed
from the survey when returned and kept separate from your survey responses.

Full Name:			
Phone Number:			
E-mail Address:			

Appendix D

Changes to the School Staff Questionnaire for Pre-Service Teachers

	ne following questions ask you to describe your qualifications and experience working in secondary chools. Please read each question carefully and tick or write your response in the space provided.						
1.	Gender: Male ☐ Female ☐ (please tick)						
2.	How old are you:						
3.	What is your home postcode:						
4.	What is your race/ethnicity:						
5.	What is the name of the university in which you study?						
6.	Have you ever worked in paid employment in the secondary education sector?						
7	Yes \(\subseteq \text{No} \subseteq \int \mathbb{no}, \text{ please go to question 7} \) 6a. If \(\mathbb{yes}, \) how many years have you worked in paid employment in the secondary education sector? \(\subseteq \subseteq \text{years} \) 6b. If \(\mathbb{yes}, \) what are the roles you have held during your time working in paid employment in the secondary education sector? (e.g., principal, teacher, school counsellor, school administrator) \(\subseteq \subseteq \text{you currently work in paid employment in the secondary education sector?} \)						
7.	Yes \square No \square If no , please go to question 8						
	7a. If yes , what is your current role in paid employment in the secondary school						
	education sector? (please tick one <u>or</u> more)						
	Teachers Aide Social/Welfare Worker Administrative Worker						
	School Counsellor Indigenous Counsellor Other						
	School Psychologist School Nurse						
	7b. How many years have you been working in your current paid employment role in						
	the secondary education sector? years						
	 3. How many years of tertiary education have you completed to become a qualified secondary school teacher? years 3. What is the highest level of tertiary education you have completed in the secondary education sector? 						
10.	10. How many years of placement have you completed to become a qualified secondary school teacher? years						
11.	. Do you have any formal mental health training? Yes \Box No \Box If no , go to question 12						
	11a. If <i>yes</i> , please tick the type of mental health training you have received:						
	Certificate in psychology, social work, counselling or related mental health discipline						
	Diploma in psychology, social work, counselling or related mental health discipline						
	Bachelor degree in psychology, social work, counselling or related mental health discipline						

	Masters degree in psychology, social work, counselling or related mental health discipline						
	Doctoral degree in psychology, social work, counselling or related mental health discipline						
	Other (please specify)						
	⊥						
12	2. Have you ever dealt directly	y wit	h studen	ts \	who have emo	tior	nal or behavioural problems?
	Yes ☐ No ☐ If no , ¡		•	•			
	12a. If yes , approximately how many students with emotional or behavioural						
	problems have you dea		_				
	12b. If yes , how often a	•		or	called on to re	esp	ond to students with
	emotional or behaviour						_
Daily Every 2-3 Months Les			Less than Once a Year				
	Weekly Every 6 Months				Never		
	Monthly		Once a Y	'ea	r		Other
	<u> </u>						
	12c. If yes , please tick the response options that best match your usual response to students with emotional or behavioural problems (please tick one <u>or</u> more) Individual Counselling Discuss with Placement Supervisor						
			_				·
	Discuss with School Counsellor Refer to School Principal						
	Refer to School Counsellor Provide Mental Health Resources					Health Resources	
	Discuss with Mental Health	Wor	ker		Refer to Cour Helpline)	nse	lling Service (e.g., Kids
	Refer to Mental Health Wor	ker	_		Other: please	e s	pecify
	Contact Parent/Guardian						
13	13. Please tick all of the emotional or behavioural issues among students you have seen during your work in secondary schools (please tick one <u>or</u> more)						
	Depression		Dysle	xia	l		Personality Disorders
	ADD/ADHD		Eating Disorders			Learning Difficulties	
	Suicidal Thoughts/Attempts	i	Alcohol or Su Abuse		or Substance		Autism/Asperser's Disorder
	Anger Problems		Anxie	ty			Other: please specify
	Schizophrenia Phobias						
	Relationship Problems Deliberate Self Injury						

This page asks you to describe training or information you may have received or would like to receive in the area of deliberate self-injury.

_	
Н	lave you ever received any training or information in how to manage deliberate self
ir	njury in secondary school students? Yes \square No \square If no , please go to question
а	a. If yes , please describe the content of the training or information (e.g., risk ssessment, counselling skills, referral process) and how it was delivered (e.g., seminorkshop, CD-Rom, workbook).
	b. If yes , do you believe the training or information was effective in increasing your
	nowledge and understanding of deliberate self injury in students? 'es $\ \square$ Unsure $\ \square$ No $\ \square$
2	c. Why or why not?
_	
tr	as someone training to be a secondary school teacher would you be willing to undertraining or receive information in the area of student deliberate self injury? The substitute \Box No \Box
tr Y	
tr Y 3 - h	raining or receive information in the area of student deliberate self injury?
tr Y 3 — Ah Y 4a	a. Why or why not? as someone training to be a secondary school teacher do you feel you need training ow to manage student deliberate self injury?
tr Y 3 — Ah Y 4a	raining or receive information in the area of student deliberate self injury? Yes Unsure No a. Why or why not? As someone training to be a secondary school teacher do you feel you need training ow to manage student deliberate self injury? Yes Unsure No a. Please describe your preferred content of the training or information (e.g., risk ssessment, counselling skills, referral process) and how you would prefer to receive

We would like to learn more about what you feel and think about people who deliberately self-injure and what you think can be done to help young people who hurt themselves on purpose.

1.	List three words you would use to describe young people who deliberately self injure. 1
2.	Describe how you feel about young people who deliberately self injure.
3.	What do you think teachers could do to help young people who deliberately self injure?
4.	What do you think parents could do to help young people who deliberately self injure?
5.	What do you think peers could do to help young people who deliberately self injure?
6.	What do you think online friends (e.g., Facebook) could do to help young people who deliberately self injure?
7.	As someone training to be a secondary school teacher is there anything you want us, as researchers in this area, to know about your experiences with self injury in students?

Appendix E

Information Sheets for School Staff and Pre-Service Teachers

MONASH University



School Staff Information Sheet

Knowledge and experiences of school staff towards mental health and self-injury

Emily Berger

Dr. Penelope Hasking

Dr. Andrea Reupert

Teryn Callaway

1. Your Consent

This Information Sheet contains detailed information about the research project. Its purpose is to explain to you as openly and clearly as possible all the procedures involved in this project before you decide whether or not to take part. Please read this Information Sheet carefully. Feel free to ask questions about any information in this document. You may keep this Information Sheet for your records.

2. Purpose and Background

Mental health issues are increasingly common in adolescents, yet few adolescents seek professional help for their mental health concerns. Given the potential for mental health issues to impact on social relationships and academic performance, school staff, including teachers, nurses, psychologists and counsellors, are often in a prime position to identify and respond to young people with mental health concerns, such as self-injury.

The current project aims to examine the knowledge, experience and training of school staff, including teachers, principals, nurses, psychologists and counsellors, towards mental illness and self-injury of secondary school students, how school staff usually respond to students with mental health concerns and how effective they perceive their response to be. This project will inform the development of training tools for school staff, which will enhance their confidence, and improve outcomes for students with mental health concerns.

You have been contacted because you are employed at a school that has agreed to participate in this project. Participants do not need to have had previous encounters with mental health problems or self-injury to participant.

This study will be completed towards a Masters of Psychology (Educational and Developmental)/ PhD at Monash University. This means that a thesis will be submitted by a student researcher based on findings of this project. The researchers have funding from the Faculty of Education at Monash University to complete this study.

3. Procedures

If you choose to participate in this project you will be asked to complete a questionnaire assessing your teaching experience and previous training in mental health issues, your knowledge and experience of mental health issues and self-injury in students, your usual response to students who disclose mental health concerns, and your knowledge of services for young people with mental health issues. The questionnaire will take approximately 40 minutes to complete, can be completed in your own time, and returned to the researchers in the reply-paid envelope provided. An online version of the survey will also be available if you prefer to complete it online. This survey can be accessed online from http://www.surveymethods/com/EndUser.aspx?DCF8948EDB9A8C86D9.

In addition, a number of focus groups with school staff will be conducted, involving teachers, school nurses, counsellors, and psychologists. You may decide to participate in a focus group in addition to, or instead of, completing the questionnaire. If you would like to take part in a focus group please read

the enclosed information sheet and contact the researchers if you require further information. School principals will not participate in focus groups and will instead be asked to take part in an interview.

4. Possible Benefits

The information you provide will allow us to better understand the knowledge and experiences of school staff towards mental health issues and self-injury in students, allow us to identify strengths and weaknesses in how school staff currently respond to students, and lead to better focused programs and training tools that will assist school staff to identify and respond to young people with mental health concerns.

All participants completing the questionnaire can choose to enter a draw to win a double pass **Gold Class** movie voucher. If you would like to enter this draw, you will be invited to provide your contact details at the end of the survey, which will immediately be removed from your survey so that your responses cannot be identified. Upon completion of all data collection, we will contact the winning participants via the contact information provided.

5. Possible Risks

While no foreseeable risk will result from participation in this project, should you become distressed as a result of the issues raised in the questionnaire, we suggest you talk to the principal of your school, your family or friends about your concerns. Alternatively, you can call lifeline on **13 11 14** for information or advice. A list of useful resources is also attached at the end of the questionnaire that you may remove and utilise at anytime in the future.

6. Privacy, Confidentiality and Disclosure of Information

All questionnaires are completely anonymous. To protect your identity, please do not include your name or any identifying information on the questionnaire. In addition, no identifying information will be provided in any presentation or publication arising from the study. Questionnaires will be stored in a locked archive room, accessible only by the researchers, for a period of at least five years, in accordance with University guidelines. Questionnaires will be shredded prior to their disposal. Data may be used for future research purposes, however all data will be anonymous.

7. Participation is Voluntary

Participation in any research project is voluntary. If you do not wish to take part you are not obliged to. If you decide to take part and later change your mind, you are free to withdraw from the project prior to submission of your questionnaire. Your decision whether to take part or not, or to take part and then withdraw, will not affect your relationship with your place of employment. Before you make your decision, a member of the research team will be available to answer any questions you have about the research project.

8. Results of the Project

Aggregate findings from this study will be disseminated to participating secondary schools and education departments, as well as published in academic journals, and presented at conferences. If you are interested in receiving a copy of the report you may contact your school principal upon completion of the project, in December 2013. Alternatively, feel free to contact any of the researchers for a summary of the findings.

If you require further information or have any questions about this project, please contact the researchers:

Emily Berger

Faculty of Education Monash University Victoria, 3800

Dr. Penelope Hasking

School of Psychology and Psychiatry Monash University Victoria, 3800

Dr Andrea Reupert

Faculty of Education Monash University Victoria, 3800 If you have any complaints concerning the manner in which this research (project number CF11/0625 - 2011000291) is conducted, please contact the ethics committee:

Executive Officer, Human Research Ethics Monash University Human Research Ethics

Committee (MUHREC) Building 3e, Room 111

Research Office

Monash University, Victoria 3800

9. Ethical Guidelines

This project will be carried out according to the *National Statement on Ethical Conduct in Research Involving Humans* (2007) produced by the National Health and Medical Research Council of Australia. This statement has been developed to protect the interests of people who agree to participate in human research studies. This project has been approved by the Human Research Ethics Committees of Monash University and the Department of Education and Early Childhood Development. The principal of your school has also granted approval for this project to be conducted in your school.

Thank you for taking the time to read this Information Sheet. Please complete the questionnaire and return it to the researchers in the reply-paid envelope or online.

Sincerely,

Ms Berger, Dr. Hasking, Dr. Reupert and Ms Callaway

MONASH University



Pre-service teacher information sheet

Knowledge and experiences of school staff towards mental health and self-injury

Emily Berger

Dr. Penelope Hasking

Dr. Andrea Reupert

Teryn Callaway

1. Your Consent

This Information Sheet contains detailed information about the research project. Its purpose is to explain to you as openly and clearly as possible all the procedures involved in this project before you decide whether or not to take part. Please read this Information Sheet carefully. Feel free to ask questions about any information in this document. You may keep this Information Sheet for your records.

2. Purpose and Background

Mental health issues are increasingly common in adolescents, yet few adolescents seek professional help for their mental health concerns. Given the potential for mental health issues to impact on social relationships and academic performance, teachers are in a prime position to identify and respond to young people with mental health concerns, such as self-injury. Although not trained mental health professionals, teachers are often in a position to offer advice and referral to these students.

The current project aims to examine the knowledge, experience and training of pre-service teachers towards mental illness and self-injury of secondary school students, how pre-service teachers would respond to students with mental health concerns and how effective they perceive their response to be. This project will inform the development of training tools for school staff, which will enhance their confidence, and improve outcomes for students with mental health concerns. You have been contacted because you are enrolled at a university that has agreed to participate in this project. Participants do not need to have had previous encounters with mental health problems or self-injury to participate.

This study will be completed towards a Masters of Psychology (Educational and Developmental)/ PhD at Monash University. This means that a thesis will be submitted by a student researcher based on findings of this project. The researchers have funding from the Faculty of Education at Monash University to complete this study.

3. Procedures

If you choose to participate in this project you will be asked to complete a questionnaire assessing your teaching experience and previous training in mental health issues, your knowledge and experience of mental health issues and self-injury in students, how you would response to students who disclose mental health concerns, and your knowledge of services for young people with mental health issues.

The questionnaire will take approximately 40 minutes to complete, can be completed in your own time, and returned to the researchers in the reply-paid envelope provided. An online version of the survey will also be available if you prefer to complete it online. Additional copies of this information sheet can also be accessed when completing the survey online. This survey can be accessed online from: http://www.surveymethods.com/EndUser.aspx?AB8FE3F9ADE8F8FAA1.

In addition, a number of focus groups with pre-service secondary teachers will be conducted. You may decide to participate in a focus group in addition to, or instead of, completing the questionnaire. If you would like to take part in a focus group please read the enclosed information sheet and contact the researchers if you require further information.

4. Possible Benefits

The information you provide will allow us to better understand the knowledge and experiences of preservice teachers towards mental health issues and self-injury in students, allow us to identify strengths and weaknesses in how pre-service teachers might respond to students, and lead to better focused programs and training tools that will assist teachers to identify and respond to young people with mental health concerns.

All participants completing the questionnaire can choose to enter a draw to win a double pass Gold Class movie voucher. If you would like to enter this draw, you will be invited to provide your contact details at the end of the survey, which will immediately be removed from your survey so that your responses cannot be identified. Upon completion of all data collection, we will contact the winning participant via the contact information provided.

5. Possible Risks

While no foreseeable risk will result from participation in this project, should you become distressed as a result of the issues raised in the questionnaire, we suggest you talk to your family or friends about your concerns. Alternatively, you can call lifeline on 13 11 14 for information or advice. A list of useful resources is also attached at the end of the questionnaire that you may remove and utilise at anytime in the future.

6. Privacy, Confidentiality and Disclosure of Information

All questionnaires are completely anonymous. To protect your identity, please do not include your name or any identifying information on the questionnaire. In addition, no identifying information will be provided in any presentation or publication arising from the study. Questionnaires will be stored in a locked archive room, accessible only by the researchers, for a period of at least five years, in accordance with University guidelines. Questionnaires will be shredded prior to their disposal. Data may be used for future research purposes, however all data will be anonymous.

7. Participation is Voluntary

Participation in any research project is voluntary. If you do not wish to take part you are not obliged to. If you decide to take part and later change your mind, you are free to withdraw from the project prior to submission of your questionnaire. Your decision whether to take part or not, or to take part and then withdraw, will not affect your relationship with the university. Before you make your decision, a member of the research team will be available to answer any questions you have about the research project.

8. Results of Project

Aggregate findings from this study will be disseminated to participating secondary schools and education departments, as well as published in academic journals, and presented at conferences. If you are interested in receiving a copy of the report you may contact the researchers at the conclusion of the project, in December 2013.

If you require further information or have any questions, please contact the researchers: Emily Berger Faculty of Education Monash University Victoria, 3800 Dr. Penelope Hasking School of Psychology and Psychiatry Monash University Victoria, 3800 Dr Andrea Reupert Faculty of Education Monash University Victoria, 3800 Dr Andrea Reupert Faculty of Education Monash University Victoria, 3800	of the project, in December 2016.	
	questions, please contact the researchers: Emily Berger Faculty of Education Monash University Victoria, 3800 Dr. Penelope Hasking School of Psychology and Psychiatry Monash University Victoria, 3800 Dr Andrea Reupert Faculty of Education Monash University	manner in which this research (project number CF11/0625 - 2011000291) is conducted, please contact the ethics committee: Executive Officer, Human Research Ethics Monash University Human Research Ethics Committee (MUHREC) Building 3e, Room 111 Research Office

9. Ethical Guidelines

This project will be carried out according to the *National Statement on Ethical Conduct in Research Involving Humans* (2007) produced by the National Health and Medical Research Council of Australia.

This statement has been developed to protect the interests of people who agree to participate in human research studies. This project has been approved by the Human Research Ethics Committees of Monash University.

Thank you for taking the time to read this Information Sheet. Please complete the questionnaire and return it to the researchers in the reply-paid envelope or online.

Sincerely,

Ms Berger, Dr. Hasking, Dr. Reupert and Ms Callaway

MONASH University



School Policy Evaluation Questionnaire Information Sheet

Knowledge and experiences of school staff towards mental health and self-Injury

Emily Berger

Dr. Penelope Hasking

Dr. Andrea Reupert

Please read this Information Sheet before deciding whether or not to complete the questionnaire. If you would like further information please contact the researchers via the contact details listed below.

1. Aim and Background

Following the excellent response we received from your school and staff who participated in our study on the knowledge and experiences of school staff towards students who self-injure, we would like to invite you to complete the attached questionnaire to better understand your school policy needs in relation to students who self-injure. Findings from our study suggest that in addition to training, school staff would like a school policy to help them identify and respond to students who self-injure.

Based on the comments we received from staff we drafted a school policy and are interesting in hearing your thoughts about how well the policy responds to your needs and the needs of your school. Therefore, we are asking secondary school staff, including principals, teachers, school nurses, counsellors and psychologists to answer a few brief questions about their impressions of the policy, as well as strengths and weaknesses of the policy.

2. Procedure

If you choose to participate you will be asked to read the attached school policy document and complete an anonymous questionnaire assessing the effectiveness of the policy and how it can be improved. The questionnaire will take 10-15 minutes to complete, can be completed in your own time, and returned to the researchers in the reply-paid envelope provided. You do not need to have any prior experience with student mental health issues or self-injury to take part. Please also feel free to pass this information onto other secondary school staff members for their input. To ensure timely dissemination of the results, please complete and post the enclosed questionnaire to the researchers in the reply paid envelope provided by **Monday 11th November, 2013**.

3. Possible Benefits and Risks

We would appreciate if you could take the time to complete the questionnaire because the information collected will lead to better focused school policies that will assist school staff when responding to students who self-injure. While no foreseeable risk will result from completing the questionnaire, should you become distressed, we suggest you talk to the principal of your school or call lifeline on 13 11 14 for support and advice.

4. Privacy, Confidentiality and Disclosure of Information

All questionnaires will remain anonymous. To protect your identity, please do not include your name or any identifying information on the questionnaire. In addition, no identifying information will be provided in any presentation or publication arising from the study. Questionnaires will be stored in a locked archive room, accessible only by the researchers, for a period of at least five years, in accordance with Monash University guidelines. Questionnaires will be shredded prior to their disposal. The information you provide may be used for future research purposes, however all responses will remain anonymous.

5. Participation is Voluntary

Completion of the questionnaire is voluntary and you are not obligated to participate. If you decide to take part and later change your mind, you are free to withdraw from the project prior to submission of your questionnaire. Your decision whether to take part or not, or to take part and then withdraw, will not affect your relationship with your place of employment. Before you make your decision, a member of the research team will be available to answer any questions you have about the research project.

6. Results of the project

Aggregate findings from this study are on track to be disseminated to participating schools in December of this year. If you are interested in receiving a copy of the report you may contact your school principal or one of the researchers at this time.

If you require further information or have any questions about this project, please contact the researchers:

Emily Berger

Faculty of Education Monash University Victoria, 3800

Dr. Penelope Hasking

School of Psychology and Psychiatry Monash University Victoria, 3800

Dr Andrea Reupert

Faculty of Education Monash University Victoria, 3800 If you have any complaints concerning the manner in which this research (project number CF11/0625 - 2011000291) is conducted, please contact the ethics committee:

Executive Officer, Human Research Ethics Monash University Human Research Ethics

Committee (MUHREC) Building 3e, Room 111

Research Office

Monash University, Victoria 3800

Thank you for taking the time to read this Information Sheet. Please read the enclosed school policy and complete and post the questionnaire to the researchers in the reply paid envelope by **Monday** 11th **November**, 2013

Kind regards,

Emily Berger, Penelope Hasking and Andrea Reupert

Appendix F

School Staff School Policy Feedback Questionnaire

MONASH University



Knowledge and experiences of school staff towards mental health and self-Injury

School Policy Evaluation Questionnaire

This is a short questionnaire that will allow us to evaluate our proposed school policy to address non-suicidal self-injury among students. Non-suicidal self-injury is defined as the deliberate destruction of one's own body tissue without suicidal intent (e.g., skin cutting, scratching, burning, hitting or punching oneself). We value your honest feedback and thank you for your time. Responses will remain anonymous. We look forward to sending your school a revised version of the school policy based on your feedback and the feedback we receive from other secondary school staff.

1.	Gender: Male Female							
2.	Age:							
3.	Profession (i.e., teacher, principal, psychologist, counsellor):							
4.	Work place/school name:							
5.	Qualifications (i.e., bachelor of teaching, masters of psychology):							
6.	Does your school already have an official policy to address self-injury among students:							
	Yes No Unsure a. If no , do you think your schools needs an official policy to address self-injury:							
	 If yes, how well do you think your current school policy addresses your needs and the needs of your school in response to students who self-injure? (please circle one number) 							
	1 2 3 4 5							
	Not at all A little bit Unsure A lot Very, very much							

Please read through the enclosed school policy and answer the questions below

1.	below)							
-								
2.	What is the worst thing about the enclosed school policy?							
-								
3.	Do you think your school would implement the enclosed school policy? Yes $\ \square$ No $\ \square$							
	Why or why not?							
-								
4.	How well do you think the enclosed school policy addresses your needs and the needs of your school in response to students who self-injure? (please circle one number for each statement)							
		1	2	3	4	<u>5</u>		
		Not at all	A little bit	Unsure	A lot	Very, very much		
5. How well do you think the enclosed school policy addresses your r of your school in the following areas: a. When school staff should report students suspected of self- 								
		1	2	3	4	<u>5</u>		
		Not at all	A little bit	Unsure	A lot	Very, very much		
	b.	To whom sc psychologist		report student	s suspected of	self-injury (e.g., scho	ol	
		1	2	3	4	<u>5</u>		
		Not at all	A little bit	Unsure	A lot	Very, very much		
	c. Which school staff member should conduct the initial risk assessment with students?							
		1	2	3	4	<u>5</u>		
		Not at all	A little bit	Unsure	A lot	Very, very much		

	d.	. When students should be referred to external mental health professionals?					
		1	2	3	4	<u>5</u>	
		Not at all	A little bit	Unsure	A lot	Very, very mud	ch
e. When students should be referred to emergency menta					gency mental hea	al health services?	
		1	2	3	4	<u>5</u>	
		Not at all	A little bit	Unsure	A lot	Very, very mud	ch
f. Which school staff member should conduct follow-up assessme students?						sments with	
		1	2	3	4	<u>5</u>	
		Not at all	A little bit	Unsure	A lot	Very, very mud	ch
g. When parents of the student should be notified about the self-injury?							
		1	2	3	4	<u>5</u>	
		Not at all	A little bit	Unsure	A lot	Very, very mud	ch
	h.	Identifies th	ne roles and respon	sibilities of e	ach member of th	ne school staff te	eam?
		1	2	3	4	<u>5</u>	
		Not at all	A little bit	Unsure	A lot	Very, very mud	ch
	i. How to prevent contagion or the spread of self-injury among students?						
		1	2	3	4	<u>5</u>	
		Not at all	A little bit	Unsure	A lot	Very, very mud	ch
6.	6. How well do you think the enclosed school policy would prepare staff members at your school to:a. Identify students who self-injure?						our
		1	2	3	4	<u>5</u>	
		Not at all	A little bit	Unsure	A lot	Very, very mud	ch
	b.	b. React to students who self-injure (e.g., in a calm way without expressing shock horror)?					
		1	2	3	4	<u>5</u>	
		Not at all	A little bit	Unsure	A lot	Very, very mud	ch

	counsellor)?					
	1	2	3	4	<u>5</u>	
	Not at all	A little bit	Unsure	A lot	Very, very much	
7.	. How confident would you be in recommending this enclosed school policy to others who work in the secondary education system?					
	1	2	3	4	5	
	Not at all	A little bit	Unsure	A lot	Very, very much	
8.	. Any other comments about your impressions of the enclosed school policy?					
-						

Thank you for your feedback!

If you have any questions please feel free to contact the researchers

Please return the questionnaire to the researchers in the reply paid envelope by **Monday**11th **November**

Please keep the information sheet and policy document for your own records.

Appendix G

Revised Template Policy for Managing Non-Suicidal Self-Injury in Schools

1. Overview

1.1. Purpose

This school policy aims to address the issue of non-suicidal self-injury (NSSI), defined as the deliberate destruction of body tissue without suicidal intent. This policy recommends actions to be taken by school staff in response to students who self-injure or are suspected of self-injuring, and sets out guiding questions for schools to consider when developing their own policy, in line with respective state and territory governing education department policies. It is recommended that all schools have a written policy with systematic procedures for managing student self-injury. It is important to note that this policy does not address the issue of suicide among students and should be used in conjunction with school policy on suicide.

2. Definitions

2.1. Non-suicidal self-injury (NSSI)

NSSI refers to deliberate acts to harm one's own body without intending to die as a consequence (Nock & Favazza, 2009). Although self-injury and suicide are distinct behaviours, self-injury is a significant risk factor for further self-injury and attempted suicide (D. Owens et al., 2002). NSSI includes, but is not limited to, skin cutting, scratching, pinching, biting, and burning, self-hitting, punching and slapping, and hitting a part of the body on a hard surface (G. Martin et al., 2010). NSSI excludes socially sanctioned behaviours (i.e., piercing, tattooing), and behaviours resulting in unintentional or gradual tissue damage, such as substance abuse, eating disorders, and other risk taking behaviours (i.e., unsafe sex and dangerous driving)(Nock & Favazza, 2009). NSSI typically begins in adolescence between 12-14 years of age (Jacobson & Gould, 2007), with approximately 10% of Australian adolescents engaging in the behaviour (G. Martin et al., 2010). Adolescents typically engage in NSSI to relieve negative emotions and to punish themselves, rather than to end their own life (Klonsky, 2007a). NSSI can be equally prevalent among males and females, and affects people of any age, and from different family backgrounds, religions, cultures, and socio-economic groups (Jacobson & Gould, 2007). Risk factors for NSSI include mental illness (e.g., depression, anxiety), earlier self-injury, and family or peer history of self-injury, drug or alcohol abuse, and childhood trauma or abuse (Toste & Heath, 2010). However, adolescents who self-injure can appear to be functioning well both academically and socially, experience caring home environments, and not have a mental illness (Toste & Heath, 2010). Adolescents often go to great lengths to conceal their injuries so it can be difficult to know if a student has self-injured.

2.2. Contagion

Contagion of self-injury refers to incidents when self-injury is imitated by a student, as a result of talking about self-injury with others, or after viewing self-injury content in television and film, or online (Toste & Heath, 2010).

3. Roles and responsibilities

3.1. Principal

- 3.1.1. Appoint a point person or school crisis team The principal should appoint a school point person, such as a school psychologist or counsellor, or assemble a school crisis team (which can include the principal, school counsellor, psychologist, nurse, year level coordinators, and teachers) to serve as the point(s) of contact for other staff members when referring students who self-injure or are suspected of self-injuring (Bubrick et al., 2010; Walsh, 2012). It is essential that the point person/members of the crisis team have the appropriate level of training and expertise to respond to and conduct risk assessments with students who self-injure or are suspected of self-injuring, or are willing to undertake such training.
- 3.1.2. Disseminate the school policy The principal should ensure that staff members are familiar with and follow the school's self-injury policy. Education for staff members The principal should ensure that staff members receive training on recognising, responding to, and referring students who self-injure or are suspected of self-injuring. Training should describe warning signs and risk factors of self-injury, difference between self-injury and suicide, functions of self-injury, common and severe forms of self-injury, and how to respond to students who self-injure (Walsh, 2012).
- 3.2. Point person/members of the crisis team
- 3.2.1. Risk assessment The point person/members of the crisis team should conduct an initial risk assessment and follow-up assessments with students who self-injure or are suspected of self-injuring (see section 7).
- 3.2.2. Referral The point person/members of the crisis team should develop a referral list of local mental health professionals experienced in working with adolescents who self-injure, and refer students who have self-injured to an external mental health professional and/or contact their parent/guardian (see section 8 and 10).
- 3.3. Staff members
- 3.3.1. Identification and referral Staff members should learn about the warning signs of self-injury and how to respond appropriately to students who self-injure, and refer students to the point person/member of the crisis team if they have self-injured or are suspected of self-injuring (see section 4, 5 and 6).
- 4. When staff members should report students suspected of self-injury
- 4.1. Any staff member should contact the assigned point person/member of the crisis team if a student has self-injured, is suspected of engaging in self-injury, or has displayed any of the following warning signs or behaviours, including:
 - Frequent or unexplained bodily scars or wounds, such as cuts, burns, scratches and bruises appear anywhere on the body;
 - Frequently wearing long sleeved/pants clothing at inappropriate times, such as in warm weather, and a reluctance or refusal to participate in activities resulting in skin exposure, such as physical education classes or swimming;
 - Frequent need for privacy and secretive behaviour. Changes in mood, including irritability, hostility, anger, uncontrollable crying, or sadness. Unexplained

withdrawal from activities or deterioration in academic performance and/or personal hygiene;

- Frequent mention of self-injury in creative writing, artwork, journals, internet postings, e-mails, notes, texts, and in communication with others (including jokes, rumours, threats); and
- Frequent high risk behaviours involving physical risk to the students that exceeds normal adolescent experimentation (e.g., train surfing, choking game, dangerous driving, substance abuse) (Bubrick et al., 2010; Lieberman et al., 2009; Toste & Heath, 2010; Walsh, 2012).
- 5. How to respond to students who self-injure or are suspected of self-injuring
- 5.1. Sometimes staff members will need to communicate with students who self-injure or are suspected of self-injuring until the point person/member of the crisis team can attend to the student.

Staff members should listen to students who self-injure or are suspected of self-injuring in a calm, caring, and non-judgmental way, trying not to communicate that they may be angry, horrified, panicked, frustrated, or upset. Staff members should monitor their reactions to these students. Walsh (2012) suggests school staff respond to students who self-injure with a low key, dispassionate demeanour and respectful curiosity.

Staff members should not attempt to solve the problems of students who self-injure or are suspected of self-injuring, should not deny their feelings or ask too many questions. Staff members should listen to these students and empathise with their situation.

Staff members should never promise students that they will keep what they tell them a secret, and should explain to the student that they have a duty of care to tell someone who can help (e.g., principal, coordinator, point person, member of crisis team). If the student refuses to see the point person/member of the crisis team, staff members should reiterate that while they understand their concerns they are obligated to tell the point person/member of the crisis team who is better equipped to help them. If the student is upset, a staff member should stay with them until the point person/member of the crisis team can respond.

Staff members should respond to students who disclose that another student has self-injured or is suspected of self-injuring in the same way.

- 6. To whom staff members should report students suspected of self-injury
- 6.1. School nurse or first aid officer Staff members should contact the school nurse or first aid officer as soon as possible to treat the student's wounds and assess whether the student has wounds requiring referral to a hospital emergency department (Bubrick et al., 2010; Onacki, 2005). If the school nurse or first aid officer is not available then first aid should be applied by a staff member. If the student's parent/guardian is unable to accompany the student to the emergency department then a staff member (ideally the point person/member of the crisis team) should accompany the student and stay with them until their parent/guardian has arrived.
- 6.2. Point person/member of the crisis team Staff members should contact the point person/member of the crisis team if the student does not require treatment by the

school nurse, first aid officer, or emergency department (Bubrick et al., 2010; Walsh, 2012).

- 7. Which staff member should conduct the initial risk assessment with students
- 7.1. Point person/member of the crisis team The point person/member of the crisis team should contact the student who self-injured or is suspected of self-injuring and confidentially conduct a thorough risk assessment with the student as soon as possible to assess the severity and intent of their self-injury (i.e., with or without suicidal intent), and determine the most appropriate course of action. The risk assessment should establish whether the student is at low, moderate, or high risk for further self-injury potentially causing severe physical injuries or death, including:
 - Suicide Previous suicide attempt, current suicidal thoughts or plans, history of family or peer suicide. If the student is at risk for suicide then the point person/member of the crisis team should follow the school's suicide policy;
 - Self-injury Severity of the physical injuries, frequency of self-injury, methods of self-injuring, escalation of self-injury, wound care strategies, triggers for self-injury, and mental state following self-injury; and
 - Evidence of other co-occurring mental health problems substance abuse, anxiety, depression, eating disorder, history of trauma or abuse, and current stressors (Bubrick et al., 2010; Toste & Heath, 2010).
 - Low risk if the student has self-injured with superficial tissue damage, has self-injured less than four times, typically engages in few forms of self-injury, and has no symptoms of co-occurring mental health problems then risk for further self-injury and death may be regarded as low. Intervention by the point person/member of the crisis team or referral to an external mental health professional may be considered.
 - Moderate risk if the student has self-injured with light tissue damage, has self-injured four or more times, has engaged in multiple methods of self-injury, or has mild symptoms of co-occurring mental health problems then risk for further self-injury and death may be regarded as moderate. Referral to an external mental health professional should be considered
 - **High risk** if the student has self-injured with severe tissue damage, has self-injured four or more times, frequently engages in multiple methods of self-injury, and has acute symptoms of mental health problems then risk for further self-injury and death may be regarded as high. Referral to an external mental health professional should be considered.

These categories of risk were developed based on studies with adolescents and young adults and guidelines for responding to NSSI in schools (Andrews et al., 2013; Toste & Heath, 2010; Whitlock et al., 2008).

- 7.2. Feedback loop The point person/member of the crisis team should ensure, within the confines of confidentiality, that the referring staff member is advised of the outcome of the assessment so they are aware that their report resulted in action (Walsh, 2012).
- 8. When students should be referred to external mental health professionals
- 8.1. Low risk If the student is at low risk for further self-injury and death, the point person/member of the crisis team may decide to continue with a more complete assessment and intervention, if their level of training and school resources permit, or

- they may elect to refer the student to an external mental health professional with experience working with adolescents who engage in NSSI (Bubrick et al., 2010; Toste & Heath, 2010; Walsh, 2012).
- 8.2. Moderate or high risk If the student is at moderate or high risk for further self-injury and death the point person/member of the crisis team should refer the student to an external mental health professional with experience working with adolescents who self-injure (Bubrick et al., 2010; Toste & Heath, 2010; Walsh, 2012).
- 9. Which staff member should conduct follow-up assessments with students
- 9.1. Point person/member of the crisis team The point person/member of the crisis team who conducted the initial risk assessment should follow-up with the student and periodically re-assess their level of risk for further self-injury and death, particularly following changes in life circumstances and during periods of stress, and if the student's initial level of risk was low and they were not referred to an external mental health professional (Toste & Heath, 2010).
- 10. When parents/guardians should be notified about the self-injury
- 10.1. Low risk The point person/member of the crisis team may or may not elect to contact the student's parent/guardian if the student is at low risk for further self-injury and death (Bubrick et al., 2010; Toste & Heath, 2010; Walsh, 2012). However, the point person/member of the crisis team should encourage the student to discuss the matter with their parent/guardian even if they are at low risk for further self-injury and death (Bubrick et al., 2010). When deciding whether or not to contact parents of students who have self-injured or are suspected of self-injuring the point person/member of the crisis team should consider respective state and territory laws, and respective state and territory governing education department policies, the relevant codes of ethics and ethical guidelines, and consult with the school principal, coordinators, or members of the crisis team.
- 10.2. Moderate or high risk The point person/member of the crisis team should contact the student's parent/guardian if the student is at moderate or high risk for further self-injury or death, and therefore, requires referral to an external mental health professional (Bubrick et al., 2010; Toste & Heath, 2010; Walsh, 2012). The student should be advised in advance by the point person/member of the crisis team that they will be contacting their parent/guardian, and the student should be invited to be present when the call is made to their parent/guardian so they are aware of what is discussed (Bubrick et al., 2010; Walsh, 2012). The point person/member of the crisis team should meet with the student and their parent/guardian(s) to discuss options for external support. If the parent/guardian does not follow up with the referral, dismisses the concerns, or indicates that they will not be following up with the referral, the point person/member of the crisis team should then meet with or contact the parent/guardian, and emphasise the importance of the referral (Walsh, 2012).
- 11. How to manage contagion or spread of self-injury among students
- 11.1. Peer communication Staff members should be aware of the potential for contagion among students and refer students who may require additional support (e.g., close friends and vulnerable students) to the point person/member of the crisis team. Staff members should also refer students who disclose that another student has self-injured or are suspected of self-injuring to the point person/member of the crisis team.

- Although communication about self-injury among peers should be discouraged and instead students should be told to speak to a staff member, it is not uncommon for students to discuss self-injury with friends, rather than seeking help from adults and teachers (Toste & Heath, 2010). Therefore, staff members may need to briefly respond to questions from friends of students who self-injure. In these instances, it may be helpful for staff to contextualise self-injury for students as one of many maladaptive coping strategies used by adolescents in response to overwhelming emotions, such as stress, anxiety, anger, and sadness (Toste & Heath, 2010).
- 11.2. Displaying unhealed wounds Deliberately displaying unhealed wounds to peers should not be permitted at school as this may be triggering for others. Staff members who notice students deliberately displaying unhealed wounds to peers should report the behaviour to the point person/member of the crisis team who should meet with the student to explain that displaying wounds could trigger peers to self-injure. Given that treatment for self-injury usually takes time and it may be years before students stop self-injuring, suspending or expelling students from school, or requiring them to return to school only after their wounds have healed or their self-injury is eliminated is not recommended. If students continue to openly show their unhealed wounds to peers, despite repeated warnings from the point person and parents, then further disciplinary action may be taken (Walsh, 2012).

12. Self-care

- 12.1. Self-care for staff members Staff members should debrief with the point person/member of the crisis team when necessary to discuss their feeling and reactions towards the self-injury. The point person/member of the crisis team should provide a list of referral options to staff members in need of additional assistance, and should seek assistance themselves when necessary.
- 13. Training programs and websites for school staff
- 13.1. Training programs
 - Self Abuse Finally Ends (S.A.F.E) Alternatives http://www.selfinjury.com/
 - Signs of Self-Injury (SOSI) Prevention Program http://www.mentalhealthscreening.org/programs/youth-prevention-programs/sosi/
- 13.2. Websites
 - International Society for the Study of Self-Injury (ISSS) http://www.itriples.org/
 - Interdisciplinary National Self-Injury in Youth Network Canada (INSYNC) http://www.insync-group.ca/
 - Cornell Research Program on Self-Injurious Behaviour in Adolescents (CRPSIB) http://www.crpsib.com/
 - Self-Injury Outreach and Support (SIOS) http://sioutreach.org/

Appendix H

Policy Flow Chart for Responding to Non-Suicidal Self-Injury in Schools

The following policy flowchart provides teachers and other school staff with a quick reference for responding to students who self-injure. This flowchart was developed to accompany the policy. The key stages of the flowchart are summarised below.

It is essential that school staff respect the student's right to confidentiality and do not disclose a student's self-injury to other staff members, other students, or the student's parents unless otherwise stated in the policy and flowchart.

However, staff members should never promise students who self-injure that they will keep what they tell them a secret, and should explain to the student that they have a duty of care to tell someone who can help.

- School staff should contact the school nurse or first aid officer if they suspect a
 student has self-injured to treat the student's wounds and assess whether the student
 has wounds requiring medical treatment. If the student does have severe or life
 threatening wounds then the student should be referred to the nearest emergency
 department.
- If the student does not have severe or life-threatening wounds, the student should be referred to the school point person/member of the crisis team who can assess the student's risk of suicide. If the student is at risk of suicide then the point person/member of the crisis team should follow the school's suicide policy.
- If the student is not at risk of suicide, the point person/member of the crisis team should assess the student's risk of further self-injury, the severity of their injuries, and the presence of co-occurring mental health problems.
- If the student has self-injured with superficial tissue damage, has self-injured less than four times, typically engages in few forms of self-injury, and has no symptoms of co-occurring mental health problems then the student's risk for further self-injury and accidental death may be regarded as low. Intervention by the point person/member of the crisis team or referral to an external mental health professional may be considered. Students should be advised in advance and allowed to be present if their parents are contacted
- If the student has self-injured with light to severe tissue damage, has self-injured four or more times, has engaged in multiple methods of self-injury, or has mild to acute symptoms of co-occurring mental health problems then risk for further self-injury and accidental death may be regarded as moderate to high. Referral to an external mental health professional should be made, and the students' parents contacted. Students should be advised in advance and allowed to be present when their parents are contacted. The point person/member of the crisis team should ensure that within the confines of confidentiality the referring staff member is advised of the outcome of their referral so they are aware that their report resulted in action.

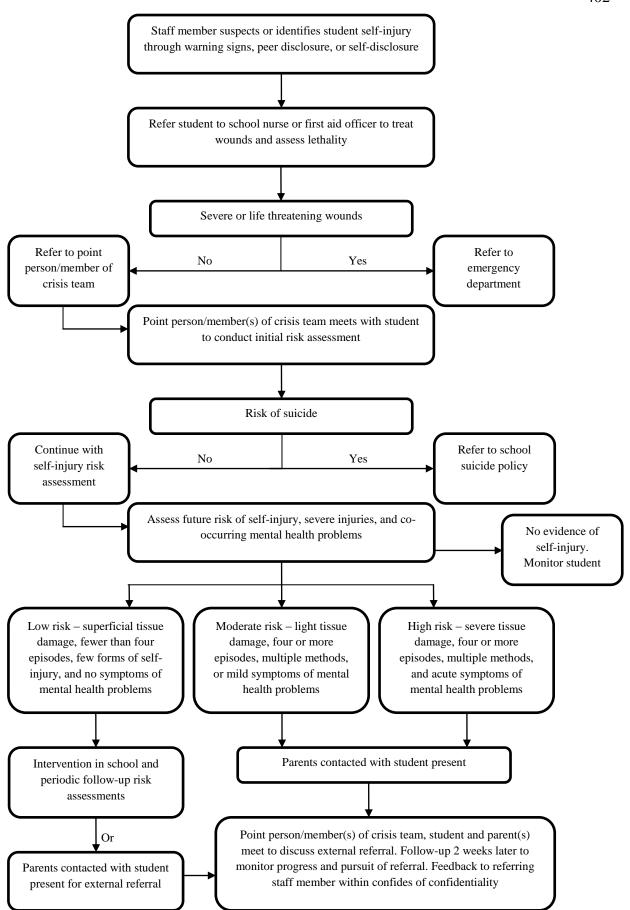


Figure H1. Policy Flow Chart for Responding to Non-Suicidal Self-Injury in Schools