MONASH University

THE IMPACT OF PARENTAL INVOLVEMENT ON CHILDREN'S SOFT SKILLS, ACADEMIC ACHIEVEMENT, AND INCOME IN ZAMBIA AND THE UNITED STATES OF AMERICA.

BY

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Abstract

This thesis examined the effectiveness of using marketing communication tools to improve students' academic attainment through parental involvement. These tools included informative brochures, sample questions (activity starters), and behaviour trackers. We, the student researcher and her supervisors investigated issues related to parental involvement in a rural and highly impoverished area in Zambia, and among the middle-class population in the U.S.A. This study's theoretical framework included the marketing mix (product, price, place and promotion; Kotler & Zaltman, 1971) coupled with the theory of consumer socialization. This study was conducted in response to the persistent issue of extreme poverty among children and the need for a low-cost sustainable tool to increase academic achievement and decrease poverty rates. A comprehensive conceptual framework (social marketing framework: SMF) was deployed to address three research questions: (1) Does marketing communication increase parental involvement that improves children's academic achievement? (2) What is the mechanism by which parental involvement affects academic achievement in terms of the role of soft skills? and (3) Is parents' involvement with their children during childhood associated with higher income in adulthood, and are soft skills related to income?

To effectively answer these research questions, we undertook interviews (exploratory studies), applied an experimental design (pre-test, study two and study three), and conducted a survey (Study 1). In addressing the first research question, results revealed that marketing communication can increase parental involvement and improve academic achievement. In tackling the second research question, we found that parental involvement increases a child's internal locus of control and grit. Moreover, we confirmed that *focused on soft skills* parental involvement marketing communication increases a child's self-esteem and internal locus of control more so than does general parental involvement marketing communication. In answer to the final research question, results revealed a positive relationship between parental involvement, academic achievement, income (in adulthood) and self-esteem.

In this thesis, we simultaneously evaluated the effect of multiple types of parental involvement and four soft skills, and their subsequent impact on academic achievement. Furthermore, we investigated the relationships between parental involvement, soft skills, level of education and income. Finally, a contribution made by the results of the study was the application of low-cost marketing communication tools in improving parental involvement among the most illiterate, improvised and rural population in Zambia, and

among middle-class parents in the U.S.A. From the theoretical perspective, the thesis demonstrated the role that soft skills play in the socialisation process, previously underexamined, and extended the applicability of consumer socialisation theory by including educational attainment and income as socialisation results.

Declaration

This thesis is an original work of my research and 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.

Signature: ……

Print Name: Yuliya Love-Kryuchkova Lynch

Date: 17/09/2021

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Dedication Page

I dedicate this thesis to Dr Dominic Thomas and Dr Gerri Spassova

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CHAPTER 1: INTRODUCTION

This introductory chapter provides an overview of the thesis. It introduces the contextual background, explains the importance of the topic, and justifies the social marketing intervention used to address effectively the social issue in question. This chapter also offers a brief overview of the experimental and survey procedures adopted for data collection.[1] Lastly, it presents an outline of the thesis structure.

1. Introduction

Extreme poverty persists nowadays, with approximately 731 million people attempting to live on less than 1.90USD per day (World Bank & Development Research Group, 2019). Children are a special sector of the population with limited or non-existent opportunities to change their financial well-being (e.g., Watkins & Quattri, 2019). Social marketing interventions have been efficacious in positively changing behaviours in developing countries. For example, social marketing interventions have been shown to increase the usage of mosquito nets (Agha et al., 2007), condoms (Pfeiffer, 2004), and exclusive breastfeeding (Quinn et al., 2005). Hence, it is crucial to investigate solutions to address the issue of child poverty via deliberate social marketing interventions.

One of the solutions to address a child's poverty is the improvement of academic achievement. Higher levels of education can help to battle poverty by increasing the skill level of individuals, which in turn can give them a better income in the future (Tebaldi et al., 2017; Blaug, 1972). Typically, in OECD countries, only 26% of the adults who have not completed upper secondary education earn more than the average wage, whereas 68% of adults who have completed tertiary education have a higher-than-average income (OECD, 2019). The situation in Zambia provides a strong example of the difference that education can make to individuals' earning capacity. In Zambia, education above the primary level (e.g., middle school, high school) can increase income dramatically, by as much as 950% (Central Statistical Office, 2016), which suggests that education is the key to alleviating poverty. The challenge is how academic achievement could be improved with limited resources.

The poorest families may not be able to afford uniforms (Boyle et al., 2002) and learning materials (World Bank, 2018). However, parents can still assist their children to

[1] Full explanation of Methodology is offered in Chapter 4.

achieve better results by being more involved with them. Current literature highlights the positive impact of parental socialisation (the process in which parents communicate with their children) on children's ability to succeed academically (e.g., Day & Dotterer, 2018). Moreover, parents could cultivate in their children several soft skills such as grit, self-esteem, and internal locus of control, all of which could improve children's educational outcomes (e.g., Akhtar & Saxena, 2013, Brunello & Schlotter, 2011). However, due to their low level of literacy (Hornby & Blackwell, 2018) and lack of communication skills (Berry, 2019), many low-income parents often find it challenging to become involved.

Communication is often identified as an area that needs to be improved, particularly, if parental involvement is to be productive (e.g., Berry, 2019). Effective communication can encourage parents to make parental involvement a priority (Brock & Edmunds, 2010), improve parent-teacher relationships (Goss, 2019), and make parents feel welcomed (Berry, 2019). Successful interventions, such as social marketing communication, are intended to remove barriers and provide valuable communication to achieve a desired behavioural shift (e.g., Chong, Aslani, & Chen, 2011; Agha et al., 2007; Donovan & Vlais, 2005).

This thesis utilises a low-cost social marketing communication strategy to encourage parental socialisation and improve children's soft skills. This study is guided by consumer socialisation theory (Ward, 1974), which helps to explain how children acquire abilities to become consumers of education. Consequently, this thesis investigates how marketing communication impacts parental involvement, soft skills, and children's academic achievement. The thesis also sets out to determine whether there is an association between parental involvement in childhood and higher income in adulthood.

To effectively investigate the stated research questions, this thesis deployed interviews (exploratory studies), an experimental design (pre-test, Study 2 and Study 3), and a survey (Study 1). The interviews were deemed an appropriate means of acquiring a better understanding of how parental involvement can influence children's academic achievements and their income as adults. To understand the impact of marketing communication tools on behaviour (parental involvement) and soft skills, we, the student researcher and her supervisors conducted a pre-test and studies two and three. Furthermore, to investigate whether there is a connection between income, parental involvement, academic achievement (highest level of education completed), and soft skills, a survey with adults was conducted.

In summary, we, the student researcher and her supervisors found that parental involvement could increase soft skills (grit and locus of control: Study 2; self-esteem and locus of control: Study 3). Moreover, we provided evidence that self-esteem positively

correlates with academic achievement (tested in Study 3). We also found that adults with greater parental involvement as children tend to have higher self-esteem, attain a higher level of education, (e.g., tertiary degrees) and have a higher income (Study 1). Additionally, we found that focused on selected soft skills marketing communication is effective in stimulating parental involvement regarding grit cultivation. The results consistently indicated that home involvement is the most predictive of academic achievement (Study 2 and Study 3), soft skills (e.g., locus of control: Study 2), and it relates to higher education level completed and income (Study 1).

Finally, we went a step further to test marketing communication, focusing on the cultivation of soft skills (mainly grit) and finding that, compared with general marketing communication, this focused marketing communication is a more effective means of fostering soft skills (locus of control and self-esteem) in children (Study 3). Moreover, a focus on soft skills marketing communication could increase parental involvement (e.g., discussion, home, academic socialisation) more effectively than general marketing communication can. We found that focused marketing communication increased parental involvement in the cultivation of soft skills such as grit more effectively compared to general marketing communication. This comprehensive thesis has a broad range of managerial and theoretical implications.

This thesis has implications for policy designers, educators, and society in general as it shows how parental involvement can be increased at a low cost. Public servants may use the tools developed during the course of the thesis to effectively increase parental involvement. Greater parental involvement may have implications for children's academic achievement and their income when they eventually join the workforce. It has been found that parental involvement has a positive correlation with academic achievement (e.g., Day & Dotterer, 2018) and vice versa (e.g., Tebaldi et al., 2017). Ultimately, for countries like Zambia where academic achievement could have a significant impact on income, an improvement in parental involvement may enable families and individuals to cross the poverty line in the longer term. And in developed countries such as the U.S.A., where general parental involvement is already high, a more focused involvement could cultivate soft skills in children and have a positive impact on academic achievement. This thesis is significant from practical and theoretical perspectives.

The thesis revealed the possible socialisation process (parental involvement → soft skills → academic achievement), which is generally not addressed in consumer socialisation theory (Moschis, 1985). Also, while Palmer et al. (2001) examined the effect of parental

involvement on children's debt, we have extended the consumer socialisation theory by examining educational attainment and income as socialisation results. The findings will allow researchers to explore the socialisation mechanism further in terms of the consumer socialisation theory, especially within the parent-child relationship.

The thesis contributed to the social marketing literature in several important ways. Many scholars have already identified that social marketing requires a participatory approach (e.g., Saunders et al., 2015). However, recent literature calls for greater stakeholder involvement as their participation is still inadequate (Truong & Dang, 2017). Since the area of interest is not well-researched (rural Zambia), insights from the target population were critical in designing marketing communication. This thesis involved customers in the design of the marketing communication by generating information from them about needs, barriers, and solutions. Thus, we contributed to the upstream marketing literature.

To effectively address the research questions, this dissertation has four main sections. It is structured as follows: first, background information on the issue (poverty) is presented; this is followed by a review of the literature, then the methodology and outcomes and, lastly, the discussion and concluding remarks.

CHAPTER 2: CONTEXT OF THE THESIS

This chapter offers an overview of the poverty situation up to date. Given the complexity of the poverty phenomenon, this chapter presents a summary of the most recent data on poverty and defines the characteristics of poverty among children. Finally, it explains the specifics of poverty in Zambia and in particular, poverty among children.

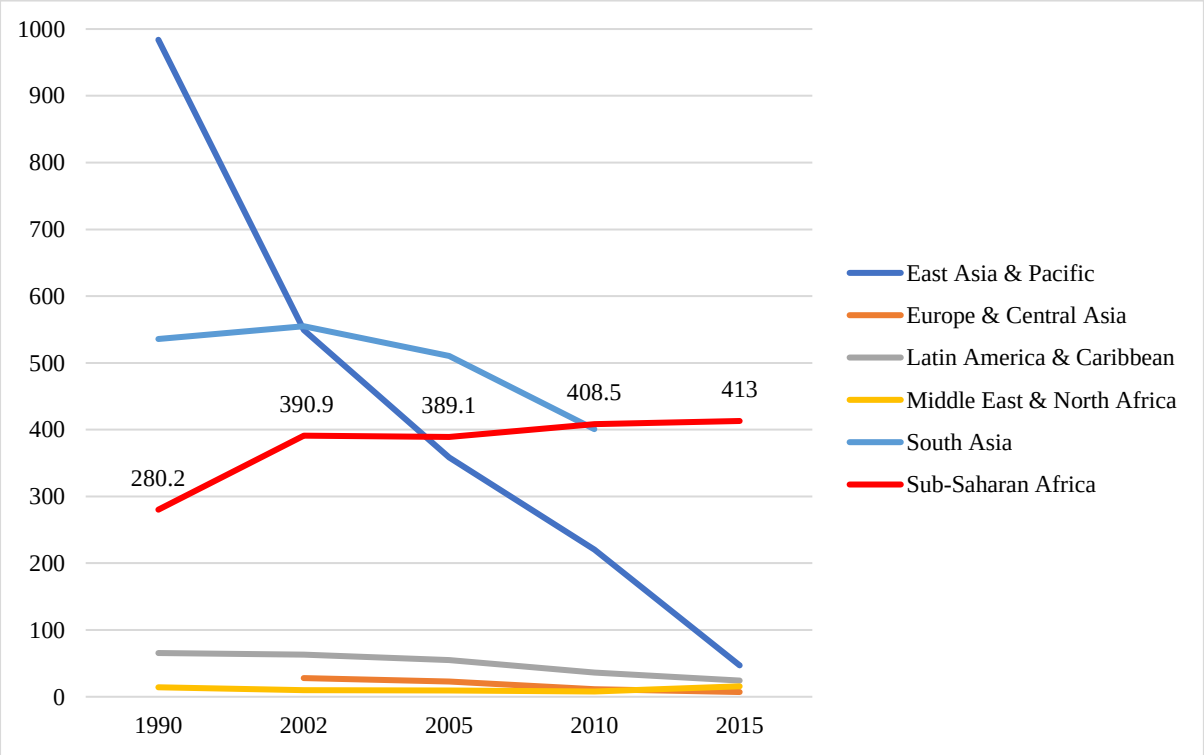
2. Overview of the Poverty Situation and Context of the Thesis

2.1. Overview of the Poverty Situation

2.1.1. Review of the Current Poverty Stance

Although efforts to reduce poverty have had some success, approximately 731 million people worldwide still live on less than 1.90USD per day (World Bank & Development Research Group, 2019; Figure 1).

Figure 1 *Number of Poor People at 1.90USD (2011 PPP) (Millions)*



Note. Adapted from *Number of poor at $1.90 a day (2011 PPP) (millions)*, by World Bank, Development Research Group, 2019.

Poverty means having "multifaceted consumption constraints" such as limited or no access to permanent employment, medical care, children's schooling, food, shelter, and clothing (Viswanathan, & Sridharan, 2009; Jansen, Moses, Mujuta, & Yu, 2015). Furthermore, the current pandemic will drive many more people into extreme poverty (The New York Times, 2020; World Bank, 2020).

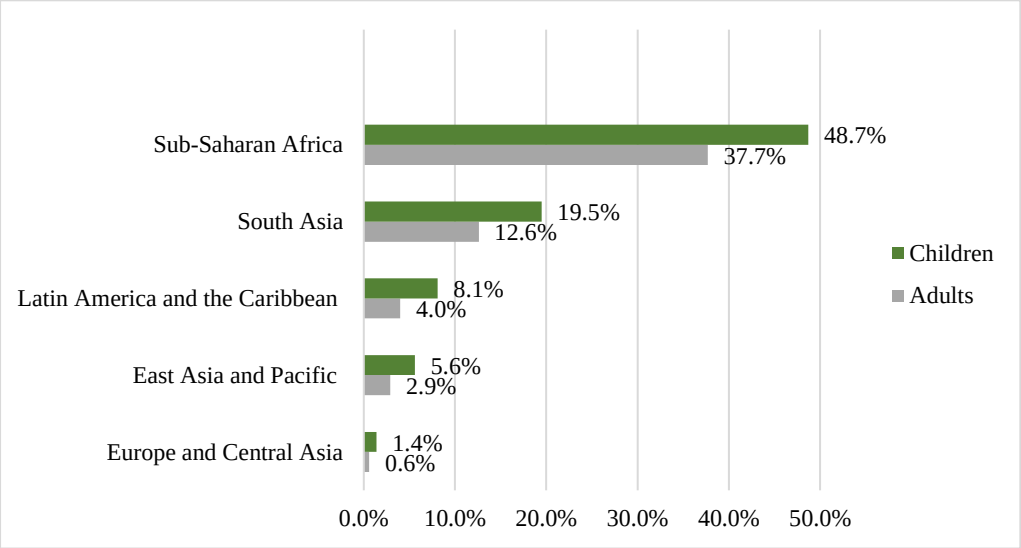
Although poverty is worldwide, over half of the world's extremely poor people live in the Sub-Saharan Africa region (World Bank & Development Research Group, 2019), and this number is increasing (Figure 1). Not only is poverty more prevalent in this region; it is also more intense compared to other regions (UNICEF, 2016). Poor people in the Sub-Saharan Africa region live on much less than 1.90USD per day. For example, 10% of the population tries to survive on just 0.80USD or less (UNICEF, 2016). As shown in Figure 1, poverty in this region is much greater than that in other regions. Hence, the dire situation in the Sub-Saharan Africa region calls for special consideration. Moreover, poverty among children is more prevalent compared to adults (UNICEF & WORLD BANK GROUP, 2016), and concentration of effort on child's poverty may be most productive in breaking the cycle of poverty.

2.1.2. Child Poverty

Child poverty deserves special attention since children are twice as likely as adults to live in extreme poverty as indicated in Figure 2 (UNICEF & WORLD BANK GROUP, 2016). It has been found that investment in children's development produces better outcomes (Knudsen et al., 2006; Cunha et al., 2005; Currie, 2001) than does the promotion of adult improvement. For example, literacy classes, educational programs, and public skills training programs for disadvantaged adults have low economic returns, and sometimes the outcomes are negative (Cunha et al., 2005).

Moreover, being brought up in poverty has long-term consequences for children's development and learning abilities (Save the Children, 2016). Hence, investments (financial and otherwise) in children's development not only produce higher returns but also create advantages for future generations. Because poverty is intergenerational (Save the Children, 2016; Partridge, 2014), the development of children's abilities through quality education and increased parental involvement could help to break the cycle of poverty (e.g., Leseman & Slot, 2014).

Figure 2 *Extreme Poverty (%) of the Population (data 2013)*



Note. Adapted from *A fair chance for every child*, by UNICEF and World Bank, 2016.

The cycle of poverty starts from the child being born into a poor household with limited opportunities for advancement (Dubay, 2021). And children born into disadvantages created by poverty (e.g., food insecurity) get trapped in poverty such as the cycle of poverty continues from generation to generation (Chilton, Chyatte, & Breaux, 2007). To break the cycle of poverty, interventions may focus on creating opportunities for advancement for children (e.g., access to education) (Chilton, Chyatte, & Breaux, 2007). As expressed concisely by Cunha et al. (2005, pp.87-88), "…we should prioritize, and shift our priorities, in a marginal fashion by redirecting a given total sum of expenditure on skill investment to earlier ages relative to how it is currently allocated toward disadvantaged populations that do not provide enriched environments for their children." The provision of the best opportunities to develop in childhood is essential in helping the disadvantaged population to become abler (UNICEF, 2016). Studies have shown that there is greater poverty among children (Figure 2) and that investments in their development produce long-term benefits that extend beyond their lifetime. Even so, in all regions, children are more likely to be poorer than adults (Figure 2), with almost 50% of all children in the Sub-Saharan Africa region suffering extreme poverty. Given these dire human conditions, worldwide efforts have been directed to developing sustainable solutions to reduce poverty.

2.1.3. Sustainable Solutions to Reduce Poverty

For decades, the World Bank and the International Monetary Fund (IMF) have been battling poverty in low-income countries (World Bank, 2005). These two institutions work with existing public policies and build partnerships to help overcome poverty by assisting economic development (World Bank, 2005). They focus on areas such as infrastructure, macroeconomic stability, improvement of governance, and education (World Bank, 2005). Because each country and region have their unique policies and economic circumstances, the solutions to poverty must be highly customised to ensure domestic development (World Bank, 2005).

In African countries, rural low-income households face exceptional challenges. The main strategies applied to alleviate poverty in this region include community initiatives (e.g., women's lending clubs), direct assistance from NGOs (e.g., cash transfers), market liberalisation, land rights, and provision of public services (e.g., health services) (Ellis & Freeman, 2004).

Community initiatives. Community schemes involve establishing partnerships with local institutions and leaders. This approach attempts to be comprehensive, inclusive, and outcome-driven (Torjman, & Leviten-Reid, 2003). However, initiatives such as lending clubs require some level of literacy for tasks such as bookkeeping. In addition, one limitation of community initiatives is that they are unable to address larger-scale issues without outside assistance (Torjman, & Leviten-Reid, 2003). Nonetheless, direct-assistance strategies applied to low-income rural communities may be implemented on a larger scale, but they produce ambiguous results.

Direct assistance. Conditional cash transfers programs, a popular form of direct aid, do not always have the desired effects (García, & Saavedra, 2017). Moreover, unfortunately, foreign aid is not concentrated where it is needed the most, but rather tends to be directed to areas that are better off (Briggs, 2017). When government and donor agencies cannot be held accountable, direct assistance programs, such as foreign aid, may not be very effective (Winters, 2010). For example, in the case of Zimbabwe, corrupt practices have meant that foreign aid has been ineffectual and inadequate (Karanda & Toledano, 2018). Moreover, aid that does not take the local context into account may have a negative effect on its recipients (Karanda & Toledano, 2018). Although foreign aid programs vary in terms of their effectiveness, market liberalisation could be beneficial in the long term (e.g., Heo & Doanh, 2009).

Market liberalisation. Market liberalisation can boost economic growth, raise wages, and increase the government's ability to subsidize the poor through the collection of taxes (Heo & Doanh, 2009). However, this is a top-down and long-term approach. In addition, market liberalisation could be a sustainable solution if the strategy of lifting restrictions works as intended, although this approach may be ineffective due to changing market conditions (e.g., a spike of fertiliser prices, the introduction of extra fees) (Ellis & Freeman, 2004), and might not always benefit the rural population (Heo & Doanh, 2009). Perhaps, the main way to reduce poverty among the rural population is to address the issue of land rights.

Land rights. Although land rights may be a way to reduce poverty, even if the rights are accessible, they might not be legally recognisable (Meinzen-Dick, 2011). For example, in Zambia, the privatisation of land is highly costly and bureaucratic. Most of the land is either public property or owned by communities (tribes). This places residents in a vulnerable position as they do not have any legal rights (security, protection) to the land. However, on its own, the provision of legal rights might not be sufficient to reduce poverty (Cousins et al., 2005). Land reforms should focus on securing property rights for the poorest sectors of the population (e.g., farmers) and should work in conjunction with supportive social and developmental policies (Cousins et al., 2005). This approach requires government initiative and a long-term commitment. Lastly, the provision of public services is another strategy that can be applied to tackle poverty issues.

Provision of public services. The provision of basic but adequate public services can improve the population's economic growth and wellbeing, and contribute to poverty reduction (Hewett & Montgomery, 2001). Academic achievement and level of education improve poverty rates (Awan et al., 2011; Wu, 2011; Brooks, 2008; Tilak, 2007). However, the provision of public education (primary and secondary) will not be effective if the quality of the education being provided is consistently poor (Wedgwood, 2007). Although the quality of education could be improved by external donations and interventions (e.g., Andrabi et al., 2017; Banerjee et al., 2007), this threatens the sustainability of services (Wedgwood, 2007). In addition, rural areas are largely under-served (Hewett & Montgomery, 2001). Although low-income households may have little control over the public services available to them, they could, for example, sustainably improve educational outcomes through greater parental involvement.

In conclusion, each of the approaches discussed above could be successful in some contexts but not in others. Community initiatives require partnerships and some level of literacy (e.g., in the case of microlending), and cannot resolve large-scale issues. However,

community initiatives are participant-driven and inclusive. Although initiatives involving direct aid could have an impact on the resolution of larger issues, they require efficient government administration and the ability to measure long-term outcomes. Similarly, market liberalisation is a long-term commitment and does not produce short-term outcomes. Moreover, the success of market liberalisation may be subject to external forces such as increased fees, although it could be an effective way to subsidize the poor. Land rights could decrease the vulnerability of the poorer sectors of the population; however, their success in reducing poverty largely depends on responsible governance. Lastly, the provision of public services can contribute to the reduction of poverty if government commitment or external donations are secured, although the sustainability of this approach is not guaranteed.

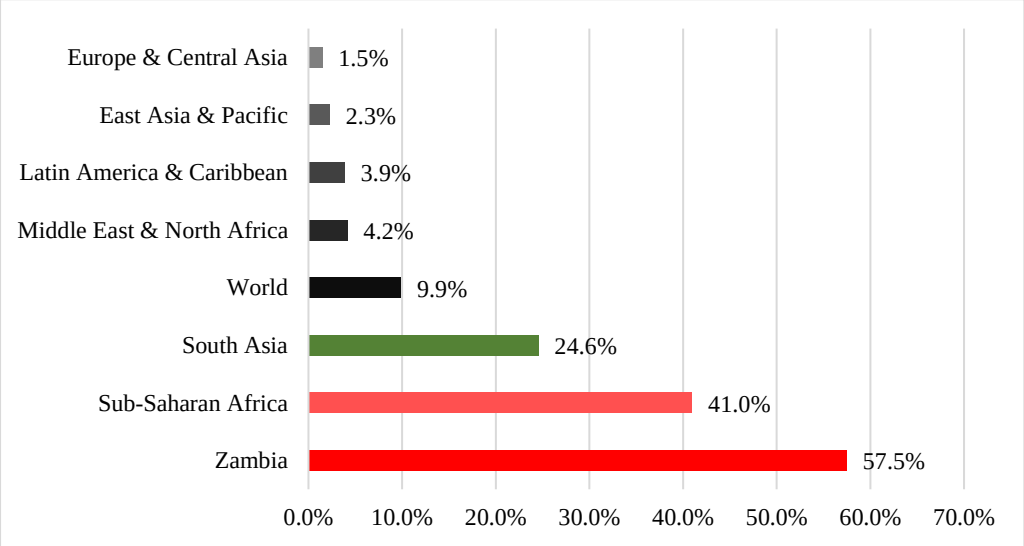
Five main strategies, which could be applied to alleviate poverty were discussed (community initiatives, direct assistance from NGOs, market liberalisation, land rights, and provision of public services). Each of the approaches could be successful but require at least one of the following: government initiatives, external donations, or partnerships. However, low-income households could still sustainably address the poverty situation while being self-reliant. One such solution could be to increase the quality of public education received by children in impoverished areas. However, for children to derive the maximum benefit from the education being offered, it should be aligned with their socio-cultural environment (Karanda & Toledano, 2018; World Bank, 2005). Therefore, the local context of the thesis will be discussed to obtain a better understanding of the most appropriate approach.

2.2. Context of the Thesis: Zambia and the USA

2.2.1. Poverty in Zambia

As shown in Figure 3 below (World Bank & Development Research Group, 2019), poverty in Zambia is greater than that in other countries in the Sub-Saharan Africa region. Fifty-eight percent of the population in Zambia live in extreme poverty, and 16% of the population are in the lower-middle-income bracket (above 1.90USD but lower than 3.20 USD) (World Bank & Development Research Group, 2019).

Figure 3 *Number of Poor People Earning 1.90USD Daily (%)*

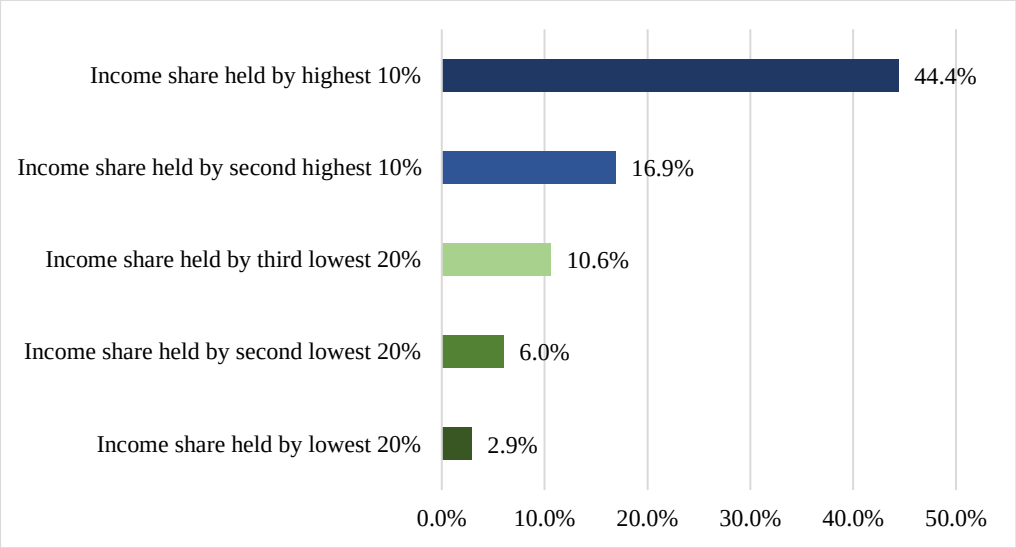


Note. Adapted from *Number of poor at $1.90 a day (2011 PPP) (millions)*, by World Bank and Development Research Group, 2019.

Since Zambia is in the centre of Southern Africa, it is landlocked (World Bank, 2019a), which makes trade difficult. Nonetheless, Zambia has several advantages, one of which is its copper reserves, although it is generally the urban areas that benefit from any industry (World Bank, 2019a). Zambia has one of the world's largest copper mining industries with a remarkable economic growth rate of about 4-7% per year. However, there are great discrepancies in incomes, with poverty being most prevalent among the rural population (World Bank, 2018b; Central Statistical Office, 2016). The income share held by the highest 10% of the population is 44%; in comparison, 60% of the lower-earning population account for less than 20% of total income (Figure 4; World Bank & Development

Research Group, 2019). Moreover, global efforts to increase the well-being of the poor have had limited success (World Bank, 2018b), especially in rural areas.

Figure 4 *Income Share Held by Subgroups of Populations in Zambia*



Note. Adapted from *Income share held by the highest 10%*, by World Bank and Development Research Group, 2019.

In summary, Zambia has higher than average poverty rates in the region (World Bank & Development Research Group, 2019) and the rural population suffers from poverty the most (World Bank, 2018b; Central Statistical Office, 2016). Moreover, the overall well-being of the rural population is at stake as they have inadequate access to public resources (World Bank, 2018b). Given the scope of the issue among the rural population in Zambia and the global trend regarding child's poverty (Figure 2), it is not surprising that poverty among rural children is much greater than the overall poverty in Zambia.

2.2.2. Poverty among Children in Zambia

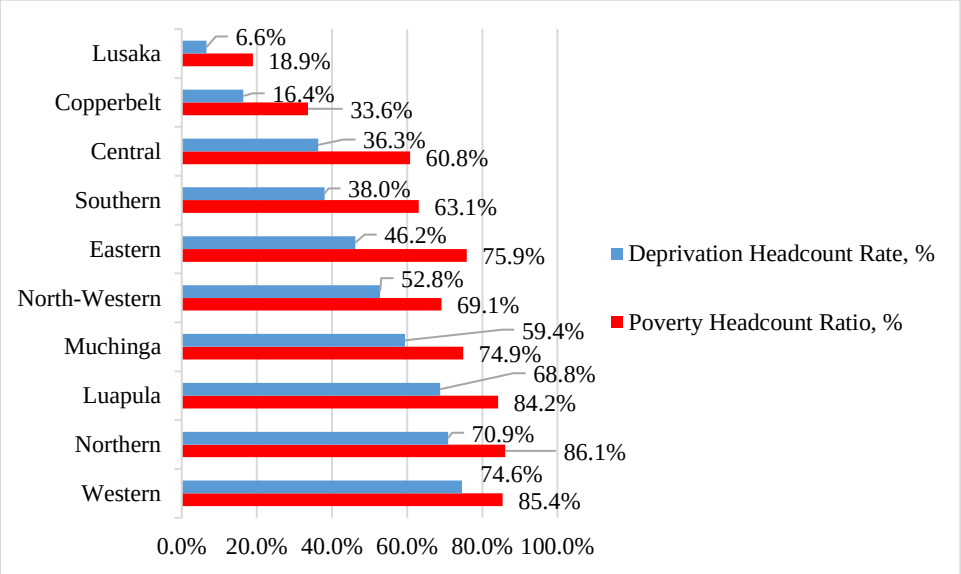
According to Zambia's Ministry of National Development Planning (2018), over 80% of children live below the national poverty line in rural areas (about 20% live above the national poverty line in rural areas) and only 25% of children live below the national poverty line in urban areas (about 75% of children live above the national poverty line in urban areas). It is vital to note that the national poverty threshold is 214.26ZMW per month (0.40USD per day) (Ministry of National Development Planning, Zambia, 2018). To

highlight, 0.40USD consumption per day is far from the generally accepted poverty threshold of 1.90USD per day (World Bank & Development Research Group, 2019). Needless to say, that if over 80% of children in rural areas live on less than 0.40USD per day, many more live on less than 1.90USD per day.

Poverty among children is greater than that among adults. In addition, children experience poverty in a distinct way. Poor children are deprived of "the material, spiritual and emotional resources needed to achieve their potential or participate as full and equal members of society" (UNICEF, 2004, p.7). In most cases, the term "poverty" refers to monetary deprivation, but this is only one of several disadvantages.

Over 41% of Zambian children (ages 0-17) experience multidimensional deprivation in terms of nutrition, health, information, child protection, education, housing, sanitation, and water (Ministry of National Development Planning, Zambia, 2018). The difference between urban and rural areas is vast: 60% of children in rural regions are multidimensionally deprived compared to 10% in urban areas (Ministry of National Development Planning, Zambia, 2018; Figure 5). Monetary poverty and multidimensional deprivation are connected.

Figure 5 *Multidimensional Headcount Ratio and Child Poverty Rates in Zambia by Province*



Note. Poverty Headcount counted as 214.26ZMW per month. Adapted from *Child Poverty in Zambia report (2018)*, by Ministry of National Development Planning, Zambia, 2018.

According to Zambia's Ministry of National Development Planning (2018), only 5% of children suffering some type of deprivation are not poor. Given the low threshold for the national poverty line and the high multidimensional deprivation rate, it may be difficult to

determine why some provinces in Zambia are poorer than the average. However, as Figure 5 indicates, the Western, Northern and Luapula provinces lead the poverty statistics in terms of money and deprivation. Lusaka, the capital, experiences the least amount of poverty and deprivation. There are multiple reasons for poverty; hence, the eradication of poverty, especially in rural areas, may be challenging. Several factors must be considered and, if possible, addressed if Zambian people hope to reduce their levels of child's poverty, particularly in rural areas. These factors are discussed below.

2.2.3. Sustainable Change toward Poverty Reduction in Zambia

There are multiple reasons for poverty and having large families may be one of them. The poorest families tend to have more offspring than less poor households (Save the Children, 2016). Since the fertility rates remain high, especially among the poor population, more pressure is added on public services and labour markets (World Bank, 2018b). The working-age population will more than double by 2050 (World Bank, 2018b), making it incumbent upon the labour market to create new jobs as well as more skilled positions (World Bank, 2018b).

Zambia's ability to increase the number of paid positions available in rural areas is directly influenced by its ability to move away from subsistent agriculture (World Bank, 2018b). Moreover, the effective transformation of the labour market in other areas critically depends on agricultural advancement (World Bank, 2018b). A more educated labour force may help to transform farming from subsistent to commercial. Naturally, the workforce must be educated to become more skilled.

Although most children in Zambia have access to primary education (World Bank, 2018b), enrolments in secondary school are declining, with only 4% of the population completing their secondary schooling (World Bank, 2018b)[2]. Moreover, childbearing and financial difficulties mean that most girls are deprived of secondary education (World Bank, 2018b; Jensen & Nielsen, 1997). In addition to the low rate of children completing their secondary schooling, the overall quality of education in Zambia is very low: less than 25% of secondary school students obtain minimum proficiency in main subjects (World Bank,

[2] While education for grades 1-9 (primary and junior secondary school) is free and compulsory, many parents cannot afford to cover additional mandatory expenses such as uniform, which forces children to drop out of school. Primary school corresponds to grades 1-7 (ages 7-14), junior secondary to grades 8-9 (ages 15-16), and senior secondary to grades 10-12 (ages 17-19). A vast majority of secondary schools are boarding schools with students living on campus all of the time except for school breaks and holidays.

2018b). To develop a skilled workforce and encourage transformation to sustainable development, academic achievement must be improved (World Bank, 2018b).

Educational success among children is especially beneficial as it not only advances the workforce but also helps to break an intergenerational cycle of poverty (Wu, 2011; Brooks, 2008; Tilak, 2007). While there is little doubt about the benefits of education in terms of increasing potential income, there has been some debate about the ways that the quality of education in impoverished environments can be improved. Masino et al. (2016) offer three main ways to enhance the quality of student learning: providing more learning resources (e.g., more teachers and learning materials), shifting some of the management of the schooling system to the communities; and/or effecting a behavioural change (e.g., in parents, students) (Masino et al., 2016). However, although the suggestions may be reasonable, they might not be executable in every context (e.g., rural areas).

As the United Nations (2017) explained, there is no uniform answer to poverty. Rather, the unique characteristics of each country or region must drive the development of programs. Given that rural Zambia receives very little aid, and the population is drastically poor (Ministry of National Development Planning, Zambia, 2018), there is little possibility of *increasing the resources* required for quality education, as suggested by Masino et al. (2016). Given Zambia's high levels of corruption, unfair practices, and bureaucracy (Risk and Compliance Portal, 2020) it may be difficult *to shift the management of public schools* to the local authority. Moreover, those schools that are already being managed by communities are often unable to obtain any learning materials, hire teachers and provide appropriate buildings because they do not have consistent government support and are continuously lacking in resources (Education Development Center, 2017). Hence, it might not be feasible to make communities responsible for delivering school programs (the second suggestion by Masino et al., 2016) due to bureaucratic issues and the lack of funding.

Hence, as discussed above, the first two approaches offered by Masino et al. (2016), which are the provision of extra learning materials and transferal of schooling responsibilities to communities, may not be achievable in rural Zambia. Moreover, Ali and Yao (2004) argue that initiatives aimed at improving the financial situation of the poor population should incorporate inclusive growth. Inclusive growth strategies are intended to encourage people to participate actively in improving their standards of living in ways that are sustainable (Ali & Yao, 2004). The third approach offered by Masino et al., 2016, which involves a *behavioural chang*e, is aligned with the notion of sustainable inclusive growth (e.g., Cohn & Fredrickson,

2010; Lisspers et al., 2005). Indeed, a behaviour change could be an effective driver of social change for those who are poverty-stricken (e.g., Agha et al., 2007).

In rural Zambia, strategies intended to bring about behavioural change to improve academic achievement could focus on changing the behaviour of the parents and enabling students to achieve better academic results. As the primary socialisation agents for their children (Moschis, 1985), parents communicate attitudes, motivations and behaviours during interactions (Moschis & Churchill, 1978). However, in this regard, parents in Zambia appear to have little involvement with their children (Arat & Wong, 2016; Svenson et al., 2008). The literature suggests that an increase in parental involvement may result in positive educational changes (e.g., Day & Dotterer, 2018; Suldo et al., 2018; O'Hehir & Savelsberg, 2014), and increase children's soft skills (e.g., Suizzo & Soon, 2006; Lingren, 1991) which, in turn, will strengthen children's abilities to improve their learning (e.g., Credé et al., 2017; Krishnan & Krutikova, 2013). Thus, the behavioural shift in parental involvement may improve children's soft skills and their educational results, empowering the children to achieve better standards of living (sustainable inclusive growth). However, due to the extreme poverty in the rural areas of Zambia, any sustainable intervention strategy must be at a low cost.

Hence, the current thesis focuses on low-cost and sustainable ways which could help to improve children's academic achievement. Because the SMF has been successfully applied to issues related to public health, education, and the environment (Singh et al., 2015; Kindra & Stapenhurst, 1998), it is adopted for this thesis and utilises low-cost marketing communication tools to alter parental involvement to increase children's level of education. While the main focus of the thesis is the examination of the impact of low-cost social marketing communication tools in Zambia, to understand the effect of these tools in the developed world, we, the student researcher and her supervisors conducted additional research in the USA[3].

2.2.4. Sustainable Change toward Improvement in Soft Skills in the U.S.A.

While poverty reduction may be the most desirable outcome from a behavioural shift in Zambia, in more well-off countries, such as the U.S.A., poverty decline may not be the main focus of the behavioural shift. Instead, an improvement in soft skills may be especially

[3] The main reason for completing studies in the U.S.A. was inability to finish data collection in Zambia due to the COVID-19.

critical as an alarming growing gap in soft skills between high-income and low-income students has been recorded in the United States (Putnam, Frederick, & Snellman, 2012).

Not surprisingly, the academic achievement gap (e.g., reading scores) between high-income and low-income students has also widened between 1943 and 2001 (Reardon, 2013) and while it has not expanded by 2010; it has not narrowed either (García & Weiss 2017). Since the literature indicates that a positive shift in parental involvement may improve children's soft skills (e.g., Brummelman & Sedikides 2020) and academic achievement (e.g., Kim et al., 2018), we investigate the effect of social marketing communication on parental involvement in the U.S.A. While academic achievement may be a by-product of increased parental involvement, the expanding gap in soft skills among children calls to be the main focus of the research in the U.S.A. Hence, work reveals how behavioural change within the SMF can help to foster the soft skills of children. Overall, it is anticipated that this thesis will provide insights into how behavioural change could improve the quality of education received by children and their soft skills. Moreover, it will make some contribution to the literature on behavioural change.

A closing note

This chapter showed that the poverty in Sub-Saharan Africa region needs special attention, as the number of poor people in this area is still increasing, with the extremely poor attempting to survive on less than 0.80USD per day (UNICEF, 2016). Zambia is among the poorest countries in the region, with rural areas having the greatest poverty. Moreover, children are twice as likely to live in extreme poverty compared to adults (UNICEF & WORLD BANK GROUP, 2016). In Zambia, over 80% of children in rural areas live on less than 0.40USD per day (Ministry of National Development Planning, Zambia, 2018). This work addresses poverty among children by demonstrating that investment in children's development is effective. This work suggests that behavioural change could be a sustainable means of reducing child's poverty. Hence, the next chapter explores various behavioural change models, in particular, the SMF and its low-cost application to the issue in question.

CHAPTER 3: REVIEW OF LITERATURE

This chapter reviews the literature on behavioural change. It comprises three sections: a review of behavioural change approaches, the contextual application of SMF, and the socialisation process with its outcomes. In the first section, various social-psychological models are discussed; these are related to government regulations, economic-centred approaches, and SMF. The second section provides an argument for the examination and assessment of the SMF for parental involvement. And, given the complexity of the proposed relationship between behavioural shift and its outcomes (soft skills, academic achievement, higher income), the third section reviews each of these outcomes. Additionally, the last section offers a hypotheses development module as it discusses consumer socialisation theory and its processes.

3. Review of Literature

3.1. Behavioural Change Literature Review: Psychology, Economics and Social Marketing Disciplines

Some human behaviour could be harmful to oneself or others because of unhealthy or dangerous actions such as overeating, using drugs, smoking and spreading sexually transmitted diseases (Kelly, 2016). Although not all human behaviour has negative consequences, some actions have contributed to major global issues. Hence, a behavioural shift could help to alleviate several social issues that have the potential to cause harm. Behavioural change has been approached by different disciplines in unique ways (e.g., psychology, economics, social marketing). Social marketing is not the only discipline to successfully utilise behavioural change to resolve societal problems. Psychology and behavioural economics are among the main disciplines to fruitfully research behavioural change, but each within its framework (Chatterton, 2016). Psychology, behavioural economics, and then social marketing will be discussed as frameworks for behavioural change. In addition, government regulation as a driver to change behaviour will be touched on.

3.1.1. Psychology as a Framework for Behavioural Change

Behavioural science has taken its roots in psychology in the early 20th century. The work conducted by B.F. Skinner did much to advance the theories and knowledge pertaining to behaviour (Chatterton, 2016). Dr Skinner saw the role of psychology in predicting and regulating an individual's behaviour (Department of Psychology, Harvard University, n.d.). He is well known for his research on reinforcement, successive approximations, and the Law of Effect, among other concepts (Department of Psychology, Harvard University, n.d.).

In the 21st century, the behavioural science field has been further expanded by Martin Fishbein and Icek Ajzen (Chatterton, 2016). These scholars discussed a cycle of relationships between beliefs, attitudes, intentions, behaviour and, again, beliefs (Fishbein & Ajzen, 1975). The expectancy-value model presented the role played by expectations and the value of the goal in forming motivation and, in turn, behaviour as a function of motivation (Fishbein & Ajzen, 1975). The theory of reasoned action and the theory of planned behaviour extended the expectancy-value model to include intentions (Chatterton, 2016). According to the theory of planned behaviour, the stronger the intention to perform the behaviour, the more likely it is that the behaviour will occur (Ajzen, 1991). Motivational factors were assumed to be captured in an intention to act (Ajzen, 1991). Here, the intention is influenced by attitude, subjective norm, and perceived behavioural control (Ajzen, 1991). However, some studies found that attitude, subjective norms and lack of perceived control were stronger predictors of behaviour, which aligns with the theory of reasoned action (Towler & Shepherd, 1991). The theory of interpersonal behaviour (Triandis, 1977) is also based on the expectancy-value model, although it considers habit to be a primary factor (Darnton, 2008).

Other psychological and socio-psychological models include the Protection Motivation Model (Rogers, 1975), Norm Activation Theory (Schwartz, 1977), and the Focus Theory of Normative Conduct (Cialdini et al., 1990), among others (for a comprehensive list see Darnton, 2008). Although not complete, Appendix 1 provides a summary of the classification of psychological and socio-psychological theories related to behavioural change. Overall, psychological and socio-psychological theories could be broadly classified into four categories based on the drivers for behavioural change: values, beliefs and attitudes, norms and identity, agency, efficacy and control, and habit and routine (Appendix 1). The social-psychological models provide an understanding of the underlining factors influencing human behaviour as categorized in Appendix 1 (e.g., values) (Darnton, 2008). Although

theoretical models can inform the design of effective interventions, they have their limitations.

3.1.2. Limitations of Social-Psychological Models

One of the limitations of the social-psychological models is their over-conceptualisation. Conceptual models cannot adequately demonstrate why people behave in certain ways in practice (Darnton, 2008; Triandis, 1977). Although the models have strong theoretical grounding, empirical evidence is needed to prove their applicability. Additionally, no single model can account for all influences (Darnton, 2008), especially if a model was built solely on a theoretical foundation. Unless a study includes additional measures (e.g., habits), it may have less predicting power (Towler & Shepherd, 1991). Hence, research that is based on a single theory may need to consider relevant influences (e.g., mood, fear) beyond theory utilised to improve its credibility.

Another possible limitation of theoretical models is that their application may be too broad or narrowed. Based on the research by Maszka (2018), if a model is too broad, it may not account for the uniqueness of each segment. On the other hand, if a model is utilized only to explain philanthropic and environmentally responsive behaviour, it may be difficult to apply it to other types of behaviour, resulting in a limitation of generalisability. Possibly, utilisation of a broad or narrow oriented theory or model depends on the behaviour in question and should be aligned with the objective of research accordingly. Supplementation of a theoretical model with empirical evidence may improve the predicting power of a given behaviour, especially if a behaviour or its context has not been well researched. Theories and models, which had been applied in practice to a variety of contexts may be most suitable for deployment to understand less-explored behaviours. Next, we will look at behavioural economic models and theories.

3.1.3. Economics as a Framework for Behavioural Change

Economics is another discipline that has made a significant contribution to behavioural science. From the perspective of economics, the basic assumption is that underlying human behaviour is a rational choice based on perceived costs and benefits (Mathis & Steffen, 2015; Hedstrom, 1993; Smith, 1887). Rationality is a tacit assumption in economic models and is applied, for example, to the utility maximisation function (Mathis &

Steffen, 2015). The utility theory was introduced by Jeremy Bentham in 1776 (Crimmins, 2019), and was later incorporated into economic theory. According to the principle of utility maximisation, individuals behave in a way that brings them maximum benefits (e.g., satisfaction, happiness) (Stigler, 1950). Traditionally, the utility principle puts an individual at the centre of attention, acting in self-interest (Stigler, 1950).

Similar to the theory of utility maximisation, the rational choice theory places the individual and his/her self-interest at the centre of the analysis (Mathis & Steffen, 2015; Smith & Frowde, 1908). The concept of "methodological individualism" was introduced by Joseph Schumpeter in 1908, and extended by Weber in 1922 (Heath, 2015; Schumpeter, 1909). According to this concept, intentions motivate individuals to act which, in turn, explains social phenomena (Heath, 2015). Schumpeter cautioned that the concept is purely theoretical and should not be applied to "great problems of collectivism and individualism" (Schumpeter, 1909, p. 213). Methodological individualism is limited in the sense that it prioritises the individual's interests, without considering collective welfare (Heath, 2015). Following the complexity of human behaviour, economists continued to explore how individuals make decisions and behave within a subfield called behavioural economics.

Behavioural economics, which emerged in 1976 (Behavioral Economics, 2020), explored the various factors which may influence the rational choice of an individual and prevent utility maximisation. For example, the Theory of Bounded Rationality (Simon, 1957) and Judgement Heuristics (Tversky & Kahneman, 1974), among others, have tried to compensate for limitations of the pure rationality concept. The Theory of Bounded Rationality proposed that decisions are influenced by computational capabilities and the availability of information (Wheeler, 2018). The Judgement Heuristics also strived to extend the concept of rationality by examining decision-making from a more practical perspective. According to this theory, people transform complex tasks (computing probabilities and assessing values) into simple ones by utilising a small number of heuristic ideologies (e.g., adjustment/anchoring) (Tversky & Kahneman, 1974). The Judgement Heuristics provides some insight into the ways that people use shortcuts to make decisions (e.g., Jacobs & Potenza, 1991; Tversky & Kahneman, 1974). Both theories provided more realistic scenarios of the decision-making process while still adhering to the notion of rationality. However, behavioural economists continue to explore limitations of rationality such as risk and uncertainty, inadequate or inaccurate information about alternatives, and the complexity of decisions (Simon, 1972).

Building on the initial work of Bandura (1977), Festinger (1957), and Higgins (1987) among others, Dawnay and Shah (2005) address the limitations of the original rationality concept by examining the main reasons for "irrational" behaviour. Firstly, individual behaviour is influenced by the actions of others; people tend to observe and copy others (e.g., Bandura, 1977). Secondly, the alteration of a habit requires a comprehensive approach (Brown, 1997; Prochaska & DiClemente, 1982). Thirdly, self-expectations (e.g., values) (Festinger, 1957) and self-evaluation (e.g., ideal self) (Higgins, 1987) affect behaviour. Fourthly, people have internal biases such as salience (overestimation of the likelihood of extreme events) (Shleifer et al., 2012; Taylor et al., 1982), discounting (O'Donoghue et al., 2000), framing (Entman, 1993), and defaults (Madrian & Shea, 2001). Other principles used to explain irrationality include "doing the right thing" stimulus (Gneezy & Rustichini, 2000, Frey & Jegen, 2000) and loss-aversion (Kahneman & Tversky, 1979).

As human behaviour is complex, the principles proposed by Dawnay and Shah (2005) indicate areas where the concept of rationality might not accurately reflect human behaviour. Overall, economists have come a long way in explaining human behaviour: from the assumption of rational choice (Smith & Playfair, 1995) to understanding behavioural constraints such as judgement heuristics (Tversky & Kahneman, 1974). One of the methods (from the behavioural economics branch) that recognises the difficulty of transforming instinctive behaviour is a nudge.

3.1.4. Nudge

"Nudging" refers to the utilisation of unconscious processes to prompt an individual to engage in a particular behaviour (Marchiori et al., 2017). Nudge means "to push slightly or gently…, prod someone into action" (Collins English Dictionary, n.d.). The nudge theorists (Thaler & Sunstein, 2009) redefined the original term "nudge" to build a framework for behavioural change.

Within the behavioural change framework, Button (2018) precisely captured the definition of nudging: "nudges refer to interventions on 'choice architecture" by public or private entities that seek to influence individual behaviours in predictable ways that (in principle) preserve freedom of choice without forbidding options or imposing significant material penalties or reward" (pp. 1034-1035). Button (2018) stresses that nudge interventions rely on choice architecture as a method for behavioural alteration. However,

since there is more than one type of nudge, this statement may be questioned. Hence, the main two types of nudging will be explored further.

Nudge as a Choice Architecture Tactic (Classic Nudge). The first type of nudging relies mainly on *choice architecture*. This is the classic nudge that works together with an unconscious or automatic decision-making process and relies on automatic responses. This tactic could be further categorised based on the kinds of human failures it uses. Scholars have identified three categories of nudges, which rely on 1) least resistance/effort, 2) common norms/peer pressure, and 3) identification with an appraised group. None of these nudges uses direct persuasion; instead, they involve unconscious processes (Mols et al., 2015). For example, Erjavec et al. (2021) increased the attractiveness of healthy food choices by improving presentation and using humorous labels and posters. Several choices were offered, but the healthy option was made more visible and attractive. Hence, the students were not persuaded to make a healthy choice; instead, the marketers made it simpler to select the healthy option. On the other hand, educational boosts use persuasion and information to change the target's behaviour.

Nudge as an Educational Boost. In contrast to the classic nudge, which uses indirect suggestions, this nudge (referred to as an "educational boost") tries to *override automatic responses* (Amir & Lobel, 2008) or "boost" education (Button, 2018; Grüne-Yanoff & Hertwig, 2016). This latter type of nudging encourages people to think more about their options and steers them toward the "right" decision. An example could be nudging people to save more for retirement. In this case, a nudge might try to decrease the psychological distance of retirement (e.g., from far in the future to the present) by providing the target audience with a timeline. If a classic nudge was being used in this case, the marketers would try to make saving for retirement easy (e.g., defaults), alluding to common norms or a particular group (e.g., most of your colleagues save 7% of salary). While classic nudges rely on choice architecture and automatic response, educational boosts rely on persuasion.

Classic Nudge versus Educational Boost. A classic nudge and an educational boost rest on basically dissimilar research programs (Grüne-Yanoff & Hertwig, 2016). The nudge concept assumes bounded rationality, whereas the educational boost accepts that people make good enough decisions (Grüne-Yanoff & Hertwig, 2016). Furthermore, the two approaches act in a very different way: the nudge bypasses the cognitive system, and the boost explores the reasoning mechanisms. The boost strengthens cognitive ability, encourages independent thinking, and helps people to make well-considered decisions. However, the classic nudge

does not have empowerment and learning effects since it does not involve cognitive competence.

Despite the two different types of nudges (choice architecture and educational boosts), the most recent literature refers to nudges as being the utilisation of mainly unconscious processes (classic nudges) (Button, 2018; Marchiori et al., 2017). Specifically, Marchiori et al. (2017) explain that nudging uses methods to deliberately alter an individual's behaviour by stimulating an automatic decision-making process through choice architecture. In summary, most of the behavioural literature considers nudges as tactics that are intended to influence choices (e.g., Marchiori et al., 2017). For this thesis, further discussion will focus on classic nudges only. While there is evidence of the positive impact of nudges, the longer-term effects raise questions.

Evidence of Nudge Impact. The popularity of the "nudge" as a means of producing a behavioural change is increasing. Since 2009, the nudge has been expanded to include multiple dedicated global nudge units to examine behavioural change (Frey & Gallus, 2016). Moreover, the nudge concept is attracting an increasing amount of research interest, evidenced by the fact that the number of annual publications on nudge[4] has more than doubled in the last decade (6,360 in 2010 to 14,800 in 2020 (Google Scholar, 2010 and 2020). Nudges focus on practical ways to bring about behavioural change (Hallsworth & Sanders, 2016) at a low cost (French, 2011).

There is an abundance of evidence to show that nudges could be successful in the short term, as indicated by a meta-analysis review of data collected for 2004-2014 (Arno & Thomas, 2016). The analysis provided quantitative evidence from health-related interventions (RCT (N=31), cross-sectional (N=9), and cohort (N=2)), showing that nudge positively improves dietary choice by about 15% (Arno & Thomas, 2016). A recent set of experimental evidence revealed that nudges could promote healthier (vegetarian buffet) options through default options in the short term (Hansen et al., 2021). However, the long-term effect of nudging is a matter of discussion.

As noted by Pickler (2019), what happens when the reminders and incentives nudging the target toward a particular behaviour are terminated? Can behaviour be changed sufficiently to withstand the termination in the long run? Numerous scholars argue that nudges cannot have a long-term impact (Chriss, 2015; Cotterill et al., 2012). According to Mols et al. (2015), to achieve a permanent behavioural change, the change should be

[4] "nudge" as a keyword

internalised rather than altered subconsciously (e.g., common norms, defaults). There is limited evidence suggesting that nudges alone could produce a sustainable behavioural shift (Cotterill et al., 2012).

Although nudges could provide part of the solution, interventions are needed that address the roots of unfavourable behaviour to ensure long-term results (French, 2011). Hence, because nudges may produce short-term benefits, if behaviour needs to be changed permanently or for a longer period, it may be necessary to implement complementary strategies such as those offered by social marketing. In addition, if a specific behaviour poses a great risk to society, government policies may be necessary to stimulate the change (Ly, 2013).

3.1.5. Government Regulation as a Driver of Behavioural Change

Within the framework of behavioural change, the problems affecting a broader section of society could take priority over individual interests (e.g., air pollution, poverty, universal primary education) (Chatterton, 2016). In the case of public smoking or driving under the influence of drugs or alcohol, governments have passed laws to deter people from engaging in behaviours that could place lives at risk and punishes such behaviours with, for example, heavy fines or jail time. In these cases, the government takes a hard-line approach to bring about behavioural change, rather than using choice architecture to encourage people to make better choices.

It is argued that the government should take responsibility for discouraging behaviours that may be harmful to others (Kelly, 2016). However, in doing so, governments often must strike a balance between individual freedom and what is better for society (Kelly, 2016). An example of a hard-line law that restricts personal freedom is a law that criminalises abortion. Some states in the U.S.A. have banned abortions altogether or restricted them (Tavernise, 2019). This top-down approach (government designed and initiated) received strong opposition since women now have limited access to the procedure (Tavernise, 2019). A more recent example of a regulation that restricted personal freedom was the limitation of movement (quarantine and lockdown) to contain the spread of COVID-19 (Chemerinsky, 2020; Hofverberg, 2020). In the case of quarantine, the response of the public varied with many protests held across the U.S.A. (Wikipedia, 2021; BBC, 2020).

However, behavioural change interventions could be better received if the desired change is identified by the intended beneficiaries themselves (e.g., Owens et al., 2011). In

this way, the change is co-designed with the intended audience and is a bottom-up, participatory approach. As such, social marketing parallels the participatory bottom-up approach (e.g., Hull et al., 2014; Domegan et al., 2013; Smitasiri et al., 1992). For example, in the case of the Human Papilloma Virus (HPV) vaccine, marketers first explored opinions, multifaceted beliefs, attitudes, and perceptions (Hull et al., 2014). During the interviews, researchers also studied product, place, placement and promotion factors (Hull et al., 2014). The marketers uncovered critical insights for forthcoming interventions. They found that mothers would feel more comfortable if the HPV vaccine were marketed for both genders and parcelled together with other pre-teen vaccines (Hull et al., 2014). In this instance, researchers understood the needs of the audience and the obstacles to the intervention from the audience's perspective and co-designed the intervention with the targeted population. Even so, a hard-line approach for behavioural change may be necessary at times, social marketing offers a bottom-up participatory method as an alternative.

3.1.6. Social Marketing as a Framework for Behavioural Change

Social marketers recognise the importance of a bottom-up approach and utilise consumer orientation in their methods (Key & Czaplewski, 2017; Domegan et al., 2013; Thackeray & Neiger, 2009). These approaches empower the target audience by involving them in the design of solutions that will address their needs (Saunders et al., 2015). Social marketing research begins with an understanding of the needs, wants, motivations and environments of the population in question (Lefebvre, 2011). The SMF offers a range of tools to bridge the gap between social and individual interests by deploying an extensive and strategic marketing protocol (Tapp & Rundle-Thiele, 2016). Unlike other disciplines, social marketing provides benefits to the market based on the understanding of the current behaviour, environments, and the cost of new behaviour for the target audience (Lefebvre, 2011). To better understand the concept of social marketing, we will explore its definition and conceptual development.

Definition of Social Marketing. Originally, the term "social marketing" was established by Kotler and Zaltman (1971) and the idea was extended by Andreasen (1994). Kotler and Zaltman (1971) defined social marketing as "…the design, implementation, and control of programs calculated to influence the acceptability of social ideas and involving considerations of product planning, pricing, communication, distribution, and marketing research" (Kotler & Zaltman, 1971, p.5). Andreasen (1994) explained that social marketing

adapts commercial marketing knowledge and strategies and stimulates voluntary behavioural change for the wellbeing of a targeted segment of society as well as society in general. Andersen's definition explains the essence of social marketing, whereas Kotler and Zaltman provide specifics.

Conceptual Development of Social Marketing. Originally, social marketing made its appearance as social advertising (Fox & Kotler, 1980), although social marketing is not a social advertisement (Hastings, 2007). A social advertisement can motivate people to change in the short term (Brader, 2005), but information alone may not be enough to produce long-term behavioural change (Fox & Kotler, 1980). Since a social advertisement often omits the reasons for people engaging in "bad" behaviour (e.g., lack of funds), the advertisement does not address the audience's concerns (Fox & Kotler, 1980). Moreover, a social advertisement may be urging a change, but gives little or no indication of how this can be done (Fox & Kotler, 1980). As a result of these limitations, social advertisements became social communication (Thackeray et al., 2012; Fox & Kotler, 1980) and then social marketing (Kotler et al., 2006.

Social communication retained some of the elements of the advertisement but also included more promotional techniques (Fox & Kotler, 1980). To this day, there is a debate on what social marketing should contain, as shown in Table 1 (Truss et al., 2010).

Table 1 *Social Marketing Program Development*

Citation	Social marketing program development steps:
Kotler and Zaltman (1971)	Product, price, place, promotion (aka the four Ps)
Fox and Kotler (1980)	Marketing research, product development, the use of incentives, facilitation
Andreasen (1994)	Basic education, value change, attitude change, motivation to act, training and reinforcement
McKenzie-Mohr (2000)	Activity to market, barriers, program design, piloting, evaluation
Kotler et al. (2006)	Segmenting, targeting, positioning

Over time, however, social communication developed into social marketing which is a more comprehensive approach intended to address social change (Kotler et al., 2006; Fox & Kotler, 1980). Originally, the social marketing approach consisted of marketing research,

product development, use of incentives, and facilitation (Fox & Kotler, 1980). However, the main elements of social marketing (marketing research, segmentation, marketing mix and consumer-centred approach) have remained the same since the 1980s (Lefebvre, 2012). However, current literature shows that applications of the framework vary based on sector, country, and context (Truong, 2014). Moreover, transformative consumer research (TCR) has provided fresh ideas about the application of social marketing (Russell-Bennett et al., 2019) while the relationship between social marketing and the TCR reminds entangled.

Transformative Consumer Research and Capability Approach. The TCR is an action-based approach, encompassing the social problem in question, which aims to improve the well-being of consumers (Mick, 2006). TCR acknowledges that consumers generate meaningful insights on ways to address their needs (Mick et al., 2012). Hence, the TCR partners with consumers not to only identify the desired behavioural change, but also to inform marketing tools that stimulate that change. The TCR commits to core quality investigations that consider environments, improve well-being, and partner with consumers to identify desirable behaviour (Mick et al., 2012).

Although the core qualities of TCR are not new to social marketing, TCR provides a practical approach to address specific social issues/opportunities related to well-being (Mick et al., 2012). Lefebvre (2012) explored core ideas within transformative social marketing. When working with "at-risk" populations, social agents must try to follow the best framework principles, which are explained as follows. Firstly, the notion of respect calls for empathy and understanding (Lefebvre, 2012). Secondly, together, marketers and participants should co-create long-term sustainable solutions that cater to stakeholders' (e.g., customers, partners, communities) needs and maximise opportunities (Lefebvre, 2012). In addition, marketers should make hope visible by providing value to the customers and building trusting relationships with them (Lefebvre, 2012). These main ideas of the TCR may compliment the SMF, especially while working with vulnerable participants.

Evidently, the TCR values freedom of choice and social justice, which is also apparent in the capability approach (Saunders et al., 2015; Mick et al., 2012). Both frameworks (the TCR and the capability approach) are consumer-oriented and strive to provide consumers with the most benefits. However, the capability approach expands the focus of the TCR by highlighting the importance of evaluating the social outcome of the behavioural change (e.g., more satisfying life) (Saunders et al., 2015). Influenced by transformative consumer research (Ozanne, 2011) and the capability approach (Sen, 1999) a revised meaning of social marketing emerged. In this newer meaning, social marketing agents

attempt to evaluate the success of campaigns based on social transformative indicators (Saunders et al., 2015), especially in the long term.

Evidence of the Impact of Social Marketing. Influenced by the capability approach and TCR, social marketers stress the importance of evaluating the *outcome(s)* of a behavioural change (e.g., more satisfying life or healthier self) (Truong et al., 2019; Saunders et al., 2015; Gordon et al., 2006). Social marketing agents attempt to motivate people to change their behaviour voluntarily (Kotler & Lee, 2009; Goske et al., 2008). Constructive approaches and tools are utilised to influence the behaviour of the target audience so that it is advantageous for the target audience and society (Kotler & Lee, 2009). To illustrate, in the case of residential energy efficiency, the social marketing approach has been effective in reducing energy consumption (Anda & Temmen, 2014). The intervention was beneficial to consumers (lower electricity bill), electricity retails (better customer relationships), and electricity generators (lower generation requirements) (Anda & Temmen, 2014). Overall, behavioural change instruments have been successful in motivating people to alter their behaviour for their own good and the well-being of society (Anda & Temmen, 2014, Gorn & Goldberg, 1982).

However, the concern is that the success of social marking campaigns is defined more by a change in behaviour and less by social consequences (Saunders et al., 2015). For example, in the case of residential energy, although energy savings most likely benefited the environment and societal wellbeing, social consequences were not explicitly measured (Anda & Temmen, 2014). Hence, this intervention was fruitful in terms of behavioural change, but in terms of social benefits, the outcome is less clear. The success of a campaign may be measured by its social impact (Saunders et al., 2015) as the goal of social marketing is to improve the wellbeing of the target population (Andreasen, 1994).

Moreover, recent literature emphasises systematic, long-term (e.g., Kennedy & Santos, 2019) and more rigorous evaluations (Firestone et al., 2017). A systematic literature review revealed that most social marketing interventions (e.g., smoking, illicit drug, and alcohol usage) are successful in the short term (Stead et al., 2007). The longer-term evaluations of the impact (more than one year) were presented in about half of all studies reviewed (Stead et al., 2007). The social marketing approach has utilised qualitative (Truong & Dang, 2017) as well as experimental and quasi-experimental designs (Firestone et al., 2017). In summary, social marketing campaigns could be successful in both the short and long terms (e.g., Stead et al., 2007). The adaptation of quantitative methods, which evaluate short- and long-term impacts complements already-established qualitative evidence.

Overall, social marketing is a consumer-oriented comprehensive approach, which co-creates value with stakeholders for the well-being of individual consumers and society in general. Social marketers strive to design and implement effective strategies that will motivate people to change their behaviour. The goal is to achieve sustainable socially desirable results. Marketers view the change in a social outcome as an indicator of success, rather than measuring success by the behavioural transformation solely. Social marketers have been successful in changing behaviour and impacting social outcomes in low-income communities as shown with examples in the next section.

Social Outcomes of Social Marketing Applications in Developing Countries. In the past, social marketing has been applied to issues such as public and environmental health, education, and protection of human rights (Kindra & Stapenhurst, 1998) as shown in Table 2.

Table 2 *Social Marketing Application*

Cause	Example
Public health	smoking, alcoholism, physical fitness, hard drugs, obesity, nutrition, immunization, sanitation, safe sex, birth defects, driving safety
Education	literacy, work skills, personal development, retraining
Environment	clean water and air, water and energy conservation, recycling, protection of animals and plants
Individual and group rights	sex and race equality, abuse of children, abortion rights, fair play in sports
Social entrepreneurship	training of farmers, product innovation, self-employment opportunities

Note. Adapted from "Social Marketing Strategies to Fight Corruption," by G. Kindra and R. Stapenhurst, 1998, *International Bank for Reconstruction and Development for the Economic Development Institute of the World Bank*; "Application of Social Marketing in Social Entrepreneurship: Evidence from India," by Singh et al., 2015, *Social Marketing Quarterly, 21*(3).

Social marketers deploy different practices to challenge social issues based on multiple factors (e.g., characteristics of the targeted population, environments, obstacles to change). Where there is a lack of adequate information, communication about the benefits of

things such as the boiling of water, breastfeeding, and treatments for diarrhoea, is a powerful means of changing behaviour (Fox & Kotler, 1980). In other cases, when people are already well-informed and desire the change, motivation (Fox & Kotler, 1980) and the provision of instruments to change the behaviour are more favourable tools. Social marketing utilises a comprehensive approach and deploys the most appropriate tools for advancement (to improve understanding or boost motivation). The following cases provide examples of social marketing applications (communication and motivation) and their impacts.

(i) Malaria (Zambia): communication

In a quasi-experimental study, researchers tried to increase the usage of mosquito nets in rural Zambia. The barriers to the usage were identified as misinformation on how malaria spread and how one could be protected from it (Agha et al., 2007). In addition, the price of bed nets was too high (27USD) and rural areas lacked distribution channels (Agha et al., 2007). The researchers partnered with government clinics and community volunteers to overcome barriers and increase the usage of nets (Agha et al., 2007). The social marketing intervention had the desired effect in terms of making the nets more accessible and imparting knowledge about malaria and its prevention (Agha et al., 2007). Still, the monetary barrier persisted: the price was too high for 92% of the poorest respondents (Agha et al., 2007). However, because of the intervention, there was an increase in the usage of bed nets among those who were better off (Agha et al., 2007). Longer-term effects (more than 12 months after intervention) were not measured.

(ii) Violence against women (South Africa): motivation (for the government agency) and communication (for women)

This campaign was launched to reduce violence against women and to reinforce the Domestic Violence Act by involving politicians, public servants, victims, and the public (Donovan & Vlais, 2005). The campaign had different messages for each target group. For example, for women, the agents advocated that violence is wrong and it is against the law (Donovan & Vlais, 2005). The campaign included an educational television series, a daily radio drama, printed information in the newspaper, and a booklet (Donovan & Vlais, 2005). Other related interventions were organised in partnership with communities, and private and not-for-profit companies. These complementary interventions included media advocacy, community mobilisation events, and a 24-hour helpline (Donovan & Vlais, 2005). As a result of the campaign, federal and state governments were pressed to fast-track the implementation and reinforcement of the Domestic Violence Act. The public acquired knowledge about domestic violence, the rights of the victims, and where help could be

obtained (Donovan & Vlais, 2005). The campaign also improved women's self-confidence and sense of self-worth and enforced a positive identity (Donovan & Vlais, 2005). Longer-term impacts had been reported.

(iii) Condom use (Mozambique): communication

The Jeito campaign was intended to contain the AIDS epidemic (Pfeiffer, 2004). However, the agents failed to include in the campaign's design the main stakeholders: communities and churches (Pfeiffer, 2004). As a result, churches spread a contradictory message about condom use (i.e., advocating for no condom use). Church prohibited the use of condoms as they saw condoms as a source of immorality and prostitution rather than a protective measure aligned with moral ideologies (Pfeiffer, 2004). Another hurdle that Jeito faced was the ignorance of the target population regarding the spread of HIV/AIDS (Pfeiffer, 2004). Some people in the targeted population believed that condoms promote promiscuity and promiscuity itself causes AIDS (Pfeiffer, 2004). In this instance, the agents left the intended recipients and their communities out of the campaign's design, which resulted in contradictory messages and misunderstandings. Despite the obstacles, the reported use of condoms increased (Pfeiffer, 2004). However, systematically repeated evaluations may be needed to determine the long-term impact of the program given the strong church opposition (Pfeiffer, 2004).

(iv) Income increase (India): communication and motivation

The Sammaan Foundation used product innovation to increase the income of rickshaw-pullers and expand equipment ownership (Kachru, 2011). The agents redesigned rickshaws to be lighter, more comfortable for the passengers, and able to accommodate small items for sale and advertising boards (Kachru, 2011). The foundation was able to secure key partnerships (e.g., bank loans for rickshaw-pullers) which helped the campaign to prosper. The campaign was successful as more than 300,000 pullers registered with the Sammaan, worked toward owning the rickshaw and earning higher wages (Kachru, 2011). Longer-term outcomes had not been evaluated.

(v) Breastfeeding (Bolivia, Ghana, and Madagascar): motivation

A large-scale behavioural intervention has been conducted across Bolivia, Ghana, and Madagascar intended to increase breastfeeding (Quinn et al., 2005). The intervention was based on formative research. "Do-able actions" included interpersonal communication along with community activities and mass media promotion targeted appropriately for each segment and country (Quinn et al., 2005). To evaluate the impact, families with children less than two years of age were surveyed (Quinn et al., 2005). In all three countries, immediate

breastfeeding (within one hour of birth) significantly increased (Quinn et al., 2005). Exclusive breastfeeding from 0-6 months also showed positive results in all countries (Quinn et al., 2005). Longer-term effects persisted in Ghana and Madagascar (Quinn et al., 2005). Overall, this large-scale campaign was able to make significant improvements in breastfeeding (in the short and long terms).

As indicated by the examples above, social marketing can be applied to a range of social issues (e.g., malaria) in developing countries by utilising effective communication and motivational techniques. However, the success of any campaign depends on multiple factors such as the removal of barriers (Agha et al., 2007), appropriate communication (Donovan & Vlais, 2005; Quinn et al., 2005), the involvement of main stakeholders (Pfeiffer, 2004), and solid partnerships (Quinn et al., 2005; Kachru, 2011).

These examples illustrate that social marketing can successfully address societal issues even in developing areas in the short and long terms. The wider literature also supports the claim that the SMF can successfully address social issues in the rural areas of developing countries (Sulistyaningsih et al., 2021; White & Livingston, 2018; Farrell & Gordon, 2012; Sweat et al., 2012; Witkowski, 2007; Duhaime et al., 1985). For instance, a systematic literature review (1990-2010) on the effects of SMF on condom use in developing countries found a significant positive effect (Sweat et al., 2012). Another literature review suggests that social marketing methods have the potential to reduce alcohol consumption in developing areas (Farrell & Gordon, 2012).

In summary, social marketing research, participatory methods and rigorous evaluations (short and long terms) provide the basis for an impactful operation. The context of the study must be well-understood to inform the focus of the campaign (e.g., communication vs motivation). The next section will consider the context of the study and will explain how a shift in behaviour can be achieved together with the resolution of a social issue. Namely, the intervention is intended to increase parental involvement (behavioural shift) as a means of improving the academic achievement of children (societal outcome), especially those experiencing extreme poverty.

A summary

This section (first of the four in the Review of the Literature) mainly discussed literature on behavioural change, including psychological models and the SMF. Psychological models attempt to explain human behaviour through the analysis of attitudes

(Ajzen, 1991), subjective norms (Towler & Shepherd, 1991) and intentions (Triandis, 1977), to name a few. On the other hand, economics purports to explain human behaviour from the perspective of rationality (Smith, 1887). However, economists soon realized that several factors may influence rational choice, such as computational capabilities and availability of information (Wheeler, 2018). Scholars continued to propose theories that better reflect a real-life decision-making process, which gave rise to the nudge theory (Thaler & Sunstein, 2009). According to the nudge theory, individuals can be steered toward a favourable option in response to unconscious appeals (Mols et al., 2015). While nudges have a positive short-term impact (Arno & Thomas, 2016), longer-term impacts are less evident (Chriss, 2015). To achieve longer-term effects, nudges may work together with means of persuasion such as social marketing which addresses the cause of undesired actions. This section discussed social marketing in detail, given that this is a comprehensive consumer-oriented approach. We also discussed the long- and short-term effects of applying social marketing in developing countries and rural areas (Sulistyaningsih et al., 2021; White & Livingston, 2018; Farrell & Gordon, 2012; Sweat et al., 2012; Witkowski, 2007; Duhaime et al., 1985). The next section comprises a detailed discussion of the application of the SMF to parental involvement.

3.2. Behavioural Change in Parental Involvement and Children's Education in Zambia: Application of SMF

This section discusses the application of SMF to improve parental involvement and academic achievement. After analysing the obstacles impeding academic achievement, an argument is made that parental involvement is a sustainable and low-cost means of improving the academic achievement of children in Zambia. Next, the barriers to parental involvement, and the strategies that can be applied to overcome them, are presented. Lastly, given the complex relationship between behavioural change (parental involvement) and its outcomes (soft skills, academic achievement, higher income), this section reviews each of the variables.

3.2.1. Barriers to Academic Achievement

The World Bank suggested that 2018 be dedicated to education since this is critical to the alleviation of poverty (World Bank, 2018a). In attempts to reduce poverty and increase self-sufficiency, low-skilled subsistent marketplaces have been striving to develop a more skilled workforce (Gau et al., 2014). More precisely, achievements in education have been pursued in hopes of increasing skills and, therefore, income in adulthood (Tebaldi et al., 2017; Blaug, 1972). However, in the case of Zambia, about 90% of second graders and 80% of third-graders cannot read a single word (RTI International, 2015). Since such inadequate outcomes of learning hinder the acquisition of the skills required in the workplace (World Bank, 2018a), the quality and level of education in Zambia must be addressed. In this regard, there are several obstacles to be overcome, especially in regions where there is extreme poverty.

Academic achievement is affected by factors such as teachers' qualifications (World Bank, 2018a), quality of educational services (Ma et al., 2018), lack of enrichment programs for the disadvantaged students (Futrell et al., 2004), and the availability of learning materials (World Bank, 2018a). Furthermore, the poorest households cannot afford to spend much on education (Boyle et al., 2002). After paying for uniform and school fees, many families find it difficult to buy extra educational resources or invest in enrichment programs. In Zambia, the main reason for children not attending school is their parents' inability to cover direct costs such as fees, uniform, etc. (Boyle et al., 2002). Similarly, qualifications of teachers, quality of a school, and availability of enrichment programs at school may be inaccessible to

families, especially in remote rural areas (Boyle et al., 2002). Due to the lack of other schools in the area, 55% of households in Zambia are unable to change schools (Boyle et al., 2002).

Other barriers to academic achievement may include lack of savings for education (Fang et al., 2018), access to books at home (Peterson et al., 2018), language barriers (Peterson et al., 2018), inadequate understanding of educational policies (Aref, 2012) and school requirements (Peterson et al., 2018); and lack of parental involvement (Futrell et al., 2004). In the context of extreme poverty, where 80% of children in rural areas live on less than 0.40USD per day (Ministry of National Development Planning, Zambia, 2018), anything which requires additional funding from parents most likely will be a persistent barrier as parents may find it impossible to save for their children's future education or to buy additional books for home use. Non-monetary barriers such as the language barrier (in Zambia, most rural parents do not comprehend English, which is the main language in school) and lack of understanding of educational policies and school requirements may necessitate long-term centralised interventions. However, even with persisting monetary and non-monetary barriers, parents may still be able to help their children to increase academic achievement by encouraging regular attendance (Gottfried, 2010) and homework completion (Avvisati et al., 2014); in other words, becoming more involved in their children's education.

3.2.2. Parental Involvement and Education

Past studies have found that parental involvement has a positive impact on children's ability to succeed in education (e.g., Kim, 2020; Otani, 2020; Day & Dotterer, 2018; Suldo et al., 2018; O'Hehir & Savelsberg, 2014). Various parental practices (volunteering in a school, limiting outings on school nights and discussing plans) were found to be beneficial to academic achievement across a variety of racial/ethnic groups (Day & Dotterer, 2018). Moreover, authoritative parenting, which is an emotionally supportive and consistently demanding style of parenting, predicted positive educational outcomes for students (e.g., GPA, AP/IB exam scores) (Kim et al., 2018; Suldo et al., 2018). Moreover, parental attitudes were shown to have a positive impact on academic achievement (mathematics) (Cui et al., 2021). Given the different types of parental involvement (e.g., help with homework, parental aspirations) this thesis will discuss barriers to parental involvement and explore how parental involvement could be increased with low-cost, sustainable, and easily adaptable solutions.

3.2.3. Barriers to Parental Involvement

Generally, parents in Zambia had little involvement in their children's education (Arat & Wong, 2016; Svenson et al., 2008). The obstacles to involvement include family factors, child's characteristics, parent-teacher relationships, and societal environment (Hornby & Lafaele, 2011). Evidently, issues such as child's disabilities and demographic factors could not be changed. Other challenges such as the school's policy and child's behavioural characteristics could be changed in the long run, but most individual and family dynamics could be manipulated more easily.

Hornby and Lafaele (2011) discussed various barriers to involvement such as parents' perceptions of parental involvement, their attitudes towards becoming more involved, and their current family circumstances. The field research following the original paper (Hornby & Lafaele, 2011) revealed other family-related obstacles such as parents' own negative experiences as students, parents' illiteracy, financial hardships, and mental problems (Hornby & Blackwell, 2018). In addition, lack of time and conflicting work demands were found to be the main reasons for lack of parental involvement (Brock & Edmunds, 2010). Evidently, obstacles impeding involvement were related to individual issues, and to understand the causes of under-involvement, researchers must segment the population carefully.

In this regard, Hornby and Blackwell (2018) and Brock and Edmunds (2010) found several obstacles to involvement in developed countries (the United Kingdom and Canada, respectively), that were vastly different from those in impoverished and underdeveloped areas. For example, in South Africa, obstacles to involvement included lack of transportation and inability to contribute financially to fundraising or to purchase extra educational materials (Michael et al., 2012). And in rural Zimbabwe, parents' lack of education, unfavourable teachers' attitudes toward parents, and inadequate communication between school and parents had caused under-involvement (Chindanya, 2011). Also, low-income parents may feel disempowered by their financial position and see the school as intimidating (Smit & Liebenberg, 2003). Overall, it was found that low-income parents are unable to become involved due to poor literacy (Hornby & Blackwell, 2018), low self-esteem (Michael et al., 2012) and not knowing how to be involved (Michael et al., 2012). Unsurprisingly, low-income parents do not feel the need to be involved (Michael et al., 2012). However, several strategies can encourage parental involvement even among the most vulnerable population.

3.2.4. Strategies to Increase Parental Involvement

Communication between parents and school is often identified as an area that needs to be improved (e.g., Berry, 2019). Effective communication from a school can encourage parents to make parental involvement a priority (Brock & Edmunds, 2010), improve parent-teacher relationships (Goss, 2019), make parents feel welcomed (Berry, 2019), and set more accurate parental beliefs about child's efforts (Bergman, 2020; Dizon-Ross, 2019). Parental involvement could be encouraged by applying some of the approaches and communication strategies as described below.

Regulations. Since the lack of parental involvement does not present immediate risks for society, systematic regulations may not be appropriate to initiate behavioural change (Ly, 2013). The economic incentives (e.g., taxes, grants) are appropriate when the benefits of a changed behaviour are clear and realised in the short term (Ly, 2013). However, the fruits of parental involvement (e.g., academic achievement, higher income in adulthood) may provide a longer-term incentive. Moreover, public agents must foresee the need to intervene in advance. Since little formal research has been conducted on parental involvement in Zambia, public servants have little evidence on which to base policies and decisions. Regulations could come after soft approaches have been utilised (e.g., social marketing or nudging) and sufficient evidence has been obtained.

Nudging. Nudging could complement regulations and increase the effectiveness of public policies already in place (Hallsworth & Sanders, 2016). For example, nudge researchers worked with existing hospital practices to increase the regularity of tuberculosis medicine intake in Moldova (The Behavioural Insights Team, 2019). The agents effectively increased compliance rates by changing the way that doctors and nurses supervise patients' treatments (The Behavioural Insights Team, 2019). Another example of nudge working with existing policies is teachers' placement in rural areas of Australia. The agents replaced a paper application with an online form (The Behavioural Insights Team, 2019). This resulted in an increase of applicants for rural positions (The Behavioural Insights Team, 2019).

However, in rural Zambia, there is limited top-down influence on encouraging parents to be involved. For example, there is a homework check policy in Zambia requiring parents to sign a slip verifying that a child has done the homework (exploratory studies, 2019). Then if parents are encouraged to be involved in homework (Kambilima, 2014), there is no trace of homework policy for parents in the Teacher's Guide (Republic of Zambia Ministry of General Education, 2015). The absence of written guidelines provided by government

agencies to the teachers means that there may be inconsistencies among schools regarding the homework policy. Moreover, since 18% of parents (24% for females) are illiterate (World Bank, 2019b), homework checks as means of involvement may not be effective. There is little doubt that illiteracy is greater among the rural population, although there are no official statistics for this sector of the population (exploratory studies, 2019). Hence, the checking of homework by rural parents may be even less feasible than for urban parents.

Existing policies in Zambia are inadequate as a means of encouraging parental involvement. Hence, nudging as a behaviour-changing technique has no policy to work with. Another limitation of the nudging approach is that someone (e.g., policymakers) must decide what is the "right" behaviour (Barr, 2015). Since there is a massive income gap, especially between urban and rural areas (World Bank, 2018b; Central Statistical Office, 2016), the deciding agents might not fully comprehend the environment of a target population. Hence, it is essential to acquire a contextual understanding to determine whether the prescribed behaviour is feasible and appropriate, or whether it should be altered.

SMF. The flexible and comprehensive framework of social marketing enables complex behaviours and challenging environments to be considered. The SMF[5] relies on multiple disciplines (e.g., psychology) to effectively design programs (Smith, 2006). Hence, agents should segment the population to understand each sector's needs and wants, and the factors that might impede the success of a program.

As communities have different characteristics which influence their behaviour, the knowledge of the difference helps agents to segment the population and to choose the most effective marketing strategy (Smith, 2006). After agents have segmented the population, understood the local background well, and chose the targeted segment, the marketing mix could be developed. The marketing mix is what distinguishes social marketing from purely communication or advertisement approaches (Smith, 2006). Since 1971, the 4Ps have been known as product, price, place and promotion (Kotler & Zaltman, 1971). These 4Ps make up the marketing mix (Smith, 2006). Next, social marketers together with stakeholders design a product that suits the targeted segment and is conducive to producing a desired new behaviour. Then the agents competitively price the product (which competes with the old behaviour). After that, the distribution channels are created (place). Lastly, promotion is designed to remove the barriers (Smith, 2006). The promotion may include events,

[5] The SMF discussed in section 3.1.6.

advertisements, and meetings. As briefly shown, SMF is a comprehensive and consumer-oriented approach.

In this consumer-centred approach (Lefebvre, 2012), the value and solutions are co-created with the customers (Lefebvre, 2012; Smith, 2006). Participation is critical as the exchange of values helps to achieve voluntary behavioural shifts at a low cost (Smith, 2006). Hence, social marketing can complement education and is appropriate when top-down approaches (e.g., regulations) are unfeasible/ineffective (Tapp & Rundle-Thiele, 2016).

Above, three possible approaches that could increase parental have been discussed: regulations, nudging and the SMF. There are three reasons that the SMF approach, rather than regulations and nudging, is the most appropriate strategy for encouraging a behavioural shift that will increase parental involvement in rural Zambia. First, since little research has been done in rural Zambia, contextual understanding must be acquired (e.g., needs, barriers) and the SMF offers comprehensive means to do so. Second, there is no public policy that encourages parental involvement; hence, the top-down approaches (e.g., regulations, nudging) are not possible. Third, the solution must be inexpensive and sustainable due to the high levels of extreme poverty. And in the case of regulations, the solution may be costly. The hypothetical social marketing strategy was adopted from Smith (2006) and other sources to guide the application of the SMF in the current thesis (Appendix 2).

This section identified several factors that impeded the parental involvement of low-income families; these factors include parents' low literacy level and the unsatisfactory communication between school and parents. In general, parental involvement could be increased with regulations, nudging or a social marketing approach. However, in the case of Zambia, there is little evidence regarding parental involvement, so a comprehensive approach must be taken to understand and cater for the local context. Due to the lack of public policy on parental involvement, top-down approaches (e.g., regulations, nudging) may not be appropriate. Social marketing provides a comprehensive consumer-centred approach that aims to produce a voluntary shift in behaviour. The proposed social marketing strategy was discussed to guide field research in Zambia.

In the case of Zambia, an increase in parental involvement could improve academic achievement, which in turn could significantly increase adults' income (Central Statistical Office, 2016). Parental involvement means participating in a child's life, and includes but is not limited to having conversations, taking an interest in a child's activities, and setting academic goals together. As noted, there are various barriers to parental involvement as

several factors must be considered. To design effective behavioural change, it is essential to first understand the various conceptualisations of parental involvement.

A summary

This section (second of the four in the Review of the Literature) primarily established how the SMF could be applied to improve societal outcomes (e.g., academic achievement) within the context of the thesis. This section discussed monetarily (e.g., purchasing of books) and non-monetary barriers (e.g., lack of parental involvement) to academic achievement. While addressing monetary barriers is outside the scope of this work, academic achievement could be effectively stimulated by overcoming a non-monetary barrier: low parental involvement (e.g., Kim, 2020). Due to the lack of public policy on parental involvement top-down approaches (regulations or nudging) may not be effective in stimulating a behavioural shift. Also, since little research has been conducted on parental involvement in rural Zambia, a comprehensive approach must be installed to understand the local context. Hence, this section made an argument that SMF should be applied to stimulate a behavioural change and social marketing communication is the most suitable tool to improve parental involvement in rural Zambia. The next section will explore the theoretical grounds for the thesis and demonstrate possible components of parental involvement.

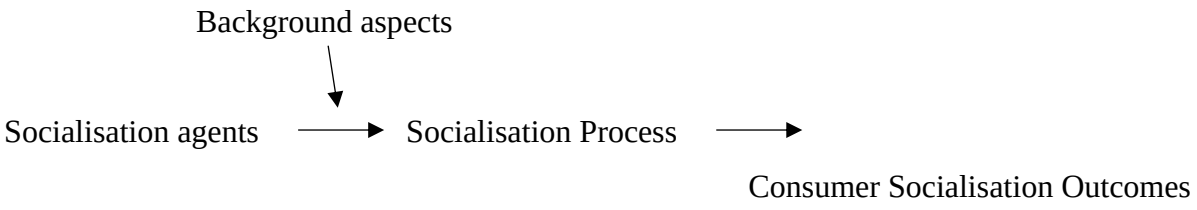
3.3. Parental Involvement

This section establishes parents as socialisation agents and explains why parents are in a favourable position to teach their children how to consume educational services effectively. Since parental involvement is a multifaceted concept, this part of the thesis discusses its components. Lastly, we justify why in this thesis we included parental involvement as a multidimensional construct.

3.3.1. Parents as Socialisation Agents

According to consumer socialisation theory, parents are the primary socialisation agents for their children (Moschis, 1985) because of the biological nature of the parent-child connection, the strong bond between parents and children, social expectations, living proximity, and parental ability to alter their children's environments (Grusec & Davidov, 2006). Hence, parents are in a unique position to shape children's attitudes and teach them appropriate behaviours. Parents have a significant influence on the formation of consumption attitudes among youngsters (Mikeska et al., 2017; Palmer et al., 2001). Parents transfer their knowledge when socialising with their children, intending to achieve a favourable outcome (Figure 6 and Figure 7).

Figure 6 *Consumer Socialisation Operators*



Note. Adapted from *"*College Students' Credit Card Debt and the Role of Parental Involvement: Implications for Public Policy", by T.S. Palmer, M. Pinto, and D. Parente, 2001, *Journal of Public Policy & Marketing, 20*(1),

Figure 7 *Consumer Socialisation Operators Considered in the Current Thesis*

This socialisation process is a mechanism whereby children learn to be consumers (Palmer et al., 2001), and has been defined as "… processes by which young people acquire skills, knowledge, and attitudes relevant to their functioning as consumers in the marketplace" (Ward, 1974, p. 2). The result of the socialisation process is the consumption ability (Bush et al., 2004). Simply, consumer socialisation can be broadly defined as the process by which individuals/groups satisfy their needs by acquiring, using, and disposing of goods, ideas, experiences, and services. The behaviours are acquired from the socialisation process (Bush, Martin, & Bush, 2004). Hence, the consumer socialisation framework has been utilised to explain how parents as socialisation agents shape children's behaviour and attitudes (Kim et al., 2015; Youn, 2008; Moore et al., 2002; Palmer et al., 2001) for example toward health, psychological issues, and family functioning (Mikeska et al., 2017).

As an example of how behaviours are acquired from the socialisation process from parents by children could be consumption of debt. Palmer et al. (2001) examined the effect of parental involvement on children's credit card balance (socialisation outcome: credit card balance). The socialisations agents, in this case, were parents. The socialisation process involved: pre-acquisition (parent as a co-obligator) and post-acquisition (parent helps with payments). The socialisation outcome was the amount of outstanding credit card debt. The research showed that pre-acquisition involvement correlates with lower credit card balances (Palmer et al., 2001). The opposite effect was found for post-acquisition involvement (Palmer et al., 2001). Regardless of a parent being a co-obligator, parental assistance with payments correlated with significantly higher balances (Palmer et al., 2001). As shown in this example, the type of parental involvement could determine whether a socialisation outcome is negative or positive. It shows that if parents have pre-acquisition involvement, this is likely to produce a positive socialisation outcome (less debt). Similarly, the consumer socialisation framework has been applied to this current thesis.

As shown in Figure 7, in this thesis, parents are the socialisation agents whose parental involvement (e.g., by discussing academic plans) is intended to increase their children's level of academic achievement (a positive socialisation outcome). Parental

involvement plays a critical role in motivating children to advance academically (Hyde et al., 2017). However, since there are factors in parental involvement that could produce a different socialisation outcome, as shown by Palmer et al. (2001) in the study of credit card debt, the different types of involvement need to be addressed. Specific parental socialisation variables such as the monitoring completion of homework and limiting children's social activities on school nights may be more effective than others. Mikeska et al. (2017, p.246) argue that there is a need for research which "…explores parental style as an explanatory basis for differential consumer socialisation of children." Since parental involvement is a multidimensional construct, the next section examines the concept.

3.3.2. Components of Parental Involvement

As Fan and Chen (2001) state "the operational use of parental involvement has not been clear and consistent" (p. 3). There is not a universal definition or critical elements of parental involvement (George & Kaplan, 1998). Rather, parental involvement is defined by its components and can vary across studies (Fan & Chen, 2001). Therefore, this section explores how different researchers have considered and classified the multidimensional aspects of parental involvement.

Home Involvement. Sui-Chu and Willms (1996) applied a distinct classification of parental involvement and grouped variables into types of parental involvement. Home involvement included discussing school activities and monitoring the child's extracurricular interests (Sui-Chu & Willms, 1996). It could also include providing help with homework, taking trips to places that foster academic development, and providing a supportive educational environment at home (Hill & Tyson, 2009). Based on the literature review, Boonk et al. (2018) broadly defined home involvement as activities that parents perform to encourage a child's learning. Home involvement may be the most common type of parental involvement; however, this construct is quite broad with some elements of school involvement possibly embedded in it.

School Involvement. School involvement could include volunteering, attending school-based meetings and conferences (Sui-Chu & Willms, 1996) as well as participating in a school's decision making and actively engaging in communication with the school's personnel (Hill & Tyson, 2009). In general, school involvement has been defined as involvement in school's activities (Boonk et al., 2018). While school involvement has been mainly identified as "hands-on" involvement in school, with increasing online capabilities,

this involvement may be shaping out to be something different from what it has been. Moreover, this type of involvement may not be less accessible for parents, who have commitments during the day or on the other hand who is illiterate (e.g., rural parents in Zambia). Scholars generally study the two types of parental involvement (home and school) in which a range of variables is included (Boonk et al., 2018). However, most of the recent literature argues that other types of involvement should be classified separately from the "big two", such as academic socialisation and discussions (e.g., Hill & Tyson, 2009).

Academic Socialisation. Parental aspirations emerged as a discrete type of parental involvement. Sacker et al. (2002) defined it as hopes for school leaving age, hopes for further education and hopes for the first type of job that a child will obtain. Recently, scholars argued that communication (between a parent and a child) is the key to parental aspirations (Day & Dotterer, 2018; Hill & Tyson, 2009). Hill and Tyson (2009) proposed that the process of *communicating* parental aspirations and discussing plans be called academic socialisation, rather than parental aspirations. Communication with the child is the essence of well-established involvements (e.g., home involvement). Therefore, the term "academic socialisation" may be a more accurate way of expressing the operationalisation of parental aspirations.

Wang and Sheikh-Khalil (2014) extended the definition by Hill and Tyson (2009) by refining elements of the academic socialisation concept. Specifically, the authors defined academic socialisation as "communication of parental expectations about schoolwork and the importance of education, encouragement of educational and career goals, and making plans and preparations with adolescents that support their future goals" (Wang & Sheikh-Khalil, 2014, p.611). Although this definition is more precise, it may be similar to yet another dimension of parental involvement: discussions.

Discussions. Discussions could be defined as continuing conversations between a parent and a child about academic matters and short/long term plans (Boonk et al., 2018). The distinctiveness of the academic socialisation construct (vs discussions) lies in communicating expectations and encouraging a child's progress; where is discussion could be general communication about education. If possible, the discussion construct should be viewed as a separate idea (McNeal, 2012; Altschul, 2011). Alternatively, it can also be included in other constructs, such as home (Hayes, 2012) or school involvement (Gordon & Cui, 2012). Academic socialisation and discussions are based on communication between parent and a child, hence these types of involvement are accessible for parents with different levels of income. Similarly, parental interest could be utilized by families with different backgrounds.

Parental Interest. Parental interest could be defined as a parental interest in a child's education, which may result in parental respect (e.g., my parent is interested hence she/he respects my interests) and parental aspirations (e.g., communication of aspirations during conversations about activities that interest a child). Parental interest is similar to discussions and academic socialisation when a parent communicates her/his interest in a child's academic advancement. Even so, parental interest may be included in other types of involvement such as home involvement or academic socialisation, it could be also studied separately (e.g., Flouri, 2006; Douglas, 1968). Parental interest may be less intrusive involvement, which is valued among middle-school children (Hill et al., 2018).

Besides the already well-established types of parental involvement, there are other stand-alone involvements. For example, cultural involvement (such as visits to the library or attending an event) has been positively correlated with better reading scores (Graves & Brown, 2011). Other examples include enrolment in organised activities (Cooper et al., 2010) and parental knowledge of school practices (Birman, & Ryerson Espino, 2007). Hence, depending on the context of the study separate parental involvement practices could be considered.

So far, the parental involvement construct includes home involvement (including discussion), school involvement, academic socialisation and parental interest. The categories of involvement are classified according to their nature if they are theoretically and empirically different (e.g., home vs school involvement) (Boonk et al., 2018). Hence, home-based (Hill & Tyson, 2009; Sui-Chu & Willms, 1996), school-based (Hill & Tyson, 2009; Sui-Chu & Willms, 1996), and academic socialisation (Day & Dotterer, 2018; Hill & Tyson, 2009) appeared as distinct types of parental involvement. Despite support by many scholars for the formal distinction of the parental involvement types, other scholars have chosen not to utilise a formal categorisation or deployed unique classifications.

Epstein (1992) utilised a unique classification of parental involvement based on activities within the home, school, and community (six types): parental obligations, parent/school communication, supporting the school, learning activities, decision-making, and accessing the community. George and Kaplan (1998) included in parental involvement the student's discussion with parents, school-wide activities; borrowing books from a library; and outings to science museums. Another author narrowed down parental involvement to two questions about parental interest (Hango, 2007). Alternatively, parental involvement could also be simply defined as parents' interest in a child's education, conversations with teachers, and time spent with a child (Sacker et al., 2002).

In summary, the authors described parental involvement as a concept comprising either a few or many elements. Each work classified parental involvement uniquely and/or examined only individual variables. Appendix 3 summarises various characteristics of parental involvement identified in the literature. For example, Sui-Chu and Willms (1996) formalized types of parental involvement (home and school involvements), while others such as Hango (2007) (parental interest) and Sylva et al. (2004) concentrated on activities of involvement (e.g., reading) without categorising them. Overall, a concrete conceptualisation of the term "parental involvement" could be beneficial for several reasons (Boonk et al., 2018), which we will discuss next.

3.3.3. Reasons for Decreasing Ambiguity of Parental Involvement as a Concept

As already shown, the term "parental involvement" has been applied to a variety of involvement-related activities (George & Kaplan, 1998). However, the broad conceptualisation of the term makes it difficult to know exactly how parents can assist their children to achieve higher academic results (Boonk et al., 2018); hence there is a need for a more precise conceptualisation of parental involvement.

First, parental involvement changes as a child grows (e.g., Green et al., 2007). As Catsambis (2001) and Ward (1978) explained, the effectiveness of parental socialisation variables depends on the age group of a child. Second, as seen from the literature review, some parental socialisation variables are more effective than others (Boonk et al., 2018), indicating that parental involvement is a multidimensional construct (Boonk et al., 2018; George & Kaplan, 1998).

Third, as some variables have a questionable impact on socialisation outcomes, there is a need to better understand the drivers of difference (Boonk et al., 2018). For example, assistance with homework produces inconsistent results in terms of educational excellence. It appears that the "how" parents are involved in helping with homework is more significant for the outcome rather than the quantity of aid (Boonk et al., 2018). For these three reasons, among others, the most recent literature calls for scholars to improve the parental involvement construct and better identify the most beneficial variables (Boonk et al., 2018). Although scholars have attempted to construct a reliable measure of parental involvement (Oswald et al., 2018), more work needs to be done.

Clearly, parental involvement is still an evolving and multidimensional construct with each variable or type of involvement having a distinct effect on socialisation outcomes

(Boonk et al., 2018; Green et al., 2007). The inclusion of parental involvement as a multifaceted concept and formalisation of types of involvement will help to determine the parental involvement strategies that will improve socialisation outcomes: academic achievement and income. Hence, this thesis examined several types of parental involvement to better understand their effects and relation to academic achievement and income.

A summary

This section (a third of the four in the Review of the Literature) demonstrated the conceptualisation of parental involvement due to the multi-faceted term and explained how parents influence children's consumption habits. Parents are the main socialisation agents whose involvement aims to improve their children's level of academic achievement. The inclusion of multiple components of parental involvement (e.g., home involvement) in research may help to determine which element(s) of parental involvement is the most advantageous to socialisation outcomes. This section set the stage for the discussion of the socialisation outcomes and process. The next section also reviews the development of hypotheses.

3.4. Socialisation Outcomes and Marketing Communication

Using several disciplines of research, this section offers important insights into consumer socialisation theory, predominately, the socialisation process. The discussions on how social marketing communication affects parental involvement, and how parental involvement affects soft skills, academic achievement and income, provide the basis for hypotheses development. Hence, this section demonstrates the conceptual framework which presents causal and correlational relationships between the theoretical components. This section provides a hypotheses development module.

3.4.1. Parental Involvement and Income

Behavioural change in parental involvement could have a positive influence on children's academic achievement (e.g., Kim, 2020; Otani, 2020; Day & Dotterer, 2018; Suldo et al., 2018; O'Hehir & Savelsberg, 2014). Recent studies have examined the influence of parental involvement on educational outcomes, albeit with limited emphasis on its potential to affect income in adulthood. Researchers have found a positive correlation between income and the level of academic achievement; hence, it is expected that better academic achievement will enable people to earn a higher income (Tebaldi et al., 2017; Kuh & Wadsworth, 1991; Roth & Clarke, 1998; Tuijnman et al.,1988). This positive trend has been seen in Zambia as well where education beyond the primary level can increase income dramatically, by as much as 950% (from 68USD/799ZMW to 720USD/8354ZMW) (Central Statistical Office, 2016). Such pay increase evidently may help individuals to break the cycle of poverty. To investigate the link between parental involvement and income, the relationships between academic achievement and income could be researched further.

Although a large body of literature indicates that academic achievement positively relates to income (Tebaldi et al., 2017; Kuh & Wadsworth, 1991; Roth & Clarke, 1998; Tuijnman et al.,1988), a few studies have not found such connection (Muchinsky & Hoyt, 2018; Strenze, 2007; Ng et al., 2005). To illustrate, Muchinsky and Hoyt (2018) did not find that grade point average influenced the career success of engineering students. In a review of the literature, Strenze (2007) found no significant relationship between intelligence and income, although the researcher acknowledged that there was a weak association between academic achievement and income (Strenze, 2007). Lastly, Ng et al. (2005) in their review of literature also found only a weak association between educational level and salary. However,

these inquiries had limitations typical of a review of literature study in that not all studies were included, and the U.S.A. data was over-represented (Ng et al., 2005). Despite Tuijnman et al.'s (1988) findings that education has a less-than-expected effect on income, other studies found longer-term effects.

Other reviews of the literature suggest that academic achievement relates to current salary (Roth & Clarke, 1998) and income levels (Han, 2019). As education cultivates motivation, promotes initiative, teaches problem-solving skills and coaches learning abilities, it relates to more significant compensation (Blaug, 1972). The benefits of education can be traced from early childhood to adulthood. Verbal and non-verbal test scores (vocabulary, sentence completion, and picture intelligence) at age eight are positively related to male adult earnings (Kuh & Wadsworth, 1991). Another study found that youth education has a direct impact on wages up to age 30 (Tuijnman et al.,1988). The most recent qualitative research also supports the positive relationships between educational attainment and income (Han, 2019; Tebaldi et al., 2017). Tebaldi et al. (2017) found meaningful relationships between grade point average and salary level and its growth for males.

Hence, evidence strongly suggests that academic achievement is positively related to income (e.g., Tebaldi et al., 2017), and parental involvement (e.g., Day & Dotterer, 2018). Combining the two links, we examine whether parental involvement in a child's education helps to determine adult income. Hence, it is reasonable to propose that parental involvement positively relates to education and income. H1 and H2 are:

H1: Parental involvement is positively related to an academic achievement (level of schooling completed).[6]

H2: Parental involvement is positively related to a child's higher income in adulthood.

So far, we have discussed relationships between parental involvement and level of schooling completed and parental involvement and income in the context of the influence of parental involvement in adulthood. Next, we will introduce a mechanism by which parental involvement relates to income: the role of soft skills.

[6] Academic achievement is defined as a "level of schooling completed" only in the study with adults, where participants reflect back on parental involvement and report their income and level of schooling completed.

3.4.2. Soft Skills and Income

Soft Skills Classification. Soft skills include a range of personal abilities such as a series of feelings, thoughts, and behaviour (Borghans et al., 2008). Or, soft skills could be defined as overall emotional intelligence, which is the "common sense" that one needs to function effectively (Sparkman et al., 2012). Generally, there is little agreement among scholars on the definition of soft skills (Gutman & Schoon, 2013). In most cases, studies focus on specific soft skills. For example, Heckman et al. (2006) refer to soft skills as a locus of control and self-esteem. Although researchers have different views about the operationalisation of soft skills, these skills could be classified by their underlying effect. The soft abilities can be categorised as follows: 1) self-perception, 2) motivation, 3) perseverance, 4) self-control, 5) metacognitive strategies, 6) social competencies, 7) resilience and coping; and 8) creativity (Gutman & Schoon, 2013). Appendix 4 provides an overview of soft skills and their impacts on academic achievement and income (Gutman & Schoon, 2013; Krishnan & Krutikova, 2013; Deke & Haimson, 2006; Heckman et al., 2006).

As identified by Brunello and Schlotter (2011), there is a need to research non-cognitive skills that influence academic achievement and success in the labour market. Therefore, in this thesis, we aim to investigate the mediating outcomes, which have an association with educational attainment and income. Hence, only measurable and malleable soft skills which have the potential to influence academic achievement and income are considered. Some soft skills are not studied in this thesis, and the explanations for these exclusions, are given below.

The following four broad categories of soft skills are not included in the thesis: metacognitive strategies, creativity, social competencies, and resilience. The metacognitive strategy involves setting goals, problem-solving and planning (Gutman & Schoon, 2013). There is no well-established measurement to estimate the metacognitive strategy (Gutman & Schoon, 2013) and for this reason, it is not evaluated in this thesis. Creativity is the development of new and useful concepts (Gutman & Schoon, 2013). Again, there no precise measurement has been established, although the Torrance Test of Creativity is well-known. This test utilises a psychometric approach, and it is beyond the expertise of the student researcher to administer this measurement and evaluate the results. Social competencies, as well as resilience and coping, are not included in this thesis as the influence of these soft skills on income is limited. Hence, this thesis will include four variables from eight broad categories of non-cognitive skills (as defined by Gutman & Schoon, 2013): self-esteem, locus

of control, grit, and self-control. The selected soft skills (self-esteem, internal locus of control, grit, and self-control) had been linked to higher income or favourable career outcomes (Gutman & Schoon, 2013; Krishnan & Krutikova, 2013; Deke & Haimson, 2006; Heckman et al., 2006). To better understand the contribution of each selected soft skill to income, each of them will be discussed in turn.

Self-esteem. Self-esteem is defined as a "… person's understanding of how valuable he or she is in the world" (Lingren, 1991, p.1). Self-esteem has been strongly associated with job prospects (Wang et al., 1999) and wages (Krishnan & Krutikova, 2013; De Drago, 2011). However, Araujo and Lagos (2012) found that self-esteem is not significantly related to earned income once the internal locus of control is considered. On the other hand, self-esteem affects wages despite the level of education, as established by a longitudinal study conducted by Heckman et al. (2006). Despite some ambiguous evidence, we can propose that:

H3: Self-esteem is positively related to a higher income in adulthood.

Grit. Grit is a passion and perseverance in pursuing very long-term goals (Duckworth et al., 2007). It includes consistency of interest and perseverance of effort (Kwon, 2017). There are at least two concepts, which could be similar to "grit": self-control and self-regulation. "…Self-control—the capacity to regulate attention, emotion, and behaviour in the presence of temptation", but "grit—the tenacious pursuit of a dominant superordinate goal despite setbacks" (Duckworth & Gross, 2014, p.319). Grit has three components: a single dominant goal, tenacious pursuit, and a strong desire to persist despite obstacles. However, self-control is an everyday ability to resist temptation. Self-control is often needed to stay gritty, but not necessarily (Duckworth & Gross, 2014).

Self-regulation is also related to grit. As identified by Baumeister et al. (2006) "self-regulation is a highly adaptive, distinctively human trait that enables people to override and alter their responses, including changing themselves to live up to social and other standards" (p.1773). Perhaps, what self-regulation has in common with grit is the need to change a behaviour to achieve the desired outcome. Self-regulation does not comprise the three mentioned elements of grit. Since grit is different from self-control and self-regulation concepts, the newly conceived concept of grit calls for more research.

Grit may be a critical predictor of career success as "grit predicted retention over and beyond established context-specific predictors of retention (e.g., intelligence, physical aptitude, Big Five personality traits, job tenure)…" (Eskreis-Winkler et al., 2014, p. 1). For

example, military recruits are more likely to complete a training course and grittier sales professionals are more likely to remain in the profession (Eskreis-Winkler et al., 2014). Also, grit has been positively related to self-employment (Wolfe & Patel, 2016) and a lower rate of young people dropping out of school or employment (Mendolia & Walker, 2014b). The following hypothesis will be tested to determine whether grit is related to income:

H4: Grit is positively related to a higher income in adulthood.

Self-control. Self-control is "overriding an incipient impulse with a goal in mind" (Rawn & Vohs, 2014, p.385). When self-control is absent, one tends to overly consider short-term objectives and engage in automatic responses (Muraven & Slessareva, 2003). The ability to exert self-control is based on the clarity of long-term objectives, self-monitoring, and a level of depletion of self-control (Baumeister, 2002, p.670).

Self-control predicts income in adulthood (Brody et al., 2020) and is indirectly related to academic achievement (Converse et al., 2014). Low self-control in childhood is associated with unemployment in adulthood (Daly et al., 2015). Moffitt et al. (2011) in a longitudinal study showed that childhood self-control is positively related to success in terms of personal finances in adulthood. Evidently, self-control has a bearing on income. This thesis will determine whether self-control is related to a higher income in adulthood by testing this hypothesis:

H5: Self-control is positively related to a higher income in adulthood.

Locus of Control. Locus of control is a self-perception of the amount of control the self has over her/his environment (American Psychological Association, 2018). Individuals who believe that they can control their lives are likely to have a higher internal locus of control (Wang et al., 1999). On the other hand, people who tend to see the occurrence of events as outside of their control and as it determines their life course, have a higher external locus of control (Wang et al., 1999).

Most of the previous studies have found that internal locus of control has been positively associated with early employment success (Krishnan & Krutikova, 2013), income (Cebi, 2007; Heckman et al., 2006) and occupational attainments (Wang et al., 1999). Cobb-Clark (2015) concluded, from a literature analysis, that internal locus of control is positively associated with successful labour market outcomes. The author suggested that internal locus

of control could influence the ability of low-income people to earn more money, which can help to alleviate poverty (Cobb-Clark, 2015). Hence, H6 is formulated as:

H6: Internal locus of control is positively related to a higher income in adulthood.

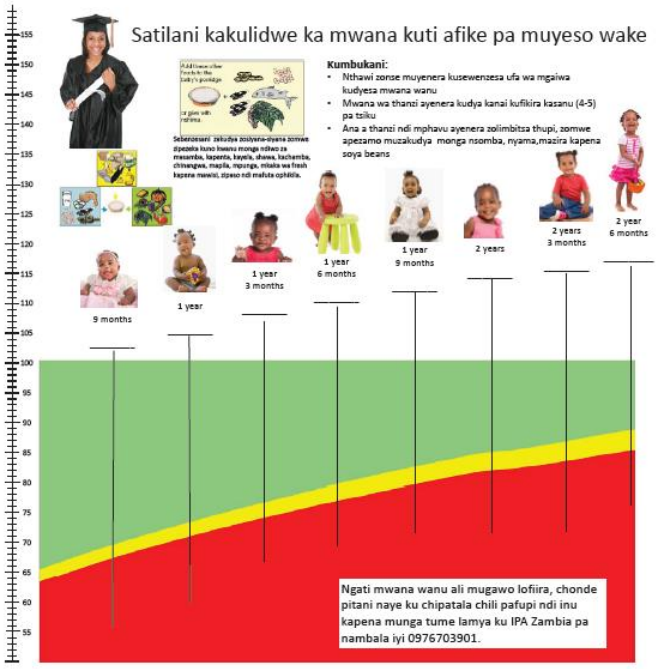
Up to now, we discussed the relationships of parental involvement with academic achievement (level of schooling completed) and income in adulthood as well as the role of soft skills regarding income. Given the non-causal relationship hypothesized so far, the next sections will concentrate on hypothesising relationships, which could be manipulated during an intervention. We will discuss the effect of social marketing communication on parental involvement. Then we will hypothesize the influence of different types of parental involvement on academic achievement among children.

3.4.3. Social Marketing Communication

Social marketing utilises communication tools to influence the behaviour of a targeted group (e.g., Agha et al., 2007; Donovan & Vlais, 2005; Quinn et al., 2005). Persuasive communication is used for promotional purposes and intended to provide information about behaviour, product, opportunity or service (Lefebvre, 2011). The vehicles for this type of communication include posters, informative brochures, and public announcements (Lefebvre, 2011).

For example, a chart intended as a home reference in Zambia (Figure 8) was successfully utilised to monitor and improve the growth of undernourished children (Fink et al., 2018). The communication tools (posters) gave caregivers information about the expected height of children according to age and recommended the most nourishing local foods (Fink et al., 2018). Moreover, the poster included a tracking tool enabling caregivers to determine the growth rate of their children (Fink et al., 2018). This communication tool aimed to motivate caregivers to be more attentive to the nutritional needs of their children. The poster significantly reduced stunted growth through the provision of information and its motivational aspects (Fink et al., 2018). Moreover, this instrument was more effective than community-based treatment, which included nutritional supplements (Fink et al., 2018).

Figure 8 *Growth Chart for Home Use (Zambia)*



Note. Adapted from *Poster Child for Healthy Growth*, G. Fink, R. Levenson, and P. Rockers, 2018, *IPA Innovations for Poverty Action*.

Unfortunately, there is very limited information available on other social marketing communication tools utilised in interventions in Zambia. However, the lack of technology may make it impossible for other tools such as videos, TV, Internet and smartphones, to be used for communication. On the other hand, booklets could be a feasible means of communication (e.g., Anghelcev & Sar, 2014). However, since there is not enough evidence to conclude which instruments will work the best in rural Zambia, the local context must be explored before making a final decision on the type of communication that could be most effective (as completed in exploratory studies: sections 4.4.-4.8).

The marketing communication on parental involvement in this thesis included an informative brochure, an action plan with sample questions, and paper trackers (Appendix 5). The marketing communication about parental involvement included information on why involvement is important and how parents can be more involved by tracking their progress in involvement. The marketing communication on parental involvement (as the growth chart: Figure 8) offered not only information on involvement (why parental involvement is important) but also motivated parents to change their behaviour by supplying them with tools to do so (e.g., trackers, sample questions). Lastly, marketing communication contained messages about five types of parental involvement (home, discussions, academic

socialisation, school-based involvement, and parental interest). Hence, it can be proposed that marketing communication increases all five types of parental involvement, hypothesised as:

H7 Marketing communication about parental involvement increases parental involvement.

- ***a. Marketing communication about home parental involvement increases home parental involvement.***
- ***b. Marketing communication about discussion increases discussion as a form of parental involvement.***
- ***c. Marketing communication about academic socialisation increases academic socialisation.***
- ***d. Marketing communication about school parental involvement increases school parental involvement.***
- ***e. Marketing communication about parental interest increases parental interest.***

Up to now, we hypothesized relationships between parental involvement, academic achievement, soft skills, and income among adults. Then, we hypothesized that social marketing communication could increase parental involvement. In the next section, we will discuss the influence of parental involvement on academic achievement among children.

3.4.4. Parental Involvement and Academic Achievement

Generally, academic achievement indicates an improved school performance, a higher level of education accomplished, and/or a better implementation of standard skills evaluations. Academic achievement can be defined in several ways: by grade point average (Tebaldi et al., 2017), standard tests (Kiernan & Mensah, 2011), non-standard academic assessments (Douglas, 1968) or by the educational level achieved (e.g., high school completion) (Hango, 2007). The academic achievement could be greatly improved by parental involvement (e.g., Day & Dotterer, 2018). As such, parental involvement in middle school has more impact on academic achievement than it does in elementary school (Kim & Hill, 2015). However, parental involvement declines as the child gets older (Stevenson & Baker, 1987), and this drop is sharper among low-income families (Bridgeland et al., 2008).

Not only is parental involvement more important in middle school (Kim & Hill, 2015), but the older children are more able to become active shapers of their academic achievement and occupational aspirations (Jodl et al., 2001). As children become older and

more developed, it is to be expected that the nature of parental involvement will change. For example, effective parental involvement with middle-school-age children may mean higher autonomy levels and monitoring, rather than direct control (Hill et al., 2018).

Despite the declining involvement in middle school (Stevenson & Baker, 1987) and the changing nature of involvement, parents desire more information on effective strategies to support their offspring (Bridgeland et al., 2008). There is a need to have a better understanding of those parental strategies which will have the most influence on children's educational outcomes in middle school. Hence, the most critical components of parental involvement at the middle school level and beyond will now be discussed.

Home Involvement. According to O'Hehir and Savelsberg (2014), home-based parental involvement could be the most effective means of achieving academic achievement. The authors argued that parents do not need special skills to become involved, but "rather, improved educational outcomes can result from a genuine interest and active engagement from parents" (O'Hehir & Savelsberg, 2014, p.3). Another review of the literature also concluded that home-type parental involvement positively relates to academic achievement in middle school, except in the case of helping with homework (Hill & Tyson, 2009). Conceptual evidence is supported by empirical studies.

George and Kaplan (1998) empirically showed that parental involvement, manifested by parental support for educational activities, is related to parents' attitude to science. Interestingly, "parental involvement has significant direct as well as indirect effects on science attitudes mediated through science activities and library/museum visits" (George & Kaplan, 1998, p.93). A survey-based study showed that home-based involvement is the sole significant predictor of academic achievement (among parental expectations and school-based involvement) for adolescents (Hayes, 2012). However, the home-based dimension in this study included discussion aspects such as "talk to your child about school experiences" (Hayes, 2012, p. 571). Hence, the influence can be produced by a combination of involvement types (home-based and discussion).

There is also causal evidence of the influence of home-based involvement on academic achievement (Avvisati et al., 2014; Van Voorhis, 2003). In the study conducted by Van Voorhis (2003), parental involvement was increased by providing directions for parents on how to become involved with a child's homework. Students (sixth and eighth graders), who were sent home with directions for parents, achieved significantly higher grades (Van Voorhis, 2003). Overall, there is enough evidence suggesting that home-based involvement is

a predictor of academic achievement among young adults. Hence, it can be proposed that parental involvement at home increases a child's academic achievement, as expressed by H_{8a}:

H_{8a}: An increase in home parental involvement increases a child's academic achievement.

Discussion. Home involvement is a complex construct on its own, which often includes a discussion as its sub-construct (e.g., Hayes, 2012). Although parental involvement (especially discussion) was associated with achievement, it was not a significant predictor beyond the 8th grade (Altschul, 2011). The achievement in 8th grade was the most significant predictor of grades in high school, suggesting that the impact of parenting occurred before the 8th grade (Altschul, 2011). Other work found a continuing influence of discussion on school matters (Gordon & Cui, 2012). For example, among 7-12th graders, the discussion aspect of parenting was more important for the GPA than general support and parents' expectations (Gordon & Cui, 2012). Although the data set was large (N=9,350), in this longitudinal study it is not clear whether prior achievement (e.g., GPA at grade 7) was considered. Potentially, this may explain the discrepancy of results across studies. The discussion as a distinct component of involvement could be explored more deeply. Hence, it can be proposed that discussion as a form of parental involvement increases a child's academic achievement, as formally stated in H_{8b}:

H_{8b}: An increase in discussion as a form of parental involvement increases a child's academic achievement.

Academic Socialisation. Non-causal evidence suggests that academic socialisation influences the educational attainment of low-achieving ninth graders (Chen & Gregory, 2010). The most recent meta-analysis found academic socialization to be the strongest predictor of academic achievement in East Asian countries (Kim, 2020). The finding suggests that academic socialisation is more effective than direct involvement as teens seek more autonomy (Chen & Gregory, 2010). Academic socialisation has been shown to have the strongest positive association with academic achievement (among school and home involvements) (Wang & Sheikh-Khalil, 2014). Moreover, parental aspirations (a closely related concept) in 8th grade are positively correlated with enrolment in the academic high school program and coursework at grade 12th (Catsambis, 2001).

Taken together, parental aspirations (Catsambis, 2001) and academic socialisation (Day & Dotterer, 2018; Wang & Sheikh-Khalil, 2014; Chen & Gregory, 2010) make a difference in children's educational experience and academic achievement. Hence, it can be proposed that academic socialisation increases a child's academic achievement, expressed as H_{8c}:

H_{8c}: An increase in academic socialisation increases a child's academic achievement.

School-based Involvement. Many studies have included school-based involvement to investigate its relationships with academic achievement. However, the findings are highly ambiguous. For example, Hill and Tyson (2009) found that school-based involvement (visits to the school, volunteering, attending school events) is related to academic achievement. Several studies support the same notion of the positive influence of school-based involvement (e.g., Islam, 2019; You et al., 2016; Oyserman et al., 2007). On the other side of the argument, there is a generous amount of evidence as well (Wang & Sheikh-Khalil, 2014; Hayes, 2012; Altschul, 2011). For illustration, Altschul (2011) found that parental involvement with the school, shown by attending school activities and being a member of a parent-teacher organization, is not related to standardized test scores. Evidently, there is no consensus regarding the suggestion that parents' involvement in school activities will influence the academic achievement of young adolescents. To investigate the effect of parental involvement in school-related activities on academic achievement, it can be proposed that parental involvement in school-related activities increases a child's academic achievement in the form of H_{8d}:

H_{8d}: An increase in school parental involvement increases a child's academic achievement.

Parental Interest. Lastly, parental interest has been shown to have a positive association with academic achievement (Hango, 2007; Flouri, 2006; Douglas, 1968). For instance, Flouri (2006) concluded that the mother's interest plays a significant role in the child's level of academic achievement in adulthood. The children, who are academically behind will benefit the most from the parental interest (Douglas, 1968). Hence, it can be proposed that parental interest in the form of parental involvement increases a child's academic achievement. Hence, H_{8e} is formally stated as:

H_{8e}: An increase in parental interest increases a child's academic achievement.

Generally, parental involvement has a positive influence on academic achievement regardless of children's socioeconomic background (Catsambis, 2001), social class (Kiernan & Mensah, 2011) and race/ethnicity of the pupils (Catsambis, 2001). The literature showed that different combinations of parental involvement are beneficial for teens regardless of race or ethnicity (Day & Dotterer, 2018). For example, African Americans and Latino teens benefit the most from academic socialisation and home-based involvement (Day & Dotterer, 2018). Even though parental involvement is a critical variable associated with academic achievement, material deprivation diminishes its positive effects (Altschul, 2011; Sacker et al., 2002). However, regardless of family circumstances, parental involvement could still have an important impact on a child's academic achievement as shown.

Although it has been found that parental involvement is positively related to academic achievement (e.g., Day & Dotterer, 2018), it is necessary to distinguish between the types of parental involvement as each type can have a different effect on educational attainment (Hill & Tyson, 2009). Home involvement and discussions (e.g., O'Hehir & Savelsberg, 2014; Gordon & Cui, 2012) as well as academic socialisation (e.g., Chen & Gregory, 2010) have the strongest influence on the academic achievement of teens. In addition to benefitting academic achievement, parents' involvement may help to increase the earning capacity of their children when they enter the workforce, which can go some way to alleviating poverty.

So far, we have discussed relationships between parental involvement and academic achievement, parental involvement and income, and the role of soft skills in adulthood. We hypothesized the effect of marketing communication on parental involvement and the following effect of parental involvement on academic achievement among children. Next, we will propose a mechanism by which parental involvement influences academic achievement among children. As such, the vital processes underlying the relationship between parental involvement and academic attainment need to be better understood. As Hoover-Dempsey et al. (2005) highlighted "… the research based on parental involvement would be enhanced considerably by closer and more detailed analyses of the mechanisms through which parents' involvement influences student outcomes" (p.122). Several studies show the mediating effect of a child's abilities in between parental involvement and socialisation outcomes (parental involvement → child's abilities → socialisation outcomes) (e.g., Phillipson & Phillipson, 2012; Flouri, 2006; Zimmerman et al., 1992). Therefore, the next section discusses the

mediating effects (the socialisation process) of parental involvement on academic consumption through soft skills.

3.4.5. The Socialisation Process: the Mediating Effect of Soft Skills and Parental Involvement

Over the past thirty years, scholars have been attentive to the mediating outcomes of the socialisation process. To illustrate, based on the social cognitive theory of self-regulation (Bandura, 1991), research has been conducted on the mediating role of self-efficacy beliefs (Zimmerman et al., 1992). Flouri (2006) examined the mediating effect of self-esteem and locus of control between parental interest and academic achievement. Another study by Normandeau and Guay (1998) researched the transitional role of self-control between pre-school behaviour and educational excellence.

Although there has been some research conducted on the socialisation process, the evidence is insufficient (Boonk et al., 2018). Of the 75 studies reviewed (published in 2003-2017) by Boonk et al. (2018), only 14 considered the mediating effect of children's abilities (cognitive, non-cognitive, and behaviour). Of these 14 studies, six considered cognitive abilities (e.g., mathematics ability), five considered soft skills (self-regulation, self-efficacy, self-concept, locus of control, and academic aspirations), and the remaining studies focused on behavioural issues. Overall, only a limited amount of research has been done on the mediating effect of soft skills since 2003, leaving the researcher to wonder if the socialisation process could be explained alternatively (e.g., by soft skills). Moreover, none of the studies on the socialisation process (the 14 out of 75) reviewed by Boonk et al. (2018) utilised experimental design; hence, causal evidence is limited. On the other hand, compared to research on soft skills, the impact of cognitive abilities on academic achievement and income received much attention from scholars.

Cognitive Development. The effect of cognitive development on academic achievement and wages has been well researched (e.g., Mateos et al. 2017; Waldfogel & Washbrook, 2010; Cunha et al., 2005; Barnett, 1995). The mediating effect of a child's cognitive abilities has been also studied (e.g., Phillipson & Phillipson, 2012). To illustrate, Schweinhart (2005) performed a half-life longitudinal study and found that children who had engaged in a high-quality preschool program, which stimulated children's cognitive ability, became more financially stable (the wage gap was 14%) and received more education. Overall, the positive effects of cognitive development and its mediating effect have been

established (e.g., Knudsen et al., 2006). Hence, because there is no research gap regarding the influence of cognitive ability, no further research (for this thesis) will be conducted in this regard.

As stated, there has been limited research on the effects of soft skills (Brunello & Schlotter, 2011) despite them being critical for academic achievement (e.g., Krishnan & Krutikova, 2013) and income (e.g., Anghel & Balart, 2017). In this regard, Gutman and Schoon (2013) stated: "non-cognitive skills are increasingly considered to be as important as, or even more important than, cognitive skills or IQ in explaining academic and employment outcomes" (p.2). The effects of soft skills (e.g., locus of control, self-esteem) on earnings are comparable to the influence of cognitive abilities (Heckman et al., 2006). Therefore, the next sections will discuss soft skills such as self-esteem and grit.

Soft Skills and their Effects. Soft skills in childhood are associated with full-time employment in adulthood (Dee & West, 2011) and earnings (Anghel & Balart, 2017). Soft skills affect income directly (Heckman et al., 2006) as well as through education (Dee & West, 2011; Heckman et al., 2006) (soft skills → academic achievement → income). Moreover, evidence in the context of poverty suggests that interventions are effective in increasing soft skills (Krishnan & Krutikova, 2013). In turn, soft skills such as self-esteem and self-efficacy influence academic achievement and wages, even when controlling for cognitive abilities (Krishnan & Krutikova, 2013).

Given that soft skills are essential to academic achievement, a deeper understanding of the relationship between parental involvement, soft skills, and academic achievement is necessary. Brunello and Schlotter (2011) argue that more research is required to investigate how soft skills could be developed and how they affect academic achievement. Scholars call to examine the less-studied soft skills (Fonteyne et al., 2017) such as grit (Kwon, 2017). The next segment discusses the effects of soft skills on academic achievement.

Self-esteem. Self-esteem applies to both children and adults in the sense that both determine their self-worth by evaluating themselves in comparison to others (Rosenberg & Peralin, 1978). However, children's self-worth is more receptive to self-perception of what others (e.g., parents) think of self (Rosenberg & Peralin, 1978).

Specifically, research shows a decline in self-esteem in children aged 12-13. During this period, teenagers start acquiring material goods to enhance their self-esteem (Shim et al., 2011). Poor families, however, may be hard-pressed to buy necessities, let alone non-essential items. Hence, parental involvement may be a more appropriate means of cultivating self-esteem in teenagers. To illustrate, Lent and Figueira-McDonough (2002) studied children

9-10 years of age in impoverished areas of a metropolitan region. The study showed that children can maintain a strong sense of self-worth despite poverty if they feel confident either at home or school (Lent & Figueira-Mcdonough, 2002). Hence, parents can cultivate children's self-esteem in family settings regardless of financial constraints.

Since parents influence a child's self-esteem by signalling approval or disapproval, "self-esteem is a family affair" (Lingren, 1991, p.1). Parents could cultivate self-esteem in children by providing honest feedback (Brummelman & Sedikides 2020), establishing a strong bond (Lingren, 1991), and being physically available (Bulanda & Majumdar, 2009). Hence, it can be proposed that parental involvement increases a child's self-esteem, stated formally as H9:

H9: Parental involvement increases a child's self-esteem.

Interventions targeting self-esteem in children could be successful (Haney & Durlak, 1998). For example, in one study, 4th graders were involved in a mentorship program, which among other things, strived to increase self-esteem (King et al., 2002). The results showed that 71% of these students improved their academic grades (King et al., 2002). In addition, self-esteem in children has been strongly associated with academic achievement (Krishnan & Krutikova, 2013; De Araujo & Lagos, 2012; Heckman et al., 2006). Hence, it is proposed that self-esteem increases a child's academic achievement, formulated as H10:

H10: Self-esteem increases a child's academic achievement.

Flouri (2006) claims that self-esteem indirectly influences academic achievement due to its effect on the internal locus of control. Also, academic achievement resulting from self-esteem is indirectly related to income (De Araujo & Lagos, 2012). Despite limited evidence on the mediating effect of self-esteem and since parental involvement can influence self-esteem (e.g., (Brummelman & Sedikides 2020) and self-esteem may improve academic achievement (e.g., (Krishnan & Krutikova, 2013), we can hypothesize that:

H11: Self-esteem mediates the relationship between parental involvement and academic achievement.

Overall, parental involvement plays a critical role in cultivating self-esteem (Ajilchi, Kargar, & Ghoreishi, 2013; Lent & Figueira-Mcdonough, 2002; Lingren, 1991) and self-esteem has been associated with academic achievement (Krishnan & Krutikova, 2013; De Araujo & Lagos, 2012; Heckman et al., 2006; Lockett & Harrell, 2003) and income (Krishnan & Krutikova, 2013; De Drago, 2011; Heckman et al., 2006). However, to date, relatively little experimental research has been conducted on the effects of self-esteem on academic achievement and income. Our research aims to fill this gap. Next, locus of control will be discussed.

Locus of Control. The expectation is that people with a higher internal locus of control are higher achievers than those individuals who feel like they do not have much control over their environment (Rotter, 1966). Hence, children with a higher internal locus of control are more likely to be more successful academically (e.g., Mendolia & Walker, 2014a). Furthermore, parents can help to foster their children's internal locus of control.

Current literature supports the idea that parental involvement is positively correlated with children's internal locus of control (Akhtar & Saxena, 2013; Wickline et al., 2011; Suizzo & Soon, 2006; Trusty & Lampe, 1997). For instance, a study performed on young adults found that parental emotional support was related to an internal locus of control (Suizzo & Soon, 2006). Also, an authoritative parental involvement characterised by reasoning practices rather than dictatorship had a bearing on children's higher internal locus of control (Georgiou et al., 2017; Keshavarz & Baharudin, 2013; Wickline et al., 2011).

On the other hand, "control and demanding hard work" was only weakly associated with an internal locus of control (Suizzo & Soon, 2006, p.834). Interestingly, a longitudinal study showed that parental control in combination with involvement increased children's internal locus of control (Trusty & Lampe, 1997), whereas control alone was associated with an external locus of control (Trusty & Lampe, 1997). In general, punishment and control (Akhtar & Saxena, 2013) or an authoritarian style of involvement (e.g., Georgiou et al., 2017) lead to an external locus of control. However, supportive (Suizzo & Soon, 2006; Trusty & Lampe, 1997) and demanding at the same time parental involvement (Trusty & Lampe, 1997) is related to an internal locus of control. Cebi (2007) calls for more research on the influence of parental involvement on the locus of control. Hence, it is proposed that:

H12: Parental involvement increases a child's internal locus of control.

Internal locus of control is a critical ability that needs to be cultivated in children as it has been positively associated with academic achievement (Mendolia & Walker, 2014a; Krishnan & Krutikova, 2013; Flouri, 2006; Wang et al., 1999) and better educational judgements (Coleman & Deleire, 2003). For example, internal locus of control in ten-year-old children is positively associated with academic achievement at age 26 (Flouri, 2006). Despite much evidence supporting the positive relationship between internal locus of control and academic outcomes, Cebi (2007) found no such relationship when the cognitive ability is considered. However, the researcher states that his findings do not suggest that internal locus of control does not affect academic achievement; rather, this issue calls for more research (Cebi, 2007). We propose to test whether an internal locus of control increases a child's academic achievement. Hence:

H13: Internal locus of control increases a child's academic achievement.

Taken together, parental involvement is positively correlated with an internal locus of control (Akhtar & Saxena, 2013; Wickline et al., 2011; Suizzo & Soon, 2006; Trusty & Lampe, 1997). Specifically, parental involvement characterised by a warm, participatory and rewarding relationship, with elements of academic stimulation, can help to foster an internal locus of control (Akhtar & Saxena, 2013). Further, internal locus of control is an essential soft skill that has been associated with academic achievement (Mendolia & Walker, 2014a; Krishnan & Krutikova, 2013; Flouri, 2006; Wang et al., 1999) and income (Cebi, 2007; Cobb-Clark, 2015; Heckman et al., 2006). However, most of the literature on the locus of control lacks experimental evidence and limited investigation of its mediating position has been conducted. Hence, this thesis proposes to test the following hypothesis:

H14: Internal locus of control mediates the relationship between parental involvement and academic achievement.

Grit. Although grit is a relatively new construct, it has already been investigated in relation to academic achievement and career outcomes and has been found to influence academic achievement (Alhadabi & Karpinski, 2020; Jiang et al., 2019; Tang et al., 2019; Broghammer et al., 2017; Browne, 2017; Light & Nencka, 2019; Duckworth et al., 2007). To illustrate, grit has been associated with higher GPAs (Duckworth et al., 2007). However, because the study participants were top achieving students in the country, the findings could

not be applied to the general population (Duckworth et al., 2007). However, other research (Alhadabi & Karpinski, 2020; Broghammer et al., 2017) confirmed the results obtained by Duckworth et al. (2007). The studies were conducted at a regional university (Broghammer et al., 2017) and a public university (Alhadabi & Karpinski, 2020) and found grit to be positively related to academic achievement (Alhadabi & Karpinski, 2020; Broghammer et al., 2017). Moreover, grit has a positive association with education-related outcomes such as the rate of high school graduation (Light & Nencka, 2019; Eskreis-Winkler et al., 2014).

Still, there is evidence suggesting an absence of the influence of grit on academic achievement. In their study, Barrington et al. (2017) concluded that grit is not associated with academic achievement. However, the study was conducted in a small rural elementary school and, as a teacher suggested, the students might have been tired at the end of the school day and therefore unable to give their full attention to the survey (Barrington et al., 2017). Overall, numerous researchers have concluded that grit is positively related to academic achievement (e.g., Alhadabi & Karpinski, 2020).

Nevertheless, there is a criticism that grit does not add anything beyond the Big Five personality traits related to academic achievement (Rimfeld et al., 2016). For example, although studies have found that grit is strongly correlated with conscientiousness (Credé et al., 2017; Rimfeld et al., 2016), a review of the literature (Credé et al., 2017) and a longitudinal study (Tang et al., 2019) concluded that grit (perseverance of effort facet) is positively related to academic achievement even after controlling for conscientiousness (Tang et al., 2019; Credé et al., 2017). Despite the lack of consensus regarding the influence of grit on academic achievement, there is a promising amount of evidence suggesting that grit has the potential to make a difference in academic attainment. Hence, it is proposed that:

H15: Grit increases a child's academic achievement.

Although grit appears to be related to academic achievement and some career success, the limitation of these studies (Eskreis-Winkler et al., 2014; Duckworth et al., 2007) is that they are not causal. For illustration, as stated by Eskreis-Winkler et al. (2014): "…due to the correlational nature of the present studies, it cannot be inferred that grit was causally related to retention" (p.10). Furthermore, limited research has been undertaken to determine how grit could be developed (Kwon, 2017). Duckworth (2016) offers suggestions, albeit not based on evidence, on how parents can foster grit in their children. For example, the author states that both strict and lenient parents should be supportive and encouraging (Duckworth, 2016). To

cultivate grit, parents should utilise a combination of supporting and demanding styles of parenting (Duckworth, 2016).

In response to Duckworth's suggestions, recent research has tried to address the lack of empirical evidence to show that parental involvement can foster grit (Lan et al., 2019; Dunn et al., 2018). The study found that authoritative parenting which includes supporting and challenging parental socialisation variables naturally aligns with the development of grit (Dunn et al., 2018). Another research suggested that parental involvement (parental autonomy support) relates to grit (Lan et al., 2019). The study by Lan et al. (2019) provided more detailed guidance on which parental practices cultivate grit, such as encouraging children to pursue their interests and exerting less control (Lan et al., 2019). We offer to contribute to causal evidence by researching whether parental involvement increases a child's grit:

H16: Parental involvement increases a child's grit.

Overall, grit has been positively associated with academic achievement (Broghammer et al., 2017; Browne, 2017; Light & Nencka, 2019; Duckworth et al., 2007) and career-related success (Wolfe & Patel, 2016; Eskreis-Winkler et al., 2014, Mendolia & Walker, 2014b). Also, grit could be cultivated by parental involvement (Lan et al., 2019; Dunn et al., 2018). However, the main limitation of current evidence is the lack of experimental confirmations. Also, grit has not been examined widely in the context of developing countries (Kwon, 2017). This thesis proposes to determine the mediating effect of grit by testing this hypothesis:

H17: Grit mediates the relationship between parental involvement and academic achievement.

Self-control. Self-control is a well-researched concept and is positively associated with academic achievement (Duckworth et al., 2019; Baumeister, 2018; Herndon et al., 2015; Kuhnle et al., 2012; Shoda et al., 1990; Mischel et al.,1989). For instance, in a correlational study, Baumeister (2018) concluded that "high self-control fosters strong academic performance" (p. 203). Self-control in young children (Mischel et al., 1989), middle-school students (Herndon et al., 2015) and older children (Kuhnle et al., 2012) is associated with academic achievement. Moreover, self-control has a lasting effect: self-control among pre-

schoolers was related to academic competence at ages 15 and 18 (Shoda et al.,1990). Hence, we suggest:

H18: Self-control increases a child's academic achievement.

Parental involvement has the potential to foster self-control in children (Brody et al., 2020; Moon et al., 2014; Blackwell & Piquero, 2005; Unnever et al., 2003; Polakowski, 1994). Supportive parenting (Brody et al., 2020) and parental monitoring have been associated with greater self-control in offspring (Moon et al., 2014; Unnever et al., 2003; Polakowski, 1994). However, too much supervision or authoritarianism in parental socialisation is related to low self-control in children (Polakowski, 1994).

Studies on the effects of parental discipline have produced inconsistent results. There is some evidence suggesting that consistent punishment is positively related to self-control in children (Unnever et al., 2003), while other studies found no link between parental discipline and children's self-control (Moon et al., 2014). Also, contradictory conclusions were reached about the prediction of self-control by parental attachment. Some scholars found a maternal attachment to be significant (Miller et al., 2009), while others concluded the opposite (Blackwell & Piquero, 2005).

Uniquely, Wright et al. (2008) controlled for genetic influence while examining the effect of parental involvement on self-control. They concluded that parental involvement does not have a significant effect on self-control when the genetic effect is controlled for (Wright et al., 2008). However, only a limited number of parental socialisation variables were examined (emotional closeness, maternal attachment, maternal rejection, and monitoring practices), and variables such as parental interest and aspirations were not considered. We attempt to offer some clarification on the effect of parental involvement on self-control by testing this hypothesis:

H19: Parental involvement increases a child's self-control.

Overall, self-control is related to better academic ability (e.g., Duckworth et al., 2019) and higher income (Brody et al., 2020). Parental involvement could encourage greater self-control (e.g., Moon et al., 2014), although there is insufficient evidence to support this. Also, the literature on parental involvement and self-control concentrates mostly on parental

monitoring and discipline, without considering other parental socialisation variables. We propose to test the mediating effect of self-control with a formally stated hypothesis as:

H20: Self-control mediates the relationship between parental involvement and academic achievement.

And, lastly, since marketing communication may positively influence parental involvement (Fink et al., 2018) and parental involvement can influence soft skills (e.g., Brummelman & Sedikides 2020) we can now propose the following:

H21: Marketing communication increases soft skills through parental involvement.

- ***a. Parental involvement mediates the effect of marketing communication on self-esteem.***
- ***b. Parental involvement mediates the effect of marketing communication on locus of control.***
- ***c. Parental involvement mediates the effect of marketing communication on grit.***
- ***d. Parental involvement mediates the effect of marketing communication on self-control.***

A closing note

This section (a fourth of the four in the Review of the Literature) provided a theoretical framework for the socialisation process (soft skills) and socialisation outcomes (income and academic achievement). In this section, it was argued that the multidimensionality of parental involvement should be addressed in this thesis. Hence, we propose that various types of parental involvement (e.g., discussion, school involvement) improve academic achievement. We also suggest that marketing communication could increase different types of parental involvement and that it could impact soft skills through parental involvement. We propose to investigate the mediating effect of soft skills between parental involvement and academic achievement. To the best of our knowledge, this is the first thesis to investigate four soft skills together including grit, a newly established concept. And since academic achievement had been strongly linked to higher income (e.g., Tebaldi et al., 2017), and parental involvement have an established positive influence on academic achievement (e.g., O'Hehir & Savelsberg, 2014), we attempt to determine whether parental

involvement has a positive relationship with income. We also extended our inquiry by examining the relationship between soft skills and income. This section also included the formulation of hypotheses: H1-H21. The next chapter will summarise the research gaps identified in the literature and explain how the hypotheses will be tested using field studies and surveys.

CHAPTER 4: METHODOLOGY AND DATA COLLECTION

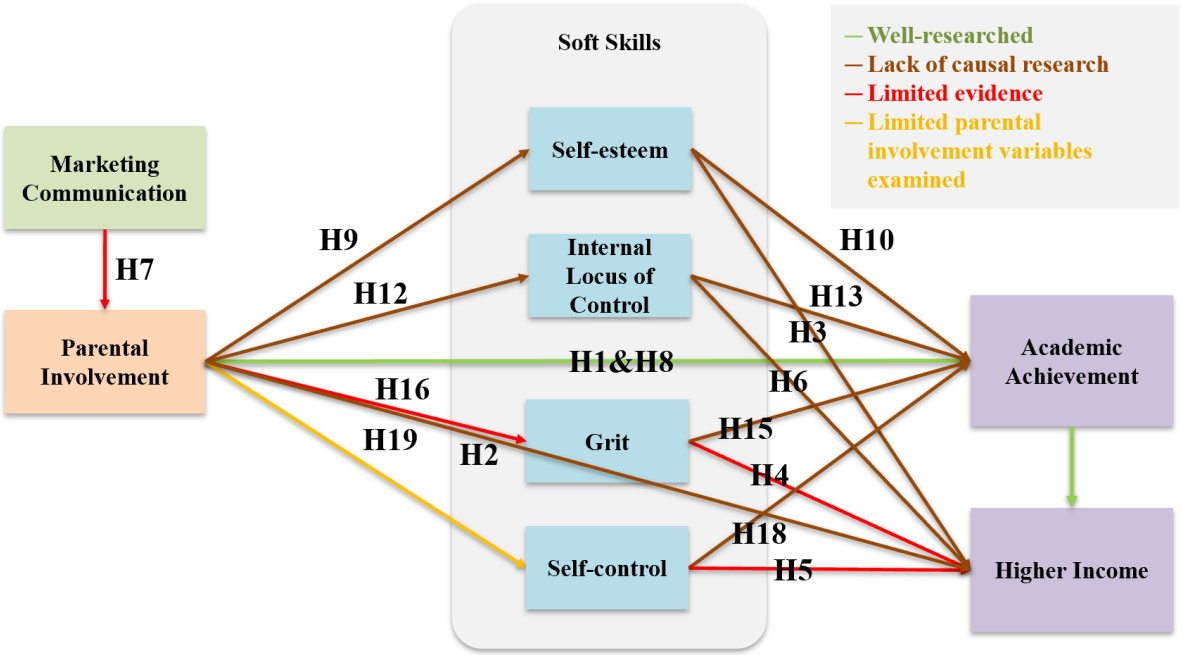
In this chapter the designs, procedures, and methods applied in exploratory studies are described; moreover, it includes a survey and field quasi-experiments conducted to test the research hypotheses. Also, the operationalisations of all dependent and independent variables are explained. Lastly, each of the studies is discussed, and findings are presented.

4. Methodology and Data Collection

4.1. Conceptual Framework: Identified Research Gaps

The conceptual framework depicted in Figure 9 demonstrates the relationship between hypotheses. While some relationships such as that between parental involvement and its influence on academic achievement have been well researched, other connections such as grit have been under-investigated.

Figure 9 *Summary of Research Gaps in the Literature*[7]



Little formal research has been conducted to determine whether and how parental involvement fosters grit. Also, the association between grit and income has not been

[7] H1 refers to the "level of schooling completed" as academic achievement. H11, H14, H17, H20, and H21 predict mediating relationships and had been left out of the figure.

comprehensively examined. Additionally, past studies have produced inconsistent results regarding the relationship between grit and academic achievement, suggesting the need for more research on grit (Rimfeld et al., 2016).

Moreover, there needs to be more causal evidence for the relationship between soft skills (self-esteem and locus of control) parental involvement, academic achievement, and income. In the case of self-control, academics tend to focus on a limited number of parental socialisation variables when examining relationships involving self-control (e.g., parental monitoring, consistent punishment). Other aspects of parental involvement such as parental interest and aspirations are often overlooked. Moreover, the research on the association between self-control and parental involvement has produced contradictory findings (e.g., Moon et al., 2014 vs. Wright et al., 2008). The linking of self-control with income needs more evidence to determine whether or not these factors are associated. The proposed studies aim to research the mediating effect of soft skills to help bridge the aforementioned research gap. The next section will provide an overview of the methods which will be used to test the hypotheses.

4.2. Overview of Methodology

This section gives an overview of the methodology applied to the studies conducted for this thesis and discusses the studies in sequence. To establish a contextual understanding, exploratory studies were deployed. Each study comprised 4-5 cases (instrumental cases) as this size is suggested as optimal (Creswell & Poth, 2018). The case study approach is adopted when the researcher is seeking to understand emerging themes and the opinions of people in natural settings. The case study approach is holistic, yet situationally sensitive (Patton, 2002). As Stake (2000) explains, an instrumental case study is appropriate for the purpose of contributing to a better understanding of a topic, as was the case with the current study. Other researchers have used case studies to acquire an understanding of parental involvement in less-studied contexts (Stitt & Brooks, 2014; Brain & Reid, 2003). Given the limited understanding of parental involvement in rural Zambia, an exploratory instrumental case study was deemed appropriate as an instrument of inquiry. Exploratory studies help to reveal themes, understand how parental involvement promotes desired outcomes, and identify the factors that motivate parents to be involved or prevent them from doing so. Exploratory studies often inform subsequent studies (studies 1-3).

Study 1, a survey of adults, was conducted to discover the parental involvement variables that are associated with their academic achievement (the highest educational level achieved) and higher income. Due to time constraints, a longitudinal study could not be undertaken. However, the results from the survey conducted with adults may serve as preliminary research on the relationship between parental involvement, academic achievement, and income. Study 1 also explored the soft skills that are associated with parental involvement, academic achievement, and income.

Studies 2 and 3 deployed a quasi-experimental design (a three-level, between-subjects design) to determine whether greater parental involvement could increase children's soft skills and improve their academic performance. Moreover, informed by preceding studies, various types of marketing communication were tested to ascertain the marketing communication tool that had the most impact on socialisation outcomes. Randomized experiments (studies 2 and 3) are capable of showing cause and effect, providing high-quality evidence (Cash, Stanković, & Štorga, 2016). On the other hand, non-experimental designs are correlational or explanatory in nature and causational conclusions cannot be drawn from this type of inquiry. While some experiments cannot be conducted for ethical reasons (e.g., asking people to drink alcohol to see the effects on the liver) or are not possible due to other

constraints, experimental design is the most appropriate when the effect of an intervention needs to be determined (Navarro, 2020).

As depicted in Figure 9, there is a limited amount of causal evidence regarding the topic in question (e.g., the effect of parental involvement on self-esteem) (Boonk et al., 2018). Social marketers are calling for more quantitative evidence in this domain, and more rigorous evaluations (Firestone et al., 2017). A quasi-experimental design was chosen to complement existing quantitative evidence and to show causal relationships (studies 2 and 3).

The first study (with adults) was conducted to determine whether there is a link between parental involvement, academic achievement and income. Specifically, it tested H1, H2, H3, H4, H5, and H6 (list of hypotheses: Appendix 6). The second study (with children) was conducted to determine whether the soft skills selected for this thesis contribute significantly to higher academic achievement. This study tested H7(a-e), H8(a-e), H9, H10, H11, H13, H14, H15, H17, H18, H20, and H21(a-d) (list of hypotheses: Appendix 6). Lastly, Study 3 (U.S.A.) tested whether by targeting specific parental socialisation variables (e.g., related to grit-commitment), academic achievement could be increased more effectively. Namely H7(a,b,c,e), H8(a,b,c,e), H_{9a}, H10, H11, H_{12a}, H13, H14, H15, H_{16a}, H17, H21(a-c) (list of hypotheses: Appendix 6) were tested.

4.3. Controlled Variables

Quasi-experimental studies (studies 2 and 3) include control variables such as social class and student's backgrounds. The inclusion of controlled variables increases internal validity and eliminates alternative explanations for the change in dependent variables apart from a change in an independent variable (Robinson, 2016).

Social Class. The literature indicates the need to control for family social class (Kiernan & Mensah, 2011; Sacker et al., 2002; Sui-Chu & Willms, 1996) as this variable may affect academic achievement. Social class is directly related to parental involvement through social norms and values, and indirectly as a result of financial difficulties (Sacker et al., 2002). Other studies present a counter-argument regarding the impact of a family's social class, suggesting that it is not significantly associated with academic achievement or parental involvement (Kiernan & Mensah, 2011; Sacker et al., 2002; Sui-Chu & Willms, 1996). Nevertheless, the literature signals that social class could influence academic achievement; therefore, this study controlled for social class.

Material Disadvantage. Material disadvantage can affect academic achievement (for a review, see Sacker et al., 2002; Hango, 2007) and was controlled for in this study. Sacker et al. (2002) found that material disadvantage affects parental involvement and academic achievement. Hango (2007) noted: "large effect of [financial] disadvantage on later education is noted." In families with fewer resources to spare, likely, the material disadvantage will negatively affect academic achievement, especially in poorer households.

Student's Background. Another variable that was accounted for is the student's background (child's gender and if the English language has been spoken at home), which has been found to influence academic achievement and the effect of parental involvement (for a review, see Kiernan & Mensah, 2011; Catsambis, 2001; Douglas, 1968).

Family Structure and Characteristics. The last variable to be considered is the characteristics and structure of the family (for a review, see Hango, 2007; Williams et al., 2002; Catsambis, 2001; Sui-Chu & Willms, 1996; Douglas, 1968). For example, Douglas (1968) found that family size negatively affects test scores but suggested that this could be due to the environment. In the sections below, each study and its methodology are explained.

4.4. Exploratory Study: Case Study 1A - Adults

4.4.1. Purpose of the Study

Using the exploratory case study methodology, the role of parental involvement in determining children's higher academic achievement and income has been examined. In particular, this study (1A) addressed the following research questions:

1) What role does parental involvement play in children's academic achievement?
2) What role does parental involvement play in determining the income of adults?
3) How does parental involvement help children to do well academically and earn a higher income in adulthood?

The exploratory studies were conducted to acquire an understanding of parental involvement in the context of Zambia. Similarly, where there has been a lack of accumulated knowledge, other scholars have used exploratory studies to examine social phenomena. For example, researchers explored parental involvement among Islamic immigrants (Gurr, 2010), nature groups (Kirkbride, 2014), and Chinese settlers (Ji & Koblinsky, 2009). Although the exploratory study was directed by the research questions, the research questions and procedures were modified as required since the case study approach allows flexibility (Braun & Clarke, 2006).

4.4.2. Method

In this study (1A), the role of parental involvement in academic achievement and income has been assessed by applying the case study method of inquiry. In this exploratory study, knowledge about reality was constructed between the student researcher and participants and formed by experiences. For the exploratory study, social constructionism was adopted as the epistemological stance, whereby the researcher and participants relate to one another (Schwandt, 2000), and the mind plays an active role in constructing knowledge (Schwandt, 2000). Hence, the student researcher in the exploratory study played the role of co-creator of knowledge and interpreter of the reality being examined. However, "there is never a finally correct interpretation" (p. 195, Schwandt, 2000) and the student researcher's interpretations are shaped by her/his own experiences and views (Creswell & Poth, 2018). Hence, the student researcher's interpretation led to the creation of knowledge from her perspective, although multiple views of the same reality could exist. Nonetheless, this study (1A) rested on the ontological premise that singular reality exists.

4.4.3. Sample

Given the exploratory nature of this study (1A) and the critical need to have a comprehensive range of local details about the case, we limited the sample to the main location of interest: rural Zambia, specifically Kasama, a Northern province. We applied purposive sampling to choose participants for the study. Those who met the criteria were: over 18 years old, raised in a rural area of Kasama, raised in a low-income family (moderate poverty or poorer), had completed senior secondary schooling (analogous to a high school)[8] and had an income above the moderate poverty level. We used snowball sampling to recruit participants. Firstly, we interviewed participants recommended by local contacts and then asked these participants to suggest other participants, yielding a total of five participants. As suggested by Creswell and Poth (2018), 4-5 instrumental cases is an optimal number for data collection.

4.4.4. Data Collection

For this study (1A), the data was gathered from five face-to-face interviews (Interview Protocol: Appendix 7), each of which took between 30 and 60 minutes. The interviews explored the role of parental involvement in the lives of participants, specifically the effect of this involvement on the interviewee's academic achievement and current income. The general topics of discussion included their childhood experiences (parental involvement), personal qualities leading to success, and examined how parental involvement might have helped a participant to thrive. The interview data provided us with a better understanding of the topic in terms of the local context and helped us to co-create knowledge with participants.

[8] Only about 51% of children attend secondary school in Northern Province (where Kasama is located) (Central Statistical Office, 2016). According to the projection for 2020 by the World Bank and Development Research Group (2018), only 20% of Zambia's population (ages 20-24) will have completed secondary school. Only 10% of the population (aged 20-64) will complete anything beyond secondary school (World Bank & Development Research Group, 2018). Hence, it is appropriate to establish the inclusion criterion for education achievement as the completion of secondary school education.

4.4.5. Data Analysis

Thematic analysis adapted from Braun and Clarke (2006) was applied in this study (1A) as it is a systematic approach used to classify, analyse, and describe themes within a dataset (Braun & Clarke, 2006). Guided by the objective of the study, the thematic analysis was applied inductively (bottom-up). According to Patton (2002), the inductive method involves the immersion in the themes and interrelationships of the data. The process involves the exploration of the data and confirmation of the discovered patterns (Patton, 2002). Hence, the inductive method is data-driven and not guided by pre-existing codes (Braun & Clarke, 2006).

The goal of the exploratory study was to understand what it is that helps children from impoverished backgrounds to succeed. Hence, the latent level of the thematic method is more appropriate for this exploratory study. Thematic analysis, guided by constructionist epistemology, is intended to show a social perspective, not to expose individual motivations (Braun & Clarke, 2006).

Following the thematic data analysis, we familiarized ourselves with the data and summarized the main ideas. Then we explained data given the contextual understanding of the issue in question. After this, we categorised data according to overarching themes that were labelled as they emerged and were identified. We reviewed and described the themes, often returning to the collected data for clarification of details. In addition, iterative back-and-forth analyses were applied to these phases as required (Braun & Clarke, 2006).

After identifying themes, we established a "larger meaning of data", which is an interpretation (Creswell & Poth, 2018). Interpretation is the meaning that is derived from the analysis (Patton, 2002) and understanding of data (Spiggle, 1994). Moreover, the interpretation involves linking findings to the relevant literature (Creswell & Poth, 2018). We used several strategies to ensure the trustworthiness of the findings, in addition to comparing our findings with those reported in the literature.

4.4.6. Trustworthiness

To establish the trustworthiness of the data, we applied the criteria developed by Lincoln and Guba (1985): transferability, dependability, confirmability, and credibility. Transferability means that the study can be applied to other situations and contexts (Suter,

2012). The reporting of the study includes a description of the case, which may assist others to determine how findings can be applied to other contexts, as guided by Suter (2012).

Dependability refers to the notion that if the study is repeated, similar conclusions will be reached (Suter, 2012). This aspect of trustworthiness could be strengthened by having audit checks and multiple sources of data (Suter, 2012). In this study (1A), we used several data sources (e.g., supervisor's guidance, existing literature, theoretical perspective) to establish a theme. This process of using multiple and different sources during the data analysis is known as triangulation, which helps to increase the validity of the study (Creswell & Poth, 2018).

Confirmability refers to control of the researcher's bias (Suter, 2012). The peer-review approach is an acceptable means of mitigating the researcher's bias (Suter, 2012). In our case, the supervisor reviewed the methodology and results to minimise the student's researcher bias. Lastly, credibility refers to the level of accuracy of the findings and the extent to which they are reliable (Suter, 2012). To ensure the accuracy of findings, the following measures were undertaken: researcher bias (if any) was acknowledged, data that challenged the research questions were included in the findings, and the study was reviewed by the supervisor. Also, quality audio devices were used to record interviews, which helped to ensure reliability (Creswell & Poth, 2018).

4.4.7. Findings

When examining the role of parental involvement in academic achievement and income in adulthood, three main themes emerged: parental encouragement, passing on educational knowledge, monitoring of attendance. One businesswoman (owner of a large warehouse) explained that her "father was a businessman and encouraged me to continue my education." Although her mother preferred her to do "woman's work" rather than study, her father supported and encouraged her to pursue education and excel academically. Another participant, a restaurant owner, explained that her parents had very little income but encouraged her to study and earn money on the side to support herself at school. Some interviewees mentioned that they had received parental assistance with their education. As far as their literacy level permitted, some parents tried to teach their children how to read and prepare for exams. For example, one participant (an entrepreneur) explained that his sisters, who were also his guardians, taught him how to read and prepare for university exams. Lastly, parents often monitored attendance and, time permitting, check their child's

homework and academic progress. One participant, an entrepreneur, explained that his father checked on his attendance and homework “as a reminder” for him to continue taking education seriously.

In summary, this study (1A) showed that parental involvement, such as parental encouragement, is critical for educational success and future income. Despite obstacles such as low literacy, parents can assist children to succeed academically and in their future careers by passing on their knowledge (e.g., how to read), encouraging them, and monitoring their progress. The contextual understanding of how parental involvement helped adults, who grew up in low-income families in rural Zambia, to succeed in education and earn a higher income, informed the measurements of parental involvement. The next study (1B) gained the perspective of teachers on the same key topics as this study (1A) (effect of parental involvement on academic achievement and income).

4.5. Exploratory Study: Case Study 1B - Teachers

4.5.1. Purpose of the Study

This study (1B) is identical to the exploratory study 1A, with the exception that it sought to obtain the opinions of teachers. Using the exploratory case study methodology, the role of parental involvement in helping children to attain higher academic achievement has been examined. Case Study 1B addressed the following research questions:

1) *What role does parental involvement play in children's academic achievement?*[9]
2) *How does parental involvement help children to achieve academically?*

4.5.2. Method

The method adopted for this study (1B) is identical to that of Study 1A.

4.5.3. Sample

Given the exploratory nature of this study (1B) and the critical need to obtain a comprehensive range of local details related to the case, we, the student researcher and her supervisors limited the sample to the main location of interest: rural Zambia, namely Northern province, Kasama. We applied purposive sampling for the selection of interviewees. *Criteria for key informants included being a teacher in Kasama and surrounding areas.* We used snowball sampling to recruit participants. Firstly, we interviewed participants who had been recommended by local contacts and then asked these participants to suggest other potential interviews, yielding a total of *four* participants. As suggested by Creswell and Poth (2018) 4-5 instrumental cases is an optimal size for data collection.

4.5.4. Data Collection

The data for this study (1B) was collected from four face-to-face interviews *(Interview Protocol: Appendix 8).* The interviews took between 30 and 60 minutes. *The interviews explored the role of parental involvement in the life of students from the teachers' perspective, specifically regarding the effect of this involvement on the children's academic*

[9] Italic cursive indicates the difference between exploratory study 1 and the exploratory study in question.

achievement. General areas for discussion included the teachers' experiences with students, students' personal qualities contributing to their success, and the ways that parental involvement might have helped students to thrive. The interviews helped the student researcher to acquire a better understanding of the topic in terms of the local context, and to co-create knowledge with participants.

4.5.5. Data Analysis

The data analysis strategy applied in this study (1B) was identical to that in Study 1A.

4.5.6. Trustworthiness

The trustworthiness strategy in this study (1B) was identical to that in Study 1A.

4.5.7. Findings

When examining the role of parental involvement in academic achievement, three main themes emerged: nourishment, availability of financial support (e.g., school fees, learning materials), monitoring of attendance. One teacher explained that children often walk five kilometres to school and by the time they arrive, they are hungry. She stated that if no proper food is given to children, they cannot focus. As schools do not provide food, it is up to the parents to supply an adequate lunch for their children. As elegantly put by one of the teachers: "if the topic of poverty is addressed, you expect a child to have energy and the strength to concentrate." All teachers indicated that the ability to pay school fees (e.g., uniform) is essential if children are to start school at the appropriate age. Moreover, as schools do not provide learning materials for students to take home, students who can purchase their learning materials may have an advantage. Lastly, as stated by one of the teachers "the parent must make sure the child attends school… some parents do not care, and such children feel demotivated." Monitoring regular and timely attendance is critical for children to ensure that they get the most from their education and perform to the best of their ability academically. An unexpected theme emerged from the data provided by the teachers. All teachers stated that IQ (natural ability) is the biggest determinant of academic success. Perhaps this influences the amount of attention that teachers give to individual learners. However, this is outside the scope of this thesis. In terms of soft skills, self-discipline, desire

to learn, focus, and determination were identified by participants as contributors to academic performance.

In summary, this study (1B) showed that, according to the teachers, parental involvement is a critical component of higher academic achievement. Additionally, this study (1B) demonstrated that parental practices, such as their provision of lunch and their monitoring of their children's attendance and progress at school, have a positive impact on the students' level of academic achievement. The contextual understanding, from the teachers' perspective, of why children succeed in school, complemented the findings from study 1A (with adults) and contributed to a better understanding of the topic. The next studies (2A and 2B) were conducted to understand the motives for parental involvement, and the barriers that prevent or decrease this involvement. These studies involved parents and teachers, respectively.

4.6. Exploratory Study: Case Study 2A - Parents

4.6.1. Purpose of the Study

Using the exploratory case study methodology, *the motivation for and barriers to parental involvement* were examined. This study (2A) addressed the following research questions:

1a) *Why do parents get involved (what motivates them)?*

1b) *What encourages parents to be involved?*

2) *What are the barriers that prevent parents from being involved?*

3) *What would help parents to become involved?*

4.6.2. Method

In this study (2A), the *motivations for and barriers to parental involvement* were determined by means of the case study method of inquiry. The method adopted for this study (2A) is identical to that in Study 1A.

4.6.3. Sample

Given the exploratory nature of this study (2A) and the critical need for a comprehensive range of local details about the case, we limited the sample to the main location of interest: rural Zambia, namely Northern province, Kasama. We applied purposive sampling to select interviewees for the study. *Criteria for key informants included being a parent with school-aged children (child) in Kasama and surrounding areas.* We used snowball sampling to recruit participants. Firstly, we interviewed participants recommended by local contacts and then asked these participants to suggest other potential interviewees, yielding a total of *four* participants. As suggested by Creswell and Poth (2018) 4-5 instrumental cases is an optimal number for data collection.

4.6.4. Data Collection

The data for this study (2A) was collected from four face-to-face interviews *(Interview Protocol: Appendix 9)* that took between 30 and 60 minutes. *The interviews of parents gathered data pertaining to their motivation for and barriers to their parental*

involvement. General areas discussed included their experiences with children, the factors motivating them to become involved, and the factors that preventing them from doing so. The interviews helped the student researcher to acquire a better understanding of the topic in terms of the local context, and to co-create knowledge with participants.

4.6.5. Data Analysis

The data analysis strategy adopted for this study (2A) was identical to that in Study 1A.

4.6.6. Trustworthiness

The trustworthiness strategy in this study (2A) was identical to that in Study 1A.

4.6.7. Findings

The data obtained from the interviews suggested that all parents felt that their involvement may help children to achieve better financial stability in adulthood. One parent stated that she is involved because she wants her child to be able to earn money if she (the parent) dies. Another parent expressed a similar motivation: “once I die children can take care of themselves.” Surprisingly, lack of time was not mentioned as a barrier to involvement. Mainly, involvement was prevented by factors such as financial struggles (e.g., inability to pay for uniform) or the parent’s lack of education (e.g., inability to help with homework). Interestingly, Zambian parents did not mention that their involvement included any form of discussion with their children. Parents indicated that paying school fees and checking homework is an integral part of their involvement.

In summary, parents have high aspirations for their children in terms of academic success, seeing this as a way whereby their children can achieve financial stability in the future. On the other hand, parents face financial and educational obstacles that limit their involvement in their children’s education. Overall, study 2A provided valuable insights on the motivations and barriers influencing parents’ involvement. This thesis did not address the financial challenges faced by participants (outside the scope of this thesis) but included the motivational factors for the involvement in marketing communication tools provided in studies 2 and 3 (e.g., parental involvement may improve future earnings for the children). The

marketing communication for parents (studies 2 and 3) also included visual material for parents with poor literacy skills. The next study (2B) was similar to this study (2A) in many respects, except that all the interviewees were teachers.

4.7. Exploratory Study: Case Study 2B - Teachers

4.7.1. Purpose of the Study

Using the exploratory case study methodology, *the motivations for and barriers to parental involvement* were examined. This study (2B) addressed the following research questions:

1a) *Why do parents get involved (what motivates them)?*

1b) *What encourages parents to be involved?*

2) *What are the barriers that prevent parents from being involved?*

3) *What would encourage parents to become involved?*

4.7.2. Method

In Study 2B, the *motivations for and barriers to parental involvement* were determined by means of the case study method of inquiry. The method used in this study (2B) is identical to that in Study 1A.

4.7.3. Sample

Given the exploratory nature of this study (2B) and a critical need for wide-ranging local details about the case, we limited the sample to the main location of interest: rural Zambia, namely Northern province, Kasama. We applied purposeful criterion sampling to choose cases for the study. *Criteria for key informants included being a teacher in Kasama and surrounding areas.* We used snowball sampling to recruit participants. Firstly, we interviewed participants recommended by local contacts and then asked these participants to suggest other potential interviewees, yielding a total of *four* participants. As suggested by Creswell and Poth (2018) 4-5 instrumental cases is an optimal number for data collection.

4.7.4. Data Collection

The data for this study (2B) was collected from four face-to-face interviews *(Interview Protocol: Appendix 10).* Interview time ranged from 30 to 60 minutes. *The interviews explored the motivation for and barriers to parental involvement from teachers' perspectives. General areas for discussion included their experiences with students and*

parents, views on what helps parents of students to become involved and what prevents parents from doing so. The interviews helped the student researcher to acquire a broader understanding of the topic in terms of the local context, and to co-create knowledge with participants.

4.7.5. Data Analysis

The data analysis strategy in this study (2B) is identical to that used in Study 1A.

4.7.6. Trustworthiness

The trustworthiness strategy in this study (2B) is identical to that used in Study 1A.

4.7.7. Findings

In regard to motivations for parental involvement, teachers felt that the reason for low involvement is a lack of understanding of the value of education by parents. The participants suggested that marketing communication about the benefits of education (e.g., earning power) will improve motivation. Teachers saw the main motivator for the involvement as being the child's ability to support herself and her parents in adulthood (education as a driver). In exploring the barriers to parental involvement, the main themes that emerged were household financial constraints (e.g., electricity) and the low educational level of parents (e.g., inability to help with homework). Study 2B contributed to the development of marketing communication tools (studies 2 and 3) in several ways.

The types of involvement that require money (e.g., payment of school fees) were not included in the marketing communication to parents (studies 2 and 3) or the survey (Study 1) as a part of the suggested activities/involvement (due to high poverty levels). Although there are other obstacles such as lack of school materials, the distance between home and school, lack of electricity etc., these were not addressed as they are outside the scope of the study. However, the design of the study (studies 2 and 3) addressed the illiteracy of parents by tailoring the marketing communication tools and holding Q&A meetings. Taken together, the exploratory studies shaped the marketing communication tools (studies 2 and 3) and improved our understanding of local parental involvement, revealing additional facets of parental involvement.

4.8. Reflection of Local Context in Marketing Communication: Contribution of Exploratory Studies 1 and 2

The exploratory studies indicated how parents are involved locally. In summary, findings from Study 1A confirmed the importance of parental involvement (e.g., encouragement) on academic achievement and income. Next, we examined closer the role of parental involvement in academic achievement in Study 1B. We found that nourishment, availability of financial support, monitoring of attendance are critical involvements for Zambian families. Not surprisingly, the main motivator for parents being involved is the potential financial stability of the children as was shown by the results of Study 2A. While parents in Zambia face financial and educational difficulties that restrict their involvement (as shown in Study 2A), the conclusions of Study 2B suggest that marketing communication with tailored messages may be effective despite these obstacles (see Table 3 for a summary of findings).

Table 3 *Summary of Results from Exploratory Studies*

Name of the study	Findings
Study 1A (Adults)	confirmed importance of parental involvement on academic achievement and income: parental encouragement, passing on educational knowledge, and monitoring of attendance
Study 1B (Teachers)	the role of parental involvement in academic achievement: nourishment, availability of financial support, monitoring of attendance
Study 2A (Parents)	motivation for involvement: potential financial stability of the children barriers: financial struggles (e.g., inability to pay for uniform) and parent's lack of education (e.g., inability to help with homework)
Study 2B (Teachers)	motivation for involvement: understanding of the value of education and prospective child's ability to support herself and her parents in adulthood barriers: household financial constraints (e.g., electricity) and low educational level of parents encouragement for involvement: marketing communication about the benefits of education (e.g., earning power)

Based on the results from the exploratory studies, the marketing communication (used in studies 1-3) had been tailored to reflect the local context. Marketing communication included the main motivation for academic achievement: financial stability as identified by parents and teachers (Study 2A and Study 2B). To mitigate the risk of not understanding the marketing communication by parents, we included visual features with messages and held Q&A meetings as this barrier (illiteracy) was identified by parents and teachers (Study 2A and Study 2B). Lastly, a few parents and teachers (participants from exploratory Study 2) reviewed the marketing communication and confirmed its appropriateness (Interview Protocol: Appendix 11). There was a suggestion to add pictures to the marketing communication to help less-literate participants to visualise the involvement. This was accomplished and the instruments with pictures were utilised for the parents from community schools (less- literate). Moreover, as a result of exploratory studies four parental involvement items were added to the scale (used in studies 1-3), which stated as follows:

How often do you and/or another parent/legal guardian

- make sure that your child has food to eat at school (if she/he spends most of the day in school)?[10]
- make sure that your child gets to school on time?[11]
- make sure that your child attends school regularly?[11]
- encourage your child to study and do well in school?[12]

The exploratory studies contributed to the survey design (reflection of a local context in parental involvement scale) and shaped marketing communication. Study 1, survey with adults, utilised the parental involvement scale influenced by the exploratory studies. Study 1 explored the relationship between parental involvement, academic achievement, soft skills, and income, which set the grounds for the following after research.

[10] Teachers explained that providing food to take to school is a critical part of parental involvement (Study 1B).
[11] Parents' monitoring of their children's attendance and tardiness are another two indicators of parental involvement (Study 1A and Study 1B).
[12] An exploratory study conducted with adults showed that, in their opinion, parental encouragement contributed to their successes in adulthood (Study 1A).

4.9. Study 1: A Survey with Adults

4.9.1. Purpose of the Study

Study 1 provided initial evidence on the association between parental involvement, soft skills (self-esteem, locus of control, grit, and self-control), academic achievement and income. This study tested H1, H2, H3, H4, H5, and H6 (list of hypotheses: Appendix 6).

4.9.2. Methodology

Participants and Survey Design. One hundred and thirty-three participants were randomly targeted and recruited to complete a field survey in Kasama, Zambia. Adults (18+) were recruited in a centre of the village (46%, Centre) (e.g., workplaces, recreational areas) and in surrounding smaller villages (e.g., homes). Participants from more rural areas (not the centre) had very low literacy levels and some did not know how to hold a pen.[13] Rural residents (smaller villages) are generally poorer than the centre's residents. Hence, this division in recruitment ensured that the sample has a wide range of participants income-wise. All participants took the same survey, except one group had questions about two soft skills, while the other group had questions about another two soft skills. This division was done to decrease participants' fatigue.

Procedure. Participants were presented with an Explanatory Statement (Appendix 12) in writing, and it was explained by the student researcher. The Consent Form for adults (Appendix 12) was obtained from each participant. When needed, the Explanatory Statement and the Consent Form were translated verbally and explained in the local language by the student's researcher assistant.

The questionnaire was divided into two parts to decrease the length of the questionnaire[14] and to sustain participants attention and decrease fatigue (Table 4). The participants were roughly divided into two equal groups (45%, Group A). One group (group A) answered questions about self-esteem and locus of control. At the end of the questionnaire, a delayed gratification procedure (manipulation for self-control) was administered with Group A. The student researcher expressed thanks to participants and offered 50ZMW (about 5USD) now or 100ZMW (about 10USD) the next day (Mischel,

[13] In such case, student researcher or her assistant (a native of Kasama with a two-year college degree) helped participant to fill out the survey.
[14] The full survey would have taken participants over 60 min to complete.

1958). Once a choice was made, it could not have been altered. Another group (group B) had questions about resilience[15] and grit.

Table 4 *Questionnaire Structure (Study 1)*

Group A and B (N=133)	Group A (N=60)	Group B (N=73)
Parental Involvement	Self-esteem	Resilience
Income	Locus of control	Grit
Education	Self-control	
Control items		

When the questionnaire was not well understood by the participants, the student researcher's assistant and/or student researcher explained the questions to the participants. In smaller villages, the literacy level is low (e.g., inability to read or write in any language). The student researcher's assistant explained the explanatory statement, the consent form and the questionnaire to multiple participants at the same time (3-5 participants). Moreover, some villagers did not know how to hold a pen. In such a case, the student researcher and her assistant helped the participants to tick the answers.

Participants kept the explanatory statement and gave the questionnaire and the consent form back to the student researcher. The student researcher expressed gratitude and gave either a small compensation (20ZMW or 2USD) or performed the self-control task (offered 50ZMW/5USD now or 100ZMW/10USD later). The "thank you" reward for participation (20ZMW or 2USD) or the self-control reward was not disclosed upfront. However, once the villagers saw that the participants got rewarded after the survey, many were willing to participate. Evidently, in this case, the villagers were incentivised to participate, and it was best to move to the next village to conduct the survey.

4.9.3. Measures

Parental Involvement. The parental involvement was self-reported by the participant adults. As limited literature discusses how to estimate parental involvement from already

[15] Resilience was excluded from analysis and future research as the scale utilized proved (in Study 1 and 2) to be inadequate (failed factor loading).

grown children's perspectives (adults, who are looking back at their childhoods), the items were adopted from current literature to reflect the adult's opinion and recall past events (Kiernan & Mensah, 2011; Sacker et al., 2002; Sui-Chu & Willms, 1996). Only items that could be asked directly of participants were included. Some items were excluded, for example, participants could not answer items about their parents' views or how often parents contacted the school.

Language in questions was modified, where needed, for example, the wording "since the beginning of the school year" was deleted since it was not applicable. Moreover, answers from "not at all, once or twice, three or more times" were replaced with "never, rarely, sometimes, often, very often" as Study 1 aimed to measure the overall level of parental involvement and not precisely at a particular year in one's life. Four items were added as an outcome of exploratory studies (Appendix 13). Questions such as how often a parent spent time with a participant, discussed school programs, and limited going out were asked.

Academic Achievement and Income. The academic achievement measure was based on the highest level of education completed (e.g., Gordon & Cui, 2012) and was self-reported by adults. Income was measured by earned income and self-reported by adults.

Soft Skills: Self-esteem. A short 3-item questionnaire from Krishnan and Krutikova (2013) was adopted for *self-esteem* (e.g., I feel proud to show my friends or other visitors where I live; on a 5-point Likert scale (1=strongly disagree to 5=strongly agree)). The scales utilised by Krishnan and Krutikova (2013) are shorter versions of the well-established scale-Rosenberg Self-Esteem Scale (1965). One item asking about the parental role of their own with their children was excluded as it is out of the scope of the current thesis.

Soft Skills: Locus of Control. A short 4-item questionnaire from Krishnan and Krutikova (2013) was adopted for the *locus of control* (e.g., I believe that If I try hard, I could improve my situation in life; on a 5-point Likert scale (1=strongly disagree to 5=strongly agree)). The scales utilised by Krishnan and Krutikova (2013) are shorter versions of the well-established scale-Locus of Control Scale (Rotter, 1966). Two items asking about the parental role of their own with their children were excluded as it is out of the scope of the current thesis.

Soft Skills: Grit. Grit was measured by an 8-item Grit scale for adults (e.g., New ideas and projects sometimes distract me from previous ones; on a 5-point Likert scale (1=very much like me to 5=not like me at all)). (Duckworth et al., 2007; Duckworth & Quinn, 2009). This scale aimed to measure perseverance and desire for long-term objectives

(Duckworth et al., 2007). The participants were asked, for example, if they perceived themselves as being hard workers and how often they perceived to change their goals.

Soft Skills: Self-control. The procedure developed by Mischel (1958) to measure delayed gratification has been adopted for this study (e.g., Stevens & Stephens, 2008; Barragan-Jason et al., 2018). This study measured self-control by delayed gratification procedure among adults with a monetary reward. The reward of choice must be desirable (Barragan-Jason et al., 2018) and since money could be spent on a variety of items, monetary reward is attractive.

The student researcher expressed thanks to members for participating in the study and offered some money. However, the student researcher noted that she is short on cash. The student experimenter then offered to give the participants 50ZMW (about 5USD) now or 100ZMW (about 10USD) in a few days when she will come back to the area again. Once a choice was made, it could not be altered.

Control Variables. The questionnaire also included demographical and background questions, as described in Table 5.

Table 5 *Controlled Variables (Study 1)*

Controlled variables	Observed variables
Family social class and Material disadvantage	Parental disability (Washbrook, 2010) (Was either of your parents/legal guardians disabled? (3-point nominal scale: 1=No; 2=Yes, one; 3=Yes, both))
Participant's Demographics	A language is spoken at home (Kiernan & Mensah, 2011) (Did you speak mainly English at home when you were growing up? (2-point nominal scale: 1=No; 2=Yes))
Family structure and characteristics	Single-family or two-parent home (Sui-Chu & Willms, 1996) (Did you grow up in a single parent home? (2-point nominal scale: 1=No; 2=Yes))

Summary of Measures. Table 6 below contains the summary of variables and measures.

Table 6 *The Variables and Their Measures (Study 1)*

Step	Construct	Measure
1.	parental involvement	self-reported: adopted from multiple sources (e.g., Sui-Chu & Willms, 1996)
2.	academic achievement	self-reported: the highest level of education
3.	self-esteem	Short Rosenberg Self-Esteem Scale (Krishnan & Krutikova, 2013)
4.	locus of control	Short Locus of Control Scale (Krishnan & Krutikova, 2013)
5.	grit	Grit scale (Duckworth et al., 2007)
6.	the delay of gratification	the procedure adopted from Mischel (1958)
7.	income	self-reported: earned income

4.9.4. Results

A total of 133 adults were recruited, with a 100% participation rate. Questions related to gender were not asked, but approximately the same number of males and females participated. All participants were Zambians. Most responders (54.2%) had household incomes of less than 300ZMW per month (about 16USD), with 19.8 % having over 1500ZMW per household (about 78USD). Somewhat surprisingly, 27.7% had completed tertiary education (e.g., trade schools) or higher (e.g., Bachelor's degree).

Parental Involvement. The parental involvement scale was reduced to three factors: home involvement (5 items),[16] discussion about school (3 items), and positive parenting (3 items) (Appendix 14) (KMO=.751). Home involvement (PI_{home}) was selected as it had an adequate level of inter-item reliability (α=.830) (Hyde et al., 2017; Hair et al., 2010; Voorhis, 2003). Discussion about school and positive parenting involvements had a low level of inter-item reliability (α=.637 and α=.544 respectively) and therefore were not chosen for further analysis.

Soft Skills. The *self-esteem* scale was reduced to one factor (KMO=.640; α=.727) (Gray-Little et al., 1997). The *grit* scale was reduced to two factors: commitment with four

[16] Four out of five items for home involvement are from exploratory studies (prompt and regular attendance, encouragement, student has food to eat at school).

items (α=.704) and hard work with three items (α=.754) (KMO=.718) (Appendix 15). Both scales had an adequate level of inter-item reliability (Hair et al., 2010; Duckworth & Quinn, 2009). *Locus of control* loaded onto two factors, but due to sampling inadequacy (KMO=.441), it was not chosen for further analysis.

4.9.5. Hypotheses Tests

Parental Involvement with Education. The survey provided evidence that the more educated adults tend to have more PI_{home} in childhood, which is supported by the literature (O'Hehir & Savelsberg, 2014; Hill & Tyson, 2009; Van Voorhis, 2003). For instance, 66.1% of better-educated adults had high parental involvement compared to only 21.2% of the less-educated adults. This association between parental involvement and education was significant χ^2 (1, N=125) = 25.7, p<.01 (Appendix 16). Hence, H1, which states that parental involvement relates to academic achievement, was supported.

Parental Involvement with Income. The results indicate that adults with a higher income had higher PI_{home} in childhood.[17] For instance, 65.5% of high-earning adults had high PI_{home} compared to only 25.4% of the low-earning adults. This association between PI_{home} and income was significant χ^2 (1, N=126) = 20.4, p<.01 (Appendix 17). Hence, H2, which states that parental involvement relates to a higher income in adulthood, was supported.

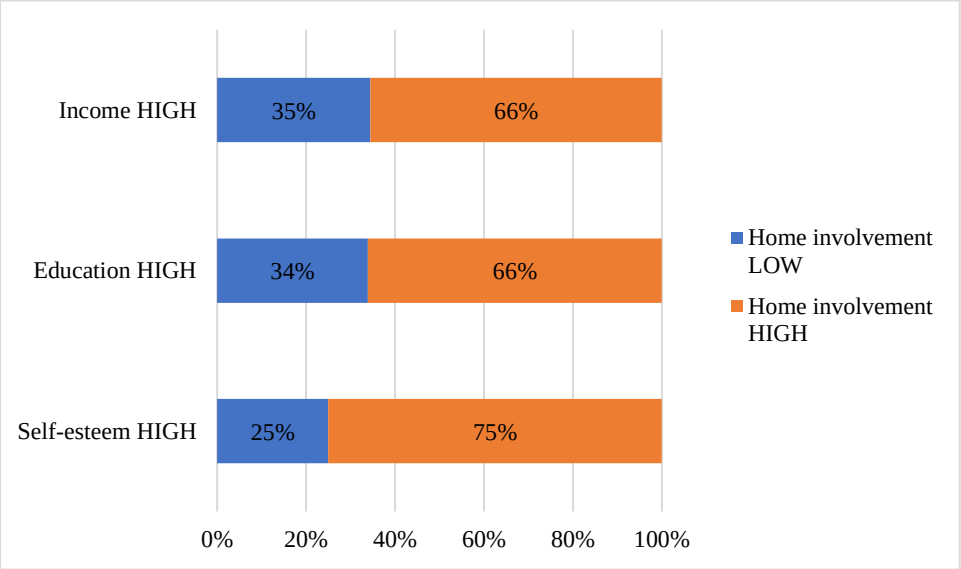
Soft Skills with Parental Involvement, Income, and Education. The results show a significant relationship between *self-esteem* and PI_{home}, income, and education. Adults with higher self-esteem tended to have a higher income (e.g., Krishnan & Krutikova, 2013), be more educated (e.g., Araujo & Lagos, 2012), and have higher PI_{home} (e.g., Ajilchi et al., 2013). More high-earning adults (73.3%) had high *self-esteem* compared to only 10.3% of the low-earning adults. This association between self-esteem and income was significant χ^2 (1, N=59) = 24.0, p<.01 (Appendix 18). Hence, H3, which states that self-esteem relates to a higher income in adulthood, was supported. Similarly, 66.7% of better-educated adults had high self-esteem compared to only 14.3% of the less-educated adults. This association between self-esteem and education was significant χ^2 (1, N=58) = 16.4, p<.01 (Appendix 19). Further, 62.1% of adults with high parental involvement had high self-esteem compared to

[17] Study 1 (adults) was analysed with Crosstabs as income and education (and their residuals) are not normally distributed. Majority of responders have a monthly income below 300ZMW (most people picked one option as their answer). Many responders completed education beyond high school (responses skewed to the right).

37.9% of adults who had low parental involvement. This association between self-esteem and parental involvement was significant χ^2 (1, N=58) = 10.2, p<.01 (Appendix 20).

Grit and *self-control* did not show significant relationships with parental involvement, income, or education. Therefore, the predictions about the association of grit and self-control with income were not supported (H4 and H5 respectively). H6 (*locus of control*) was not considered for the hypothesis testing due to sampling inadequacy. Taken together, the survey of adults showed that people with higher PI_{home} tended to have higher self-esteem, academic achievement, and income. The main findings are summarised in Figure 10 and Table 7.

Figure 10 *Study 1: Association between Self-Esteem, Parental Involvement, Income, and Education*



$\chi 2$ (1, N=126) = 20.4, p<.01

$\chi 2$ (1, N=125) = 25.7, p<.01

χ^2 (1, N=58) = 10.2, p<.01

Table 7 *Summary of Hypotheses Tested in Study 1*

Hypothesis	Statement	Study 1	Pre-test	Study 2	Study 3
H1	Parental involvement is positively related to an academic achievement (level of schooling completed).	√			
H2	Parental involvement is positively related to a child's higher income in adulthood.	√			
H3	Self-esteem is positively related to a higher income in adulthood.	√			
H4	Grit is positively related to a higher income in adulthood.	X			
H5	Self-control is positively related to a higher income in adulthood.	X			
H6	Internal locus of control is positively related to a higher income in adulthood.	NC			

Notes. In regard to abbreviations: "√" supported, "X" not supported, "NC" not considered as the hypothesis could not be tested (e.g., inadequate scale reliability, sampling inadequacy).

4.9.6. Discussion

The results obtained from Study 1 indicate that adults with higher income tend to have higher academic achievement, higher self-esteem and higher parental involvement (PI_{home}) during childhood (summarized in Table 7). However, we, the student researcher and her supervisors did not find significant relationships between *grit*, parental involvement, income, or education. This may be due to "grit" being very different in local settings and scale might not have captured the meaning of the concept as understood by the participants. Also, we did not find significant relationships between *self-control*, parental involvement, income, or education. This could be due to the trust issues between the student researcher (an outsider) and respondents. Participants might not have believed that a reward would be given later. One participant called the student researcher "a devil" as he had never previously encountered a white person.

This study had several limitations. First, adults were recalling parental involvement during their childhood, and their memories might not have been strictly accurate. Future

research could explore the relationship between parental involvement and income in a longitudinal study. Second, the sample was limited to rural Zambia and the associations suggested by the results should be explored further in other contexts (e.g., more developed areas). Third, the study showed an association between variables and not causation; hence, experimental or longitudinal studies should explore the relationships further. In an attempt to determine the directionality of the observed effect, we adopted a three-level, between-subjects quasi-experimental design for Study 2. Thus, Study 2 explored causal relationships between parental involvement, soft skills, and academic achievement. Before proceeding to Study 2, a pre-test for Study 2 was conducted.

The pre-test for Study 2 tested the effect of marketing communication on parental involvement. The exploratory studies provided us with a sound contextual understanding of this factor. We co-designed a marketing communication strategy with potential participants and with these insights, the effectiveness of marketing communication needed to be tested in practice. The next section discusses the pre-test used to test the effectiveness of marketing communication and its results.

4.10. Pre-test

4.10.1. Purpose of the Study

The pre-test's purpose was to test if marketing communication (an informative brochure, an action plan along with paper trackers: Appendix 5) can increase parental involvement.

4.10.2. Design

We employed a marketing communication strategy (treatment and control) by parental involvement in a two-level, between-subjects design, where marketing communication was manipulated, and parental involvement was measured.

4.10.3. Sample

Sixty-eight parents of students at a private school in Kasama (Northern Province) participated (70.6% mothers, average age between 36 and 41 years old, SD_{age}=1.14). The Zulu school (a pseudonym) comprises one or two classes in each grade from pre-kindergarten up to grade seven. The number of students at this school is typical of a village this size.

For secondary and tertiary education, students are usually at boarding schools and see their parents only during school breaks and holidays. Hence, the investigation of parental involvement was less applicable. Moreover, the poorest households may not afford to send their children to secondary schools. And since this study included the poorest households and focused on consistent parental involvement, students from secondary schools were not asked to participate. Additionally, students from the lower grades in elementary schools were not asked to participate due to low proficiency in English. Students start learning English only from the first grade (English is the language used for all instructions in school), which makes it difficult for children who have had no previous exposure to the language to comprehend English. Since the higher grades in elementary schools are more fluent in English, grades 6 and 7 were the focus of the study.

4.10.4. Method

Procedure. The study was conducted over six weeks from March to April 2019. All parents of students in grades 6 and 7 received a hard copy of the Explanatory Statement and a Consent Form (Appendix 12), which were sent home with students. Reminders were sent out a week later, again on paper. The students dropped off the completed consent forms in the sealed box located in the school's office.

Parents were randomly assigned to a condition (control or treatment) by flipping a coin. The treatment group received an informative brochure, an action plan along with paper trackers with a pencil, together constituting a marketing communication tool (Appendix 5). The control group was not given any such marketing communication tool. The participants in the treatment group were asked to return the trackers every two weeks via the students (sealed box in the school's office) (for a review of a similar design, see Avvisati, Gurgand, Guyon, & Maurin, 2014). A new set of trackers (for two weeks) was sent out with students on the same day that the previous one was due. At the end of six weeks, all participants in the treatment group were invited to the school to take a questionnaire and those who had returned all trackers collected a small reward of 5USD.[18]

Participants were offered refreshments while they completed the questionnaire. Those participants in the treatment group who were not able to attend, and the participants from the control group, received the questionnaire in a sealed envelope taken home by their children. Children dropped off completed questionnaires in the sealed box in the school's office.

Measures: Parental Involvement. In the questionnaire, we embedded the 12-item Parental Involvement scale proposed by Sui-Chu & Willms (1996) (e.g., How often do you or your partner check on whether your child has done her/his homework?). Participants recorded their responses on a 5-point Likert scale (1=never to 5=very often). Some items were reworded to indicate that parents, not children, were the participants. To illustrate, "How often have you talked to [your mother or female guardian] about planning your high school program?" was changed to "How often have you talked to your child about planning her/his senior secondary program?" The question about limiting TV times was removed due to the unavailability of TVs in the local area. A question about the school contacting parents was removed since the measurement of school participation as involvement was not relevant to this study. Lastly, since there is no direct equivalent of a Parent Teacher Organization in

[18] The reward information was disclosed upfront (after the consent was given).

Zambia, the question about the Parent Teacher Organization was removed from the questionnaire.

In addition to the scale proposed by Sui-Chu and Willms (1996), items from other works were added to the questionnaire to reflect various types of parental involvement. The question about negative interactions with a child, such as slapping or spanking, scolding or physically restraining the child, was included (Kiernan & Mensah, 2011). Items about parental aspirations were adopted from Sacker et al. (2002). Sacker et al. (2002) used a 9-point scale to determine parents' aspirations for a child's first job, ranging from non-skilled manual jobs to professional or managerial jobs. However, the full scale was not provided. The scale attempts to estimate the high/low hopes of parents for their offspring. Hence, four broad categories were included as options: "unpaid family worker", "skilled agricultural, forestry and fisheries", "professional or managerial", and "other" to reflect the reality of the job market in Zambia.

Overall, the questionnaire reflected four types of parental involvement: home (including discussion), school-based parental involvement, academic socialisation and interest. Moreover, four items that emerged from the exploratory studies were added (e.g., How often do you or your partner make sure that your child has food to eat in school (if she/he spends most of the day in school)?) Overall, parents were asked to respond to 20 items related to parental involvement.

Control Variables. Participants were asked to indicate their age, income, highest level of education, family structure (e.g., single parent, number of children), and the main language is spoken at home.

4.10.5. Results

Although factor analysis revealed four components of parental involvement, only three of them had an adequate level of inter-item reliability: home involvement with five items[19] (α=.789), school involvement with three items (α=.840), and home discussion with three items (α=.844) (Hyde, Canning, Rozek, Clarke, Hulleman, & Harackiewicz, 2017; Hair, Black, Babin, & Anderson, 2010; Voorhis, 2003) (Appendix 21). The results confirmed that the manipulation of parental involvement had been successful. Participants in the treatment

[19] Four out of five items for home involvement are from exploratory studies (prompt and regular attendance, encouragement, student has food to eat at school).

condition reported a greater home parental involvement (M=4.88, SD=0.17) than did the participants in the controlled condition (M=4.62, SD=0.50). This difference was significant (t(36)=2.73, p<.05), thereby supporting H_{7a}, which states that marketing communication increases home parental involvement. Similarly, results indicated that more discussions occurred at home in the treatment group (M=3.70, SD=0.95) compared to the control (M=2.97, SD=1.31), and this difference was significant (t(52)=2.56, p<0.05). Hence, H_{7b}, which states that marketing communication increases discussion as a form of parental involvement, was supported. The two groups were not significantly different in terms of school involvement. Hence, H_{7d}, which states that marketing communication increases school parental involvement, was not supported.

Table 8 *The Summary of Hypotheses Tested in Pre-test*

Hypothesis	Statement	Study 1	Pre-test	Study 2	Study 3
H7	**Marketing communication** about parental involvement increases parental involvement.				
H_{7a}	Marketing communication about home parental involvement increases home parental involvement.		√		
H_{7b}	Marketing communication about discussion increases discussion as a form of parental involvement.		√		
H_{7d}	Marketing communication about school parental involvement increases school parental involvement.		X		

Notes. In regard to abbreviations: "√" supported, "X" not supported, "NC" not considered as the hypothesis could not be tested (e.g., inadequate scale reliability, sampling inadequacy).

4.10.6. Discussion

The pre-test demonstrated that parental involvement (home involvement and discussion) could be successfully manipulated by the designed marketing communication instrument applied in a local setting. Hence, Study 2 manipulated parental involvement by the marketing communication tool verified in the pre-test. Study 1 explored the connections between parental involvement, soft skills, education and income and, together with the pre-test, it set the stage for Study 2, the field quasi-experiment.

4.11. Study 2: Experiment with Children

4.11.1. Purpose of the Study

Study 2 was conducted to test whether soft skills (grit, locus of control, self-esteem, self-control) and parental involvement mediate the effect of marketing communication on academic achievement. This study tested H7(a-e), H8(a-e), H9, H10, H11, H12, H13, H14, H15, H16 H17, H18, H19, H20, and H21(a-d) (list of hypotheses: Appendix 6).

4.11.2. Methodology

Participants and Experimental Design. We, the student researcher and her supervisors employed a marketing communication for parents (high parental involvement, low parental involvement and control) by parental involvement in a three-level, between-subjects design, where marketing communication was manipulated, and parental involvement, soft skills, and academic achievement were measured. For the data collection, the student researcher deliberately chose both community and private schools in Kasama, Zambia.

Community schools represent the poorest population. Parents of children attending community schools have very low literacy levels and some do not know how to hold a pen.[20] These parents cannot afford a uniform, school fees or, often, even shoes for their children. On the other hand, children who attend private schools come from families that can afford not only the basics such as the school uniform but also extra educational materials. Having both types of schools in the sample enabled us to see the effects of marketing communication on two different segments of the population. Since the aim was to recruit 240 responders (120 from community schools and 120 from private schools) and most schools had one class per grade with 30-50 children in the class, six schools were included in the study. Three community and three private schools participated (mostly grades six and seven).

In this study, students from grades 6 and 7 participated (ages 10-16).[21] Students in grades 6 and 7 have had enough exposure to the English language since instruction is delivered in English from grade 1. Lower grades were excluded from the study due to a lack of English proficiency. Higher grades were not included in the study because, after grade 7,

[20] In such case, student researcher or her assistant (a native of Kasama with a two-year college degree) helped participants to fill out the survey.
[21] The variation of ages in the same grade is due to children repeating a grade or start school later.

students attend boarding schools and parents have fewer opportunities to be involved as well as the poorest households may not have the means to send their children to school beyond grade 7.

Procedure. Each school (community or private) was randomly assigned (by flipping a coin) to one of the three conditions (parental involvement high, low or control). The reason for the assignment of the whole school was to 1) avoid potential contamination of evidence by individuals at the same school sharing the social marketing communication materials and discussing the study; 2) for ease of administration.

Children and their parents received an Explanatory Statement (Appendix 12) in writing. Teachers distributed the Explanatory Statement and the Consent Form to the children who then took them home to parents. The Consent Form was obtained from the parent for parental participation and a child's participation (permission from a parent) (Appendix 12). The reminders were sent out a week later. The students dropped off the completed consent forms in the sealed box located in the school's office. For children, the Explanatory Statement was given in writing at the time of the survey, and it was read out aloud by the teacher. All minors were given the Assent Form (Appendix 12) just before the commencement of the survey. Children, who did not sign the Assent Form were excluded from the studies.

Parents in the "high" group were asked to return the trackers every two weeks via their children (Appendix 5),[22] who placed them in a sealed box in the school's office. The new set of trackers (for two weeks) were sent out with students on the same day that the previous one was due. However, in community schools, to boost participation and understanding, meetings with parents (light refreshments provided) were held at the time when trackers were due. It was an alternative way for the parents to return trackers, and it allowed parents to ask questions. In private schools, no such meetings were held.

At the end of six weeks, parents in the "high" group were invited to the school to collect the reward of 5USD[23] (if they had returned all trackers) and to complete a paper-based questionnaire (light refreshments provided). Parents in the "high" group, who were not able to attend, and participants from the "low" and control groups received questionnaires in a sealed envelope taken home by their children. Children returned completed questionnaires to the sealed box in the school's office.

[22] Section 3.4.3. provides and explanation on development of social marketing communication tool, which includes trackers.
[23] The reward information was disclosed upfront (after the consent was given).

The paper-based survey conducted with children took place after the treatment period (within 1-2 weeks). All of the children, regardless of the condition to which they had been allocated, completed the questionnaires at the same time. Immediately after completion, the questionnaires were collected by the student researcher's assistant (a native speaker). Absent students were not allowed to complete the questionnaires at a later time. The student researcher's assistant translated the questionnaire items into the children's native tongue if the participants had a poor understanding of English (as was often the case in community schools). This translation by a native speaker follows the best practice recommended by Brace (2004). This study utilised breaks to reduce possible fatigue among surveyed children.

The procedure used to measure self-control was adopted from Mischel (1958). This procedure has been widely applied by researchers to measure self-control in children (Burns et al., 2021; Schlam et al., 2013; Mischel & Ayduk, 2004; Cuskelly et al., 2004). The advantage of this procedure is that the task can be well understood by children in a variety of contexts and the results can be easily measured (reward now or later). In the context of extreme poverty the student researcher and her assistant provided children with a desirable reward and measured self-control by waiting times (reward now or later). The student researcher/her assistant thanked the children for participating in the study and offered them candies and coloured pencils. The student researcher/her assistant noted that some supplies were left behind (as per procedure by Mischel, 1958), so the children could choose to receive one candy and one colour pencil immediately. Alternatively, the student researcher stated that she would come back in a few days and give the children several candies and two coloured pencils. The difference between choices was emphasised. Each child independently was asked to indicate whether she/he wanted the candies and pencils immediately or later, writing the choice on the top of the questionnaire. Academic achievement was measured by the grade point average (provided by the school) for the term before the treatment and the term after the treatment.

The Treatment: High Condition. Participants in the high condition received an informative brochure, an action plan, paper trackers, and sample questions (Appendix 5). The brochure communicated how parents could be involved at home and school. It prompted them to communicate their aspirations and to take an interest in their child's education and hobbies. The brochure also stated that parental involvement can lead to higher income for their children in the future (motivation for parents). An action plan outlined the steps for each type of involvement such as spending time with a child: playing a game, going for a walk or shopping, all of which constitute home involvement. A tracker, which was based on an action

plan, outlined the activities for involvement and encouraged parents to tick a box every time they complete the task (involvement). The tracker suggested that parents complete each activity a few times per week (eight activities in total). Lastly, a set of sample questions (such as "What interests you the most?") were given to parents to help start the activities.

The Treatment: Low Condition. Participants in the low condition received an informative brochure only (Appendix 5). The brochure was identical to the one given to the "high" condition participants. The brochure communicated how parents could be involved at home and in school. It prompted them to communicate their aspirations and to take an interest in their child's education and hobbies. The brochure also stated that parental involvement can lead to higher income for their children in the future (motivation for parents). An action plan, paper trackers, and sample questions were not included (as in "high" condition).

The Treatment: Control Condition. Participants in the control condition were given no materials.

4.11.3. Measures

Parental Involvement. In the survey, we, the student researcher and her supervisors utilised the same scale as that for the pre-test.

Academic Achievement. The students' academic performance was measured by the grade point average (the total score) provided by the school. The grade point average was accessed from the school records right before the treatment (end of the semester) at the end of a three-month term.

Soft Skills: Self-esteem. A common measure of self-esteem is the Rosenberg Self-Esteem Scale (1965) (Krishnan & Krutikova, 2013; Heckman et al., 2006). The items selected from the Rosenberg Self-Esteem Scale (1965) were adopted for this study and taken from Krishnan and Krutikova (2013). The 9-item self-esteem scale from Krishnan and Krutikova (2013) included items such as "I feel proud to show my friends or other visitors where I live." Responses were indicated on a 5-point Likert scale (1=strongly disagree to 5=strongly agree) that has been validated by studies on developing countries (for a review, see Krishnan & Krutikova, 2013). Additionally, more narrowly defined measurements such as the Krishnan and Krutikova (2013) scale perform the same as or better than comprehensive tests (Bowles et al., 2001).

Soft Skills: Locus of Control. The items selected from the Locus of Control Scale (Rotter, 1966) were adopted for this study from Krishnan and Krutikova (2013) with items

such as “If I try hard, I can improve my situation in life” were responded to on a 5-point Likert scale (1=strongly disagree to 5=strongly agree) which has been validated by previous studies (for a review, see Krishnan & Krutikova, 2013). The wording of items related to the locus of control was changed to the present tense. Original items were worded to address children who have just finished or are about to finish high school. For example, the original survey item stated: “I feel proud of the job the main breadwinner in my family did when I was at school.” This was changed to: “I feel proud of the job the main breadwinner in my family does.” The two items about employment were excluded as it is expected that participants are full-time students and do not work as they are under-age.

Soft Skills: Grit. Grit was measured via the 8-item Grit scale for children in the form of a short multiple-choice questionnaire. It contained items such as “New ideas and projects sometimes distract me from previous ones.” The measurement instrument was a 5-point Likert scale (1=very much like me to 5=not like me at all) (Duckworth & Quinn, 2009; Duckworth et al., 2007).

Soft Skills: Self-control. A test for delayed gratification has been utilised in past works to measure self-control (Romer et al., 2010; Mischel et al., 1989). For example, one study examined the association between self-control (measured in terms of delay of gratification) and the use of popular drugs (tobacco, marijuana, and alcohol) by children and young adults aged between 14 and 22 (Romer et al., 2010). A single-trial delayed gratification task, where participants are faced with a real choice requiring them to choose between smaller or larger options is an acceptable way to measure delayed gratification (Barragan-Jason et al., 2018; Mischel, 1958).

This study measured self-control by experimenting with children, offering candy and coloured pencils as rewards. Given that some of the participants were from extremely poor families, it was essential to control for hunger issues; if candy were the only reward, it might not have given a valid result for self-control. It is also important to ensure that children are highly motivated by rewards (Barragan-Jason et al., 2018). Where there is extreme poverty, candy and coloured pencils are luxuries and therefore desirable. The children had to choose between taking the reward “now” or “later” (in a few days). Once a choice was made, it could not be altered.

Control Variables. Table 9 shows the controlled variables for this study. This study accounted for controlled variables such as social class, material disadvantage, students’ background, family structure and characteristics (Table 9). Participants indicated their age,

income, highest educational level achieved, family structure (e.g., single parent, number of children), and the main language which is spoken at home.

Table 9 *Controlled Variables (Study 2)*

Controlled variables	Observed variables
Family social class and material disadvantage	Current household income (Kiernan & Mensah, 2011); parents' highest educational level (George & Kaplan, 1998); parental disability (Washbrook, 2010); gender of the primary caregiver
Students' Background	Child's gender (Sui-Chu and Willms, 1996; Hango 2007); a language spoken at home (Kiernan & Mensah, 2011)
Family structure and characteristics	Single-family or two-parent home (Sui-Chu & Willms, 1996); parental confidence to help with homework (Williams et al., 2002); the age of the parents at the birth of the child (Hango, 2007); having another child close in age

Summary of Measures. Table 10 provides a summary of the variables and their measures.

Table 10 *The Variables and Their Measures (Study 2)*

Step	Construct	Measure	Respondent
1.	parental involvement	Parental Involvement scale	parents
2.	academic achievement	grade point average	NA (provided by the school)
3.	self-esteem	Short Rosenberg Self-Esteem Scale	children
4.	locus of control	Short Locus of Control Scale	children
5.	grit	Grit scale	children
6.	self-control	the procedure adopted from Mischel (1958)	children

4.11.4. Results

In total, 358 families (358 children and 358 parents) were recruited from six schools (all Zambians, 60.7% mothers, 49.5% female students, average parental age between 36 and 41 years (SD_{age}=1.22). This effort yielded a sample size of 107 completed questionnaires.[24] The majority of respondents (50.5%) have household incomes below 200ZMW per month (about 11USD) with 16.2 % having over 3000ZMW per household (about 163USD). Most households consisted of five or more members (86.9%) with 36.4% having seven-nine members and 13.1% having over ten members in a household. Over 89.7% of parents had completed 7th grade or beyond.

Parental Involvement. The parental involvement scale was reduced to four factors: home involvement (six items),[25] school involvement (three items), discussion about school (three items), and positive parenting (three items) (Appendix 22) (KMO=.760). Home (α=.817) and school (α=.808) involvement were selected for analysis as they had adequate levels of inter-item reliability (Hyde et al., 2017; Hair et al., 2010; Voorhis, 2003) Discussion about school and positive parenting had low levels of inter-item reliability (α=.662 and α=.460 respectively) and were not selected for further analysis. High and low conditions were not significantly different for home[26] or school parental involvement.[27] The tools provided in the "high" condition (e.g., trackers) were no more effective than the tools in the "low" condition (e.g., informative brochure). Hence, high and low conditions were combined into the "treatment" condition.

Soft Skills. *Self-esteem* did not meaningfully load on any factors and displayed sample inadequacy (KMO=.585) (Gray-Little et al., 1997). Hence, self-esteem was not considered for further analysis. The *grit* scale was reduced to two factors: hard work, with three items (α=.775) and commitment, with five items (α=.727) (KMO=.775) (Appendix 23). In the literature, these factors (with similar loading) are named as the perseverance of effort

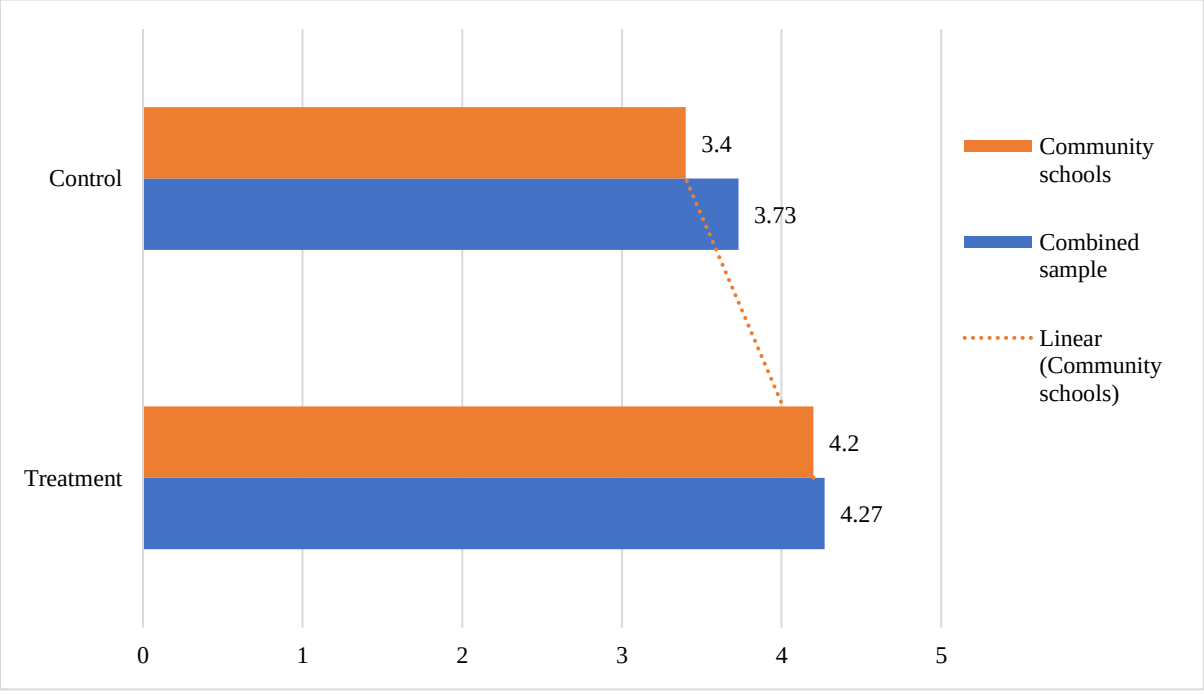
[24] Data from the pre-test school was included in the analysis. The data from the pre-test school excluded soft skills. The pre-test school data had a random assignment on a student level.
[25] Four items of home involvement are from exploratory studies (prompt and regular attendance, encouragement, child has food to eat at school).
[26] Participants in the high condition reported a greater home parental involvement (*M*=4.27, *SD*=0.08) than participants in the low condition (*M*=4.25, *SD*=0.50), but this difference was not significant (*t*(71)=-0.146, *p*=.885).
[27] Participants in the high condition reported slightly lower school parental involvement (*M*=2.59, *SD*=1.09) than did the participants in the low condition (*M*=3.12, *SD*=1.07), but this difference was not significant (*t*(69)=1.99, *p*=.051).

(in this work called “hard work”) and consistency of interest (in this work called “commitment”) (Muenks, Yang, & Wigfield, 2018). Both scales had adequate levels of inter-item reliability (Hair et al., 2010; Duckworth & Quinn, 2009). *Locus of control* loaded onto one factor (KMO=.884) with weak inter-item reliability of α=.577. *Self-control* was not considered for analysis as all respondents in community schools chose the reward “now” and everyone in private schools chose the reward “later” despite the condition (control /treatment).

4.11.5. Hypotheses Tests

Manipulation Check: Parental Involvement (Predicting Variable: Communication). We conducted an independent sample t-test. Participants in the treatment condition reported greater home parental involvement (M=4.27, SD=0.5) than did those participants in the controlled condition (M=3.73, SD=1) and this difference was significant (t(32)=-2.25, p<.05). Moreover, the treatment worked only for community schools (private schools excluded) (Figure 11). Participants (community schools) in the treatment condition reported greater home parental involvement (M=4.20, SD=0.6) than did those participants in the controlled condition (M=3.4, SD=1); this difference was significant (t(22)=-3.20, p<0.01).

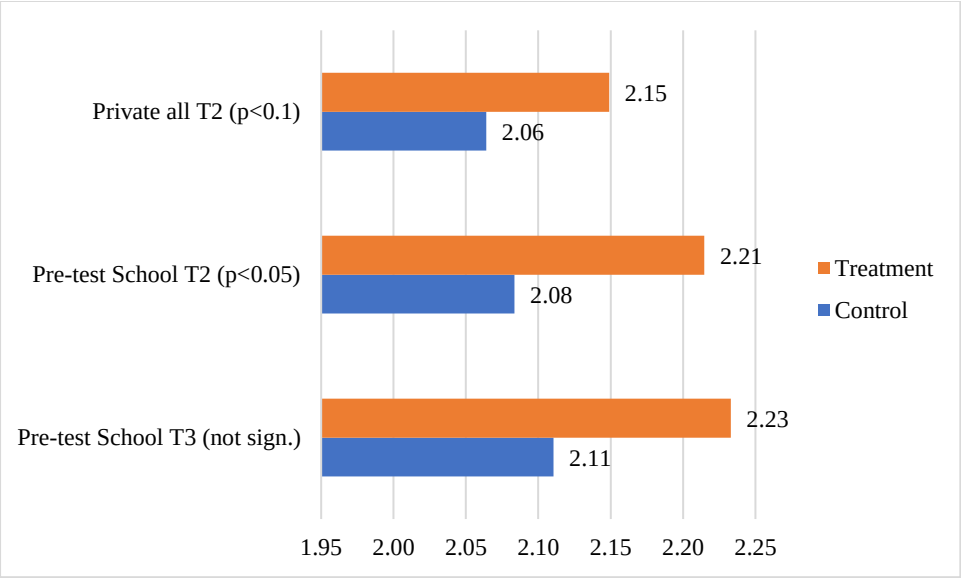
Figure 11 *Study 2: Manipulation Check (PI_{home}) for Combined Sample (Private and Community Schools) and Community Schools (Scale 0 to 5)*



Evidently, the treatment worked in private and community schools combined as well as for participants in the community school alone (home involvement: PI_{home}). Hence, H_{7a}, which states that marketing communication increases home parental involvement, was supported. The two groups were not significantly different in terms of school involvement. Hence, H_{7d}, which states that marketing communication increases school parental involvement, was not supported. H_{7b}, which states that marketing communication increases discussion as a form of parental involvement, H_{7c}, academic socialisation, and H_{7e}, parental interest, were not considered for the hypothesis testing as a discussion type of involvement (that includes academic socialisation and interest) had low levels of inter-item reliability.

Academic Achievement (Predicting Variable: Marketing Communication). We conducted an independent sample t-test in SPSS using academic achievement as a dependent variable and marketing communication (treatment or control) as a predicting variable. Results from an independent sample t-test showed that academic achievement is different for the control (M = 2.06, SD = 0.22) and treatment groups (M = 2.15, SD = 0.20) in private schools, and this difference was significant (t(-1.81)=86, p<.1) (Figure 12).

Figure 12 *Study 2: Effect of Marketing Communication on Academic Achievement (Private Schools Combined and the Pre-Test School)*



Marketing communication in community schools produced a significant inverse effect. This result may be due to the quality of the data or to the farming season, which is a significant factor in a largely agricultural community. However, since the private school sample showed a significant difference between groups for PI_{home}, H_{8a}, which states that

greater home parental involvement increases a child's academic achievement, was supported. However, due to the inadequate sample size in private schools (one school - the pre-test school - did not survey children), hypotheses related to soft skills and education could not be considered in this study (H10, H11, H13, H14, H15, H17, H18, H20).

Private schools displayed a positive change in PI_{home} based on marketing communication. The pre-test school's sample showed a higher level of significance ($p<.05$) one school term after the treatment and not significant, but still improvement in academic achievement two school terms after the treatment (Figure 12). In a pre-test school, where randomisation was completed on a student level (and not on the school level as in Study 2), an independent sample t-test showed that academic achievement differs between control (M = 2.08, SD = 0.27) and treatment groups (M = 2.21, SD = 0.22) and this difference was significant (t(-2.05)=58, $p<.05$).

H_{8b} (discussion increases academic achievement), H_{8c} (academic socialisation increases academic achievement), and H_{8e} (parental interest increases academic achievement) were not considered for hypotheses testing as involvement that takes the form of discussion, (and includes academic socialisation and interest) had low levels of inter-item reliability. H_{8d} (school involvement increases academic achievement) was not considered for the hypothesis testing as school involvement did not pass the manipulation check.

Soft Skills (Predicting Variable: Marketing Communication). We conducted an independent sample t-test in SPSS using soft skills (self-esteem, locus of control, grit, and self-control)[28] as dependent variables and marketing communication (treatment or control) as a predicting variable. Results from an independent sample t-test showed that *grit*-commitment differs between control (M = 4.21, SD = 1.05) and treatment groups (M = 2.95, SD = 0.80). This difference was significant (t(6.82)=102, $p<0.01$), thereby supporting H16: that parental involvement increases a child's grit.

Similarly, an independent sample t-test showed that *locus of control* differs between control (M = 4.10, SD = 0.38) and treatment groups (M = 4.42, SD = 0.46) and this difference was significant (t(-3.60)=101, $p<.01$) (see Table 11 for results). Hence, H12, which states that parental involvement increases a child's internal locus of control, was supported. H5, which states that parental involvement increases a child's *self-esteem*, was not considered for the hypothesis testing as self-esteem had a low level of inter-item reliability. H19, which states

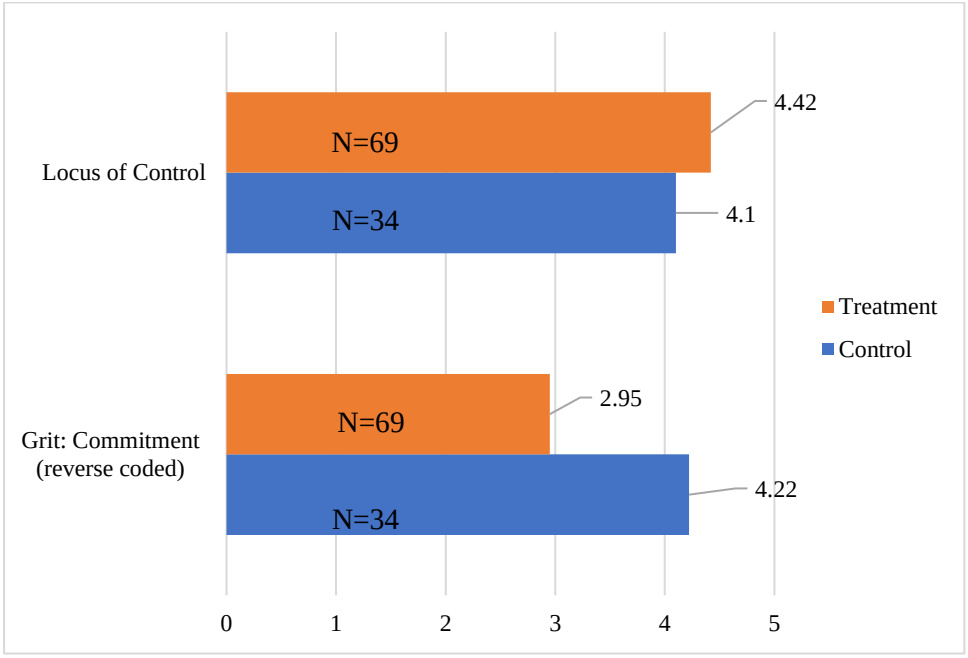
[28] H5, H6, H8, and H9 related to self-esteem cannot be tested due to inadequate sample factor loading and sample inadequacy. H19, H20, and H24 related to self-control cannot be tested as vast majority of responders preferred one choice.

that parental involvement increases a child's *self-control*, was not tested since most of the respondents chose one answer despite the condition (control /treatment).

Table 11 *Results of T-Test and Descriptive Statistics for Soft Skills (Combined Community and Private School Samples) for Study 2*

Outcome	Group								
	Control			Treatment					
	M	*SD*	N	*M*	*SD*	N	*p*	*t*	df
Grit-Commitment[29]	4.21	1.05	34	2.95	0.80	70	.000	6.82	102
Locus of Control	4.10	0.38	34	4.42	0.46	69	.001	-3.60	101

Figure 13 *Study 2: Effect of The Treatment on Soft Skills Combined Community and Private School Samples (Scale 0 to 5)*



Locus of control
$t(-3.60)=101, p<0.01$

Grit: commitment
$t(6.82)=102, p<0.01$

The Mediating Influence of Parental Involvement on Soft Skills (Predicting Variable: Marketing Communication). To test hypotheses H_{21a-c}, which postulate that parental involvement mediates the relationship between marketing communication and children's soft skills (marketing communication → parental involvement → soft skills (e.g.,

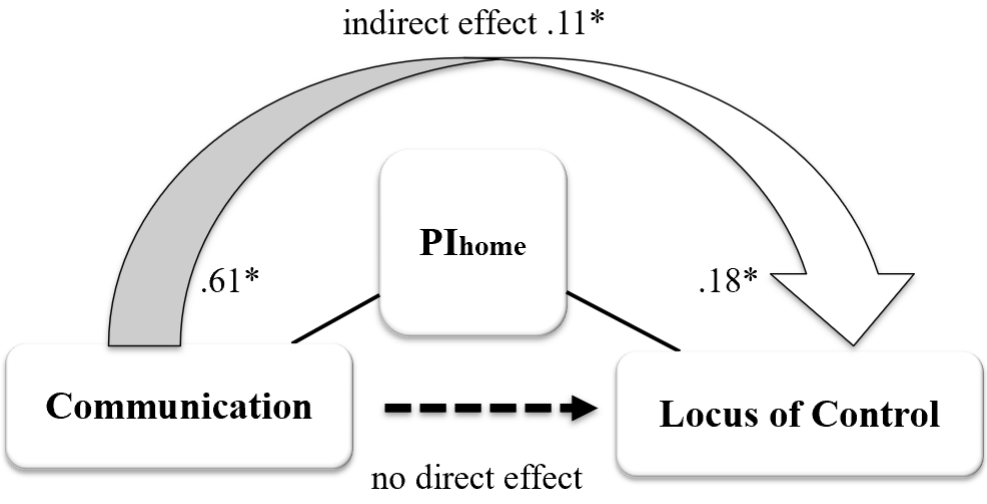
[29] Reversed coded (statements from + to -)

locus of control)) PROCESS by Hayes (2013) was utilised. Evidence supported mediation by parental involvement and confirmed one of the four hypotheses.

As predicted, parental involvement mediated the effect of marketing communication on locus of control. Table 12 shows the *c* (total effects on the outcome), *c ′* (direct effect on outcome after controlling for the mediator), and the indirect effects (*c*–*c ′*) which is equal to *a* × *b*. There is no direct effect of marketing communication on the locus, but there is a total significant positive effect of marketing communication on the locus of control (mediated effect=.3251, *SE*=.1109, CI [0.11, 0.55], *p*<.01) (path *c*). The indirect effect (.1132) of PI_{home} is present. It is noted that PI_{home} had the highest meditational impact on the relationship between marketing communication and locus of control ($t = 2.93$, $p < 0.01$). Hence, marketing communication (compared to no marketing communication) increased the extent to which parents are involved with their children (PI_{home}), which showed a greater internal locus of control.

H_{21b} predicts that parental involvement mediates the relationship between marketing communication and locus of control. Results indicated that parental involvement is a significant mediator in this relationship, thereby supporting $H_{21b.}$ There is evidence that marketing communication has an indirect effect on the locus of control, resulting from parental involvement ($p < 0.01$) (see Table 12). This significant relationship may be explained by the fact that parental involvement (guided by marketing communication) increases internal locus of control (Suizzo & Soon, 2006; Trusty & Lampe, 1997).

Figure 14 *Study 2: Mediating Effect of Parental Involvement on the Relationship between Marketing Communication and Locus of Control (*p<.01)*



This finding corroborates those of previous studies regarding the positive effect of marketing communication on changing behaviour (parental involvement) (e.g., Fink et al., 2018; Agha et al., 2007). This finding suggests the possibility that parental involvement of the poorest parents could be stimulated, which in turn could lead to positive outcomes for children.

H_{21c}, which states that parental involvement mediates the effect of marketing communication on grit, was not supported (no indirect effect). The absence of the mediating effect of parental involvement signals that marketing communication affected grit through other channels (e.g., parents' attitudes) not measured as part of parental involvement. Evidently, there is a total significant positive effect of marketing communication on grit (mediated effect=-1.2845, *SE*=.2100, CI [-1.70, -0.87], $p<.01$) (path *c*) (Table 12).

Table 12 *Mediation Results (Study 2)*

Independent variable	Mediator	Direct effect (*c'*)	Total effect (*c*)	Indirect effect (*a* × *b*)	*T* value (total effect)	CI	Hypotheses
Marketing communication	Self-esteem	N/A	N/A	N/A	N/A	N/A	H_{21a} not considered
Marketing communication	Locus of control	-	0.3251	0.1132	2.9323	CI [.03, .24]	H_{21b} supported
Marketing communication	Grit	-1.1554	-1.2845	-	-6.1174	CI [-.34, .01]	H_{21c} not supported
Marketing communication	Self-control	N/A	N/A	N/A	N/A	N/A	H_{21d} not considered

Hence, marketing communication was successful in achieving socially desirable outcomes (such as increased grit). Similarly, marketing communication has been successful in increasing parental involvement (mediated effect=.5620, *SE*=.1740, CI [0.22, 0.91], $p<0.01$) (path *a*). One plausible explanation is that marketing communication increased parental involvement and at the same time influenced non-measured dimensions of parent-child relationships, which in turn changed grit. Although this work utilised parental involvement as a multidimensional construct, there are drivers which could have been

missed. As already established, the conceptualization of parental involvement is too broad (e.g., Boonk et al., 2018) and there is a need to establish clearer and more consistent measures (Fan & Chen, 2001).

H_{21a}, which states that parental involvement mediates the effect of marketing communication on self-esteem, was not tested as self-esteem had a low level of inter-item reliability. Furthermore, since most of the participants chose one answer despite the condition (control /treatment), H_{21d}, which states that parental involvement mediates the effect of marketing communication on self-control, was not tested. Summary of hypotheses tested and the results for Study 2 could be found in Appendix 24.

4.11.6. Discussion

In the field study, we, the student researcher and her supervisors, once again confirmed the results (from the pre-test), which established that better marketing communication increases parental involvement. The findings from this thesis also indicated that parental involvement had a positive effect on students' academic achievement in private schools; however, this positive effect was not evident in community schools. This may be due to the farming season since children in community schools are from the poorest agricultural areas and their help may be needed.

Additionally, the outcomes of this study suggest that grit and locus of control can be increased by parental involvement. We, the student researcher and her supervisors, also found initial evidence that parental involvement mediates the effect of marketing communication on locus of control. Nonetheless, this study had limitations, as it was applied to a small local area (Kasama) and relied largely on participants' self-reporting (e.g., parental involvement). Future research could complement the findings from this thesis by exploring other environments (e.g., less rural) and implementing observations (e.g., observing how parents are involved at home).

Since we deployed general marketing communication for parental involvement, the next step was to test whether marketing communication on focused involvement (cultivation of soft skills) produces better socialisation outcomes (e.g., increased soft skills) compared to general marketing communication. Thus, in Study 3 U.S.A., we implemented focused marketing communication and modified the parental involvement scale to reflect the new aspects of communication. We included items related to the cultivation of soft skills (grit, self-esteem, and locus of control) in the parental involvement questionnaire to reflect the soft

skills dimension. This advanced understanding of the mediating effect of parental involvement on the relationship between marketing communication and soft skills. The pre-test (to test manipulation by marketing communication) for Study 3 was deployed since we had to change the context of the study to the U.S.A. following the closure of schools in Zambia due to COVID-19.

4.12. Pre-test for Study 3: a Cross-Sectional Online Study with Parents with School-Aged Children

4.12.1. Purpose of the Study

To generalise the findings from Study 2 and due to the school closures in Zambia because of the COVID-19, Study 3 was conducted in the U.S.A. Since the context of the study has changed from a developing country to a developed country, we conducted a pre-test for manipulation (marketing communication tools). Additionally, we pre-tested a marketing communication ($PI_{focused}$), aimed at triggering involvement to cultivate soft skills, such as grit, in children.

4.12.2. Design

For this cross-sectional experiment conducted online, a four-level, between-subjects design was utilised: parental involvement high, low, and control (irrelevant information and no information).

4.12.3. Sample

Parents with school-aged children (5-17) were invited to participate via the online platform MTurk. Participants in the high condition (N=13)[30] were presented with an informative brochure on soft skills' advancement ($PI_{focused}$). Participants in the low condition (N=5) were shown an informative brochure on home involvement (PI_{home}). One control group was exposed to irrelevant information (N=10), while the other control group received no material (N=14).

4.12.4. Method

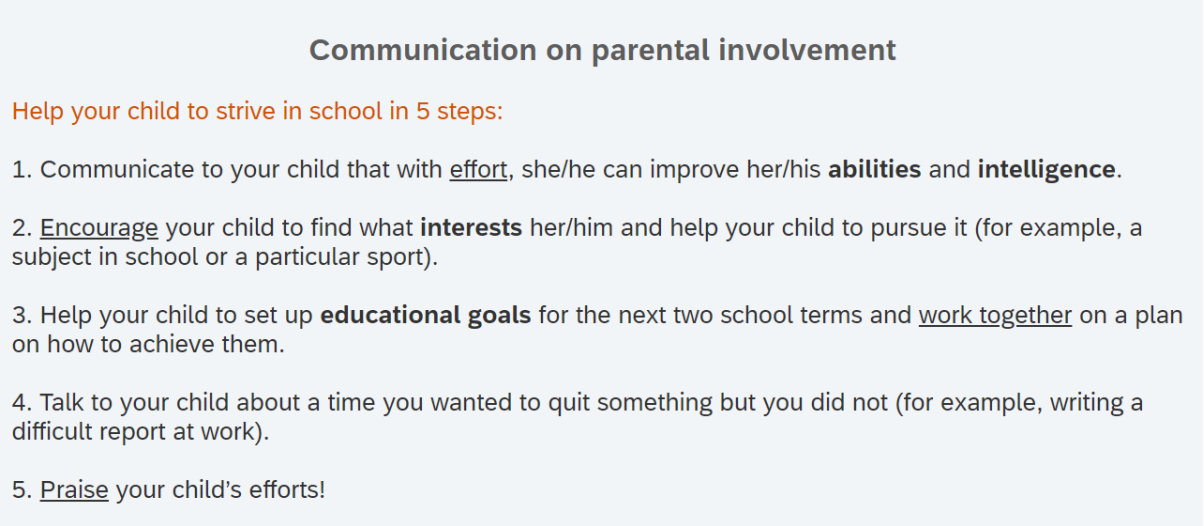
Procedure. Participants were randomly assigned to one of the three conditions (high, low or control) by the MTurk randomiser tool (equal split between groups). Participants were given an Explanatory statement to read. Afterwards, a consent statement was presented at the

[30] The small sample size is due to two reasons: 1) the study is a pre-test for a later study 2) participants, who looked at the communication for less than 5 seconds had to be excluded to ensure a quality sample.

beginning of the survey which stated: "Please, read the attached Explanatory Statement. By proceeding you are providing your consent to participate. If you wish not to participate, please exit the survey now." The participants who gave this implied consent proceeded with the survey. Participants saw marketing communication as assigned per their condition, after which the survey items were presented. Each participant who completed the survey received a small compensation of 2USD. The compensation information was disclosed at the outset.

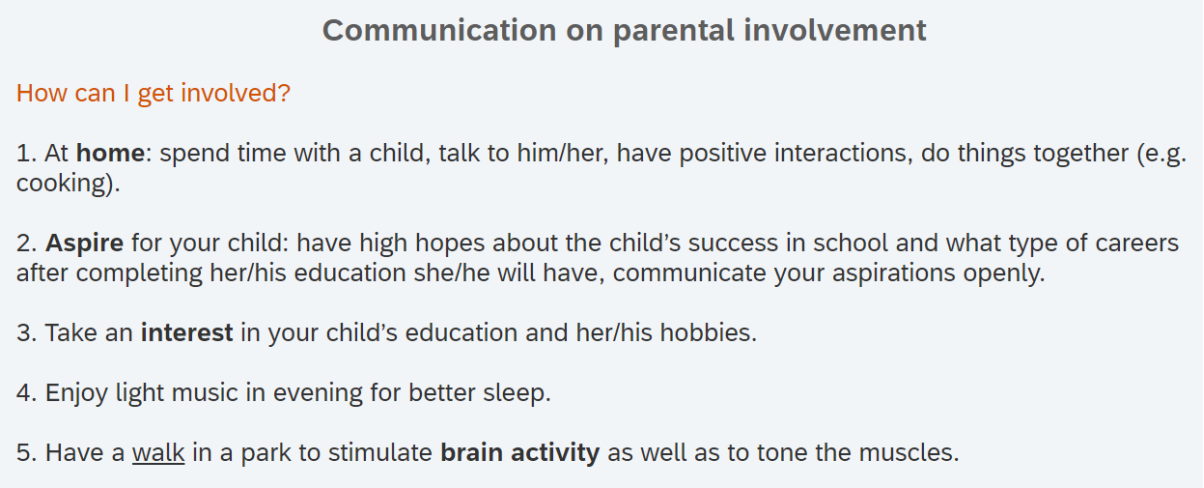
The Treatment: High Condition ($PI_{focused}$). Participants in the $PI_{focused}$ condition received a marketing communication explaining how to cultivate soft skills in their children (Figure 15). Marketing communication consisted of five steps and asked participants to e.g., find what interests her/his child and help to pursue it. The marketing communication focused on the cultivation of soft skills (e.g., for self-esteem, we asked for parents to praise their child's efforts).

Figure 15 *Pre-test for Study 3: Marketing Communication on $PI_{focused}$ Displayed on Online Platform*



The Treatment: Low Condition (PI_{home}). Participants in the PI_{home} condition received marketing communication about general parental involvement at home (Figure 16). This marketing communication included information on what activities parents could do at home (e.g., talk to a child, have positive interactions, enjoy music). It also included suggestions on how to communicate parental aspirations and take an interest in a child's activities.

Figure 16 *Pre-test for Study 3: Marketing Communication on PI_{home} Displayed on Online Platform*



The Treatment: Control Condition. Participants in one of the control conditions were given irrelevant information (e.g., how to make taco); the other control group received no information.

4.12.5. Measures

Parental Involvement.[31] In the questionnaire, we embedded the 12-item Parental Involvement scale (Sui-Chu & Willms, 1996) (e.g., How likely will you check on whether your child has done her/his homework? on a 7-item Likert scale (1=extremely unlikely to 7=extremely likely)). Some questions were reworded to suit the context of the study. To illustrate, "How often have you talked to [your mother or female guardian] about planning your high school program?" was changed to "How likely will you talk to your child about planning her/his future studies?" The question about a parent being at home when a child returns from school was removed due to COVID-19 learning and work modifications (remote learning, working from home). Moreover, school involvement was excluded due to limitations on in-school parental attendance due to COVID-19).[32] Questions related to school contacting parents were removed since the measurement of school participation as involvement was outside the scope of this study.

[31] The measurement is similar to the measurement used in the pre-test.
[32] The school-related involvement (e.g., PTA) has moved online, but the situation is very fluid and there is limited literature on how to measure school-related attendance during unsettled (online/offline) times.

In addition to the scale proposed by Sui-Chu and Willms (1996), items related to other types of parental involvement were adopted from other works and included in the questionnaire. The question about negative interactions with a child, such as slapping or spanking, scolding or physically restraining the child, was included (Kiernan & Mensah, 2011). Moreover, three items, which emerged from the exploratory studies conducted in Zambia were added as they were deemed to be relevant (prompt and regular attendance, encouragement to study).

Lastly, items related to the cultivation of soft skills (grit, locus of control, and self-esteem) were included. Although there is limited research on how to cultivate grit, it is assumed that with an effort, children can develop this attribute (Wang et al., 2018). This idea is also aligned with the concept of locus of control, which posits that people with a higher internal locus of control feel that they have power over life's outcomes (Wang et al., 1999). Hence, the following question was included in the parental involvement measure to reflect grit/locus of control: "How likely will you communicate to your child that with effort, she/he can improve her/his abilities and intelligence?"

Another work explained how parents could cultivate grit in children by giving them an example from their own life (Sanguras, 2017). Hence, the questionnaire included the following question: "…How likely will you talk to your child about a time you wanted to quit something, but you did not?" Similarly, research calls for parents to encourage children to find what they enjoy doing and pursue it (Sanguras, 2017). Hence, a question was included that expressed this theme: "How likely will you encourage your child to find what interests her/him and help your child to pursue it?" Drawing once again on Sanguras (2017) the question about helping a child to set up educational goals and work on them was included in the parental involvement questionnaire to reflect this aspect of grit. Lastly, praising a child's efforts may assist children to cultivate grit (Sanguras, 2017). This idea also aligns with the notion of increasing a child's self-worth through positive parental communication (Lingren, 1991). Hence, this question was included: "How likely will you praise your child's efforts?" Overall, the questionnaire reflected four types of parental involvement: home (including discussion), academic socialisation, interest, and involvement in soft skills.

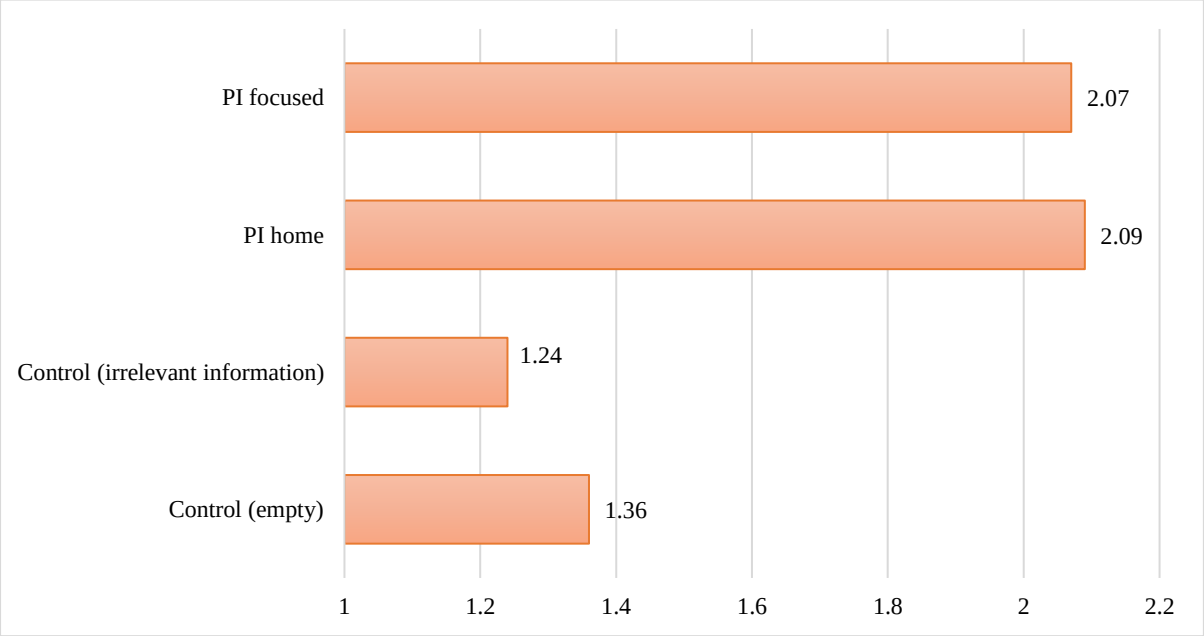
Control Variables. Participants indicated their age, educational level achieved, income, gender, and ethnicity; child's grade and a number of children in the household.

4.12.6. Results and Discussion

Manipulation Check: Results from Study A. There was a significant effect of marketing communication on parental involvement at the $p<.05$ level for the three conditions [$F(3, 38 = 4.3, p<.05$]. Post hoc comparisons using the Tukey HSD test indicated that the mean score for the focused parental involvement condition ($M = 5.38$, $SD = 2.23$) was significantly different from that of the control group ($M = 2.57$, $SD = 2.14$). Taken together, the results indicated that the participants who saw information on soft skills parental involvement recognized more types of parental involvement than did the control group (no marketing communication), and the difference was statistically significant.

Manipulation Check: Results from Study B. There was a significant effect of marketing communication on parental involvement at the $p<.05$ level for the three conditions [$F(3, 175 = 3.80, p<.05$]. Post hoc comparisons using the Tukey HSD test indicated that the mean score for the general parental involvement condition (PI_{home}) ($M = 2.09$, $SD = 1.60$) was significantly different from that of the control group that was given irrelevant information ($M = 1.24$, $SD = 1.56$) (Figure 17). Taken together, the results indicated that the participants who were exposed to information on general parental involvement recognized more types of parental involvement than the control group that was given irrelevant information. The difference was statistically significant.

Figure 17 *Pre-test for Study 3: Check for Manipulation (Mean)*



Overall, as shown by the manipulation check, marketing communication has been understood correctly by the participants in the U.S.A. This pre-test set the stage for Study 3 to explore processes and consequences of marketing communication on parental involvement in the context of the U.S.A., a developed country.

4.13. Study 3: Experiment with Children (U.S.A.)

4.13.1. Purpose of the Study

Following the pre-test for this study, and to complement the findings from Study 2, we, the student researcher and her supervisors conducted a second quasi-experimental study intended to examine the generalizability of the documented effect in Study 2 (conducted in Zambia) in a developed country (the U.S.A.). The primary objective was to test whether marketing communication with parents, which targeted the cultivation of soft skills in children, could increase parental involvement and soft skills more effectively than general marketing communication. Secondly, it examined whether the mediators *grit* (from Study 2), *locus of control* (from Study 2) and *self-esteem* (from Study 1) significantly contribute to higher academic achievement. Thirdly, it investigated whether, by targeting specific parental socialisation variables (e.g., related to grit), academic achievement could be increased more effectively. This study tested H7(a,b,c,e), H8(a,b,c,e), H_{9a}, H11, H_{12a}, H14, H_{16a}, H17, H21(a-c) (list of hypotheses: Appendix 6). The hypotheses related to school involvement were not tested due to the COVID-19 related restrictions which prevented involvement with children on school grounds and limited school-wide projects calling for parental assistance online.

In summary, the goals of this study were as follows: 1) to test the effect of marketing communication ($PI_{focused}$) on parental involvement, soft skills, and academic achievement, which aimed to have parents boost soft skills in their children; and 2) to determine the mediating effect of grit, locus of control, and self-esteem in the relationship between parental involvement and academic achievement.

4.13.2. Methodology

Participants and Experimental Design. We, the student researcher and her supervisors employed a marketing communication on parental involvement ($PI_{focused}$ (included strategies to boost soft skills), $PI_{general}$ (general home involvement), and control) by parental involvement a three-level, between-subjects design, where marketing communication was manipulated, and parental involvement, soft skills, and academic achievement were measured. The recruitment strategy included inviting schools to participate, and advertising that targeted parent groups via the Facebook platform. Parents with children aged 10-17 years were invited to participate.

Procedure. Students were randomly assigned (flipping a coin) to a condition of parental involvement: $PI_{focused}$, $PI_{general}$, or control. The randomisation took place at the student level to account for school and teacher's effects. Parents were able to read the Explanatory Statement in the advertisement (via a school or Facebook) and the Consent Form was sent to the parents by email as a Qualtrics link. The Consent Form was obtained from the parent for parental participation and a child's participation (permission from a parent) (Appendix 25). The reminders were sent out a week later (online marketing communication by the school or by the student researcher). In addition to the Consent forms and the Explanatory statement, parents were asked to answer two items (in the same online marketing communication). They were asked to indicate their level of current parental involvement and select what would help them to be involved more (e.g., more time).

In this longitudinal study, the participants (children and parents) were surveyed 6 weeks after the start of the experiment (online link). Parents received 2-8 reminders to complete the survey (for them and the children) over the three weeks after the questionnaire became available. No payment was given for participation. Academic achievement scores were collected from schools when possible and from parents directly (self-reported) when schools declined to provide the academic achievement scores. The academic achievement scores for all students were collected at the end of the school term. Parents also indicated their child's academic achievement for the term before the start of the treatment in the questionnaire they took before the start of the experiment.

The Treatment: $PI_{focused}$ Condition. Participants in the $PI_{focused}$ condition received marketing communication on how to be involved with a child in a way that cultivates a child's soft skills along with sample questions (Appendix 26). Marketing communication consisted of five steps and required participants to, for example, encourage their child to find what interests her/him and help to pursue it. The marketing communication focused on the cultivation of soft skills (e.g., for self-esteem, we asked for parents to praise their child's efforts). The marketing communication also had a motivational component (e.g., paternal involvement may increase academic achievement and potential income). It also included sample activities for a parent to do at home (e.g., have positive interactions with the child). Sample questions were intended to assist parents with initiating the activity. For example, a parent was prompted to ask her/his child: "What interests you the most?"

The Treatment: $PI_{general}$ Condition. Participants in the $PI_{general}$ condition received marketing communication on general parental involvement at home (without a focus on soft skills) along with sample questions (Appendix 27). This marketing communication did not

include the five steps on how to cultivate soft skills; instead, it explained the educational system in Finland (irrelevant information). However, it still included the same motivational aspect (as in the $PI_{focused}$) and information on sample activities, which parents could do at home (the same as those in the $PI_{focused}$). Sample questions were also included, which were the same as those in the $PI_{focused}$.

The Treatment: Control Condition. Participants in the control condition received no information.

4.13.3. Measures

Parental Involvement.[33] In the survey, we embedded the 12-item Parental Involvement scale (Sui-Chu & Willms, 1996) (e.g., How likely will you check on whether your child has done her/his homework? on a 7-item Likert scale (1=extremely unlikely to 7=extremely likely)). Some items were reworded to suit the context of the study. To illustrate, "How often have you talked to [your mother or female guardian] about planning your high school program?" was changed to "how likely will you talk to your child about planning her/his future studies?" The question about a parent being at home when a child returns from school was removed due to COVID-19 learning and work modifications (remote learning, working from home). Moreover, school involvement was excluded due to limitations on in-school parental attendance (COVID-19).[34] The question about the school contacting parents was removed since the measurement of school participation as involvement was outside the scope of the study. All of the additional items (from Kiernan & Mensah, 2011; Sacker et al., 2002; exploratory studies), as well as items related to the cultivation of soft skills, were the same as those in the pre-test for Study 3. Overall, the questionnaire examined four types of parental involvement: home (including discussion), academic socialisation, interest, and involvement in soft skills.

Academic Achievement. The academic achievement was indicated by the grade point average (the total score) provided by the school or parents for the term after (Term 2) and the term before (Term 1) the treatment (terms are 3-4 months apart). Also, parents reported the child's grade point average for the term before the start of the treatment in the questionnaire they took before the start of the experiment (Term 0).

[33] The measurement is similar to the measurement in Study 2 and Study 3 (online).
[34] The school related involvement (e.g., PTA) has moved online, but the situation is very fluid and there is limited literature on how to measure school-related attendance in unsettled (online/offline) reality.

Soft Skills: Self-esteem. The measure was the same as for Study 2 with the exception that the 5-point Likert scale was changed to a 7-item Likert scale (1=strongly disagree to 7=strongly agree).

Soft Skills: Locus of Control. The measure was the same as for Study 2 with the exception that the 5-point Likert scale was changed to a 7-item Likert scale (1=strongly disagree to 7=strongly agree).

Soft Skills: Grit. The measure was the same as for Study 2.

Control Variables. Participants indicated their age, educational level achieved, income, gender, ethnicity, how many hours of the week a parent works (paid work); child's grade, number of people in the household, and number of school-aged children. This study accounted for controlled variables such as social class, material disadvantage, students' background, family structure and characteristics (Table 13).

Table 13 *Controlled Variables (Study 3)*

Controlled variables	Observed variables
Family social class and Material disadvantage	Current household income (Kiernan & Mensah, 2011); parents' highest educational level (George & Kaplan, 1998); the number of hours primary caregiver works (paid work)
Students' Background	Child's gender (Sui-Chu and Willms, 1996; Hango 2007); child's grade
Family structure and characteristics	Single-family or two-parent home (Sui-Chu & Willms, 1996); gender and age of the primary caregiver; the number of school-aged children in a family

In addition, parents were asked to indicate their level of current parental involvement and select what would help them to be involved more (e.g., more time). These two items were asked before the treatment.

Summary of Measures. Table 14 gives a summary of the variables and measures.

Table 14 *The Variables and Their Measures (Study 3)*

Construct	Measure	Respondent
parental involvement	Parental Involvement scale	parents
academic achievement	grade point average	parents and provided by the school
self-esteem	Short Rosenberg Self-Esteem Scale	children
locus of control	Short Locus of Control Scale	children
grit	Grit scale	children

4.13.4. Results

In total, 74 parents and 86 children completed the questionnaire. Most of the parents who completed the survey were mothers/female guardians (93%), while the number of children's questionnaires were almost equally divided between genders (47% females, 51% males, and 2% other). Over 64% of parents had completed a four-year college degree or beyond. Only eight parents identified themselves as "single" parents. Most responding parents were white (99%). Most respondents (81%) had a household income of more than 80,000USD per year with 29% having over 150,000USD per household per year. All groups rated their involvement with the child before the experiment at about 7 out of 10. Also, most responding parents worked 30 hours per week or less (56%) with 39% of respondents working 0-10 hours per week.

Parental Involvement. The parental involvement scale was reduced to three factors: discussion and grit involvement[35] with five items ($PI_{discuss}$) (α=.770); encouragement at home with four items (PI_{home}) (α=.693); and controlling practices with four items ($PI_{control}$) (α=.693) (e.g., limiting outings on school nights) (Appendix 28) (KMO=.693). All factors were selected for further analysis as they had adequate levels of inter-item reliability (Hyde et al., 2017; Hair et al., 2010; Voorhis, 2003).

Soft Skills. *Self-esteem* meaningfully loaded on three factors: pride, with four items (α=.843) and guardians' influence, with four items (α=.797), and shame, with two items (α=.592) (KMO=.754) (Gray-Little et al., 1997) (Appendix 29). A three-factor loading is acceptable, while some variance in loading may be due to the sample (Alessandri, Vecchione, Eisenberg, & Laguna, 2015). Pride and guardians' influence scales had adequate levels of

[35] Three out of five items in this factor are grit-related: questions 9,10, and 11 (the grit scale had five grit-related items).

inter-item reliability (Alessandri, Vecchione, Eisenberg, & Laguna, 2015; Hair et al., 2010). The shame factor had a low level of inter-item reliability (Hair et al., 2010) and was not considered for future analysis. *Locus of control* loaded onto two factors: hard work, with four items (α=.746) and guardians' aspirations, with three items (α=.636) (Appendix 30) (KMO=.716). Both scales had adequate levels of inter-item reliability (Hair et al., 2010; Beretvas, Suizzo, Durham, & Yarnell, 2008). The *grit* scale was reduced to two factors: hard work, with five items (α=.757) and commitment, with five items (α=.757) (KMO=.767) (Appendix 31). In the literature, these factors (with similar loading) are named as the perseverance of effort (in this work called "hard work") and consistency of interest (in this work called "commitment") (Muenks, Yang, & Wigfield, 2018). Both scales had adequate levels of inter-item reliability (Hair et al., 2010; Duckworth & Quinn, 2009).

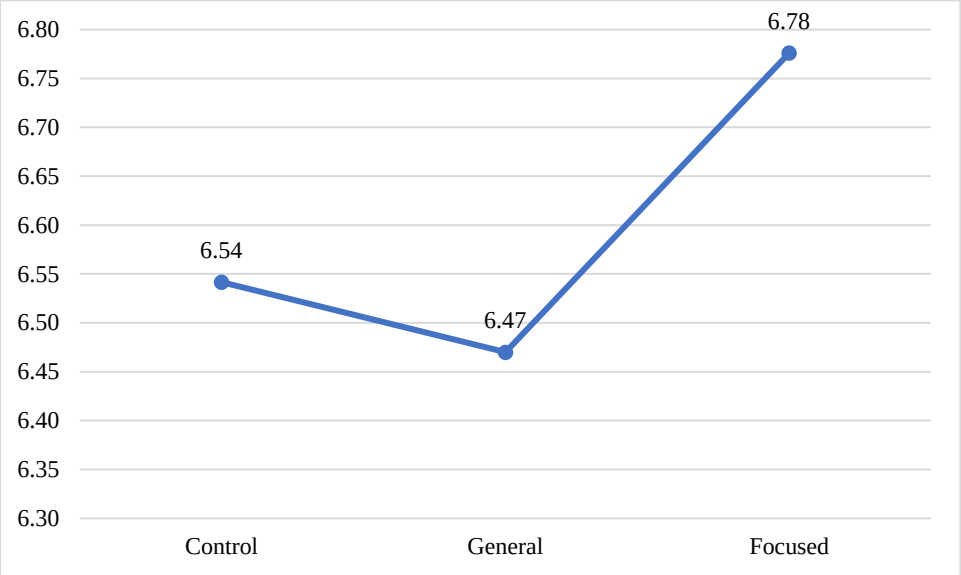
4.13.5. Hypotheses Tests

Manipulation Check: Parental Involvement (Predicting Variable: Communication). $PI_{discuss}$. We conducted an independent sample t-test for $PI_{discuss}$.[36] There was a significant difference between the scores for focused involvement (M=6.78, SD=0.27) and those for general (M=6.47, SD=0.60) conditions for $PI_{discuss}$: $t(49)$=-2.37, p<0.05 (Figure 18). There was a significant difference in the scores for focused involvement (M=6.78, SD=0.27) and control (M=6.54, SD=0.44) conditions for $PI_{discuss}$: $t(47)$=-2.25, p<.05. However, there was no significant difference in the scores for general involvement (M=6.47, SD=0.60) and control (M=6.54, SD=0.44) conditions for $PI_{discuss}$: $t(48)$=0.48, p n.s. Taken together, these results suggest that focused marketing communication influences $PI_{discuss}$ stronger than does general marketing communication. Hence, H_{7b}, which states that marketing communication increases discussion as a form of parental involvement, was supported.[37]

[36] Also, we conducted a one-way ANOVA test. There was a significant effect of communication on $PI_{discuss}$ at the p<.05 level for the three conditions $F(2, 72) = 3.05$, $p = 0.05$. Post hoc comparisons using the Tukey HSD test indicated that the mean score for the focused condition (M=6.78, SD=0.27) was significantly different than the general condition (M=6.47, SD=0.60). However, the focused condition was *not* significantly different than the control parental involvement condition (M=6.54, SD=0.44).

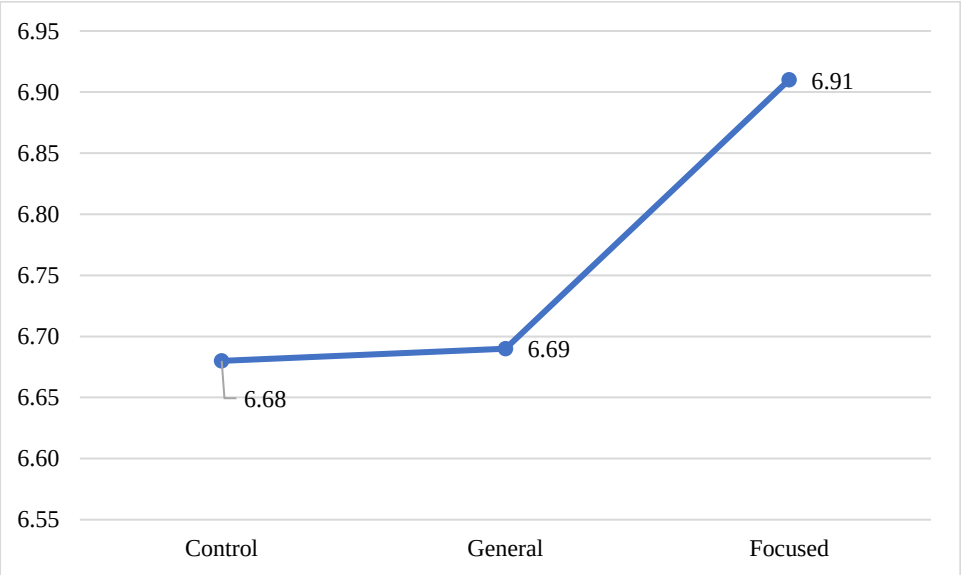
[37] As $PI_{discuss}$ is not normally distributed across groups; nonparametric test (Mann-Whitney) was performed and showed significant difference between focused and general groups (p<.1).

Figure 18 *Study 3: Manipulation Check ($PI_{discuss}$)*



PI_{home}. We conducted an independent sample t-test for PI_{home}.[38] There was a significant difference in the scores for focused involvement (M=6.91, SD=0.18) and general (M=6.69, SD=0.48) conditions for PI_{home}: $t(49)$=-2.12, p<.05. There was a significant difference in the scores for focused involvement (M=6.91, SD=0.18) and control (M=6.68, SD=0.46) conditions for PI_{home}: $t(29)$=-2.34, p<.05 (Figure 19).

Figure 19 *Study 3: Manipulation Check (PI_{home})*

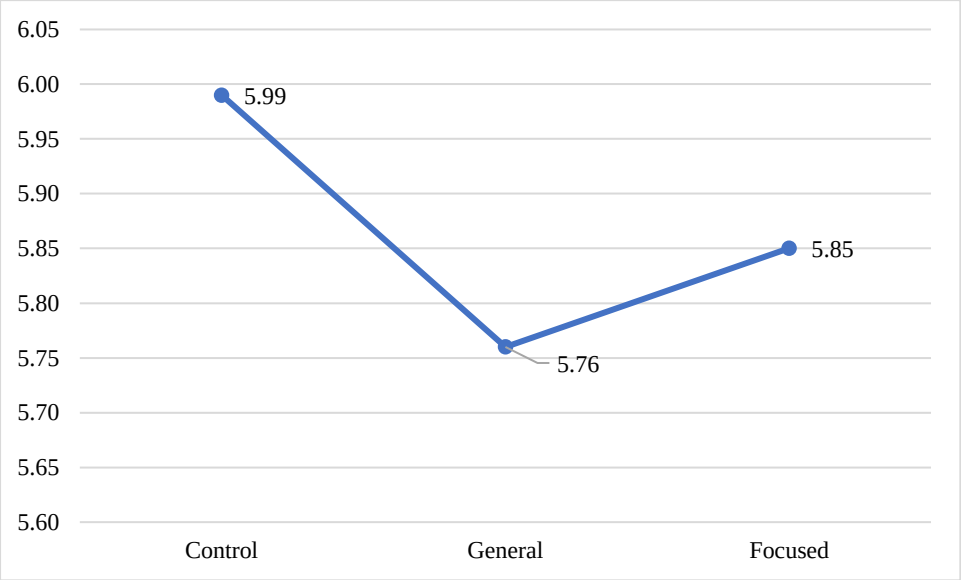


[38] Also, we conducted a one-way ANOVA test. There was a significant effect of communication on PI_{home} at the p<.05 level for the three conditions $F(2, 72) = 2.68$, $p = 0.08$. Post hoc comparisons using the Tukey HSD test indicated that the mean score for the focused condition (M=6.91, SD=0.18) was *not* significantly different than the general (M=6.69, SD=0.48) and control (M=6.68, SD=0.46) parental involvement conditions.

There was no significant difference in the scores for general involvement (M=6.69, SD=0.48) and control (M=6.68, SD=0.46) conditions for PI_{home}: $t(48)$=-0.12, p n.s. Taken together, these results suggest that focused marketing communication influences PI_{home} more strongly than does general marketing communication (Figure 19). Hence, H_{7a}, which states that marketing communication increases home parental involvement, was supported.

$PI_{control}$. We conducted an independent sample t-test for $PI_{control}$.[39] There was no significant difference in the scores for focused involvement (M=5.85, SD=1.13) and general (M=5.76, SD=1.02) conditions for $PI_{control}$: $t(49)$=-0.30, p n.s. There was no significant difference in the scores for focused involvement (M=5.85, SD=1.13) and control (M=5.99, SD=0.71) conditions for $PI_{control}$: $t(47)$=0.51, p n.s. There was no significant difference in the scores for general involvement (M=5.76, SD=1.02) and control (M=5.99, SD=0.71) conditions for $PI_{control}$: $t(48)$=0.92, p n.s. (Figure 20).

Figure 20 *Study 3: Manipulation Check ($PI_{control}$)*



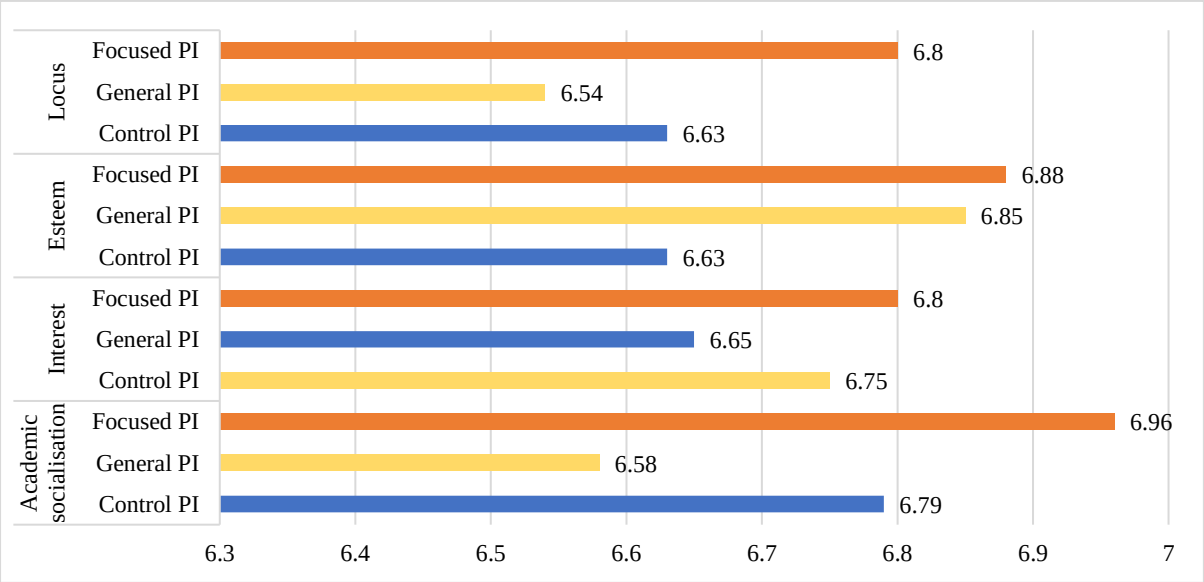
Interestingly, the control group had higher (not significant) involvement in controlling practices compared to other groups. This is in line with established evidence, which states that controlling practices may be a negative type of involvement. Positive parenting with middle-school-aged children includes more autonomy levels and less direct control (Hill et al., 2018). Possibly, marketing communication reduced the influence of controlling practices

[39] Also, we conducted a one-way ANOVA test. There was *no* significant effect of communication on $PI_{control}$ at the p<.05 level for the three conditions: $F(2, 72) = 0.35$, p n.s.

in the treatment groups (Figure 20). Since the $PI_{control}$ did not display a significant difference between groups, it was not considered for further analysis.

Additionally, we conducted an independent sample t-test to test the effect of marketing communication on academic socialisation (PI_{acs}) (item 7).[40] There was a significant difference in the scores for focused involvement (*M*=6.96, *SD*=0.20) and general (*M*=6.58, *SD*=0.90) conditions for PI_{acs}: $t(27)=-2.12$, $p<.05$. There was a significant difference in the scores for focused involvement (*M*=6.96, *SD*=0.20) and control (*M*=6.79, *SD*=0.42) conditions for PI_{acs}: $t(33)=-1.80$, $p<.1$. There was no significant difference in the scores for general involvement (*M*=6.58, *SD*=0.92) and control (*M*=6.79, *SD*=0.42) conditions for PI_{acs}: $t(36)=1.10$, *p* n.s. (Figure 21).

Figure 21 *Study 3: Means for Academic Socialisation, Parental Interest, Esteem Practices, and Locus of Control Cultivation*



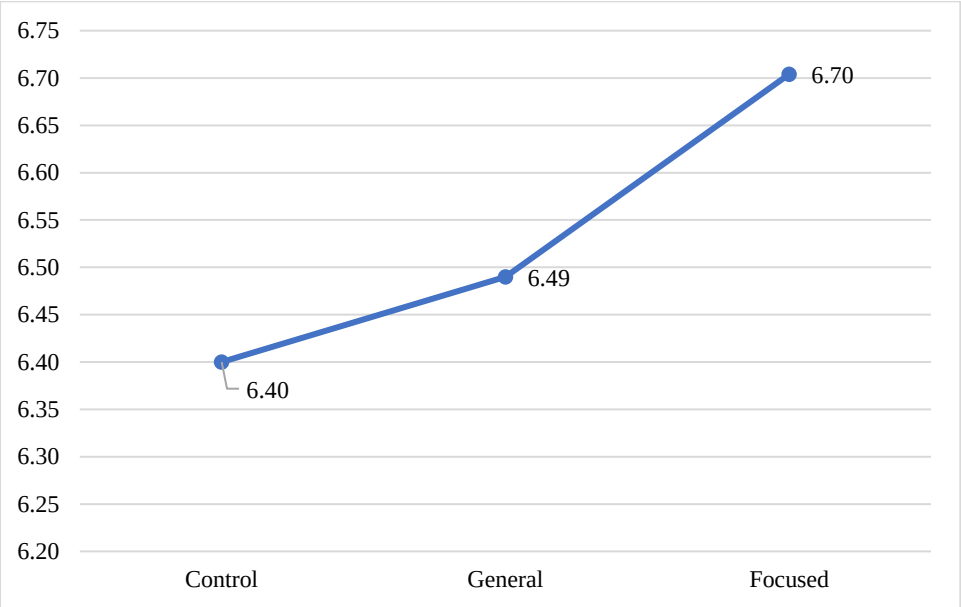
Taken together, these results suggest that focused marketing communication influences PI_{acs} stronger than general marketing communication does. Hence, H_{7c}, which states that marketing communication increases academic socialisation, was supported. We also tested the effect of marketing communication on parental interest (item 19), esteem practices (item 12) (not a hypothesised relationship), and locus of control cultivation (item 9)

[40] Also, we conducted a one-way ANOVA test. There was a significant effect of communication on PI_{acs} at the $p<.05$ level for the three conditions $F(2, 72) = 2.68$, $p = 0.08$. Post hoc comparisons using the Tukey HSD test indicated that the mean score for the focused condition (*M*=6.96, *SD*=0.20) was significantly different than the general condition (*M*=6.58, *SD*=0.90). However, the focused condition was *not* significantly different than the control parental involvement condition (*M*=6.79, *SD*=0.42).

(not a hypothesised relationship) and the differences between focused and general marketing communication were not significant. Hence, H_{7e}, which states that marketing communication increases parental interest, was not supported.

Lastly, we conducted an independent sample t-test to test the effect of marketing communication on grit cultivation (PI_{grit}) (items 9, 10, 11, 12, 20) (α=.580) (not a hypothesised relationship).[41] There was a significant difference in the scores for focused involvement (*M*=6.70, *SD*=0.24) and general (*M*=6.49, *SD*=0.47) conditions for PI_{grit}: *t*(38)=-2.09, *p*<.05. There was a significant difference in the scores for focused involvement (*M*=6.70, *SD*=0.24) and control (*M*=6.40, *SD*=0.49) conditions for PI_{grit}: *t*(33)=-2.76, *p*<.05. There was a no significant difference in the scores for general involvement (*M*=6.49, *SD*=0.46) and control (*M*=6.40, *SD*=0.49) conditions for PI_{grit}: *t*(48)=-0.69, *p* n.s. Taken together, these results suggest that focused marketing communication influences PI_{grit} more strongly than does general marketing communication (Figure 22).

Figure 22 *Study 3: Effect of Marketing Communication on Grit*

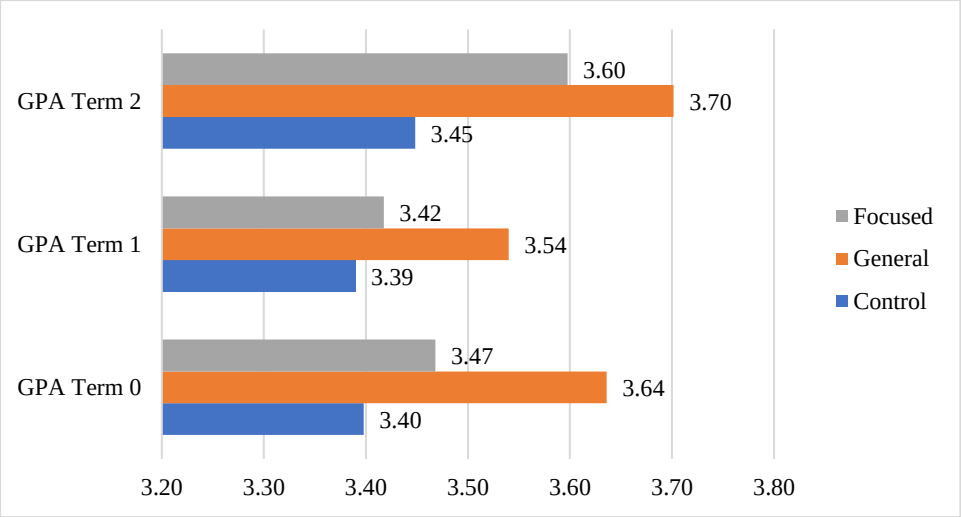


Academic Achievement (Predicting Variable: Communication). We conducted an independent sample t-test to test the effect of marketing communication on academic

[41] Also, we conducted a one-way ANOVA test. There was a significant effect of communication on PI_{grit} at the *p*<.05 level for the three conditions *F*(2, 71) = 3.57, *p* = 0.03. Post hoc comparisons using the Tukey HSD test indicated that the mean score for the focused condition (*M*=6.70, *SD*=0.24) was *not* significantly different than the general condition (*M*=6.49, *SD*=0.47). However, the focused condition was significantly different than the control parental involvement condition (*M*=6.40, *SD*=0.49).

achievement.[42] The treatment took place after Term 1 and before the start of Term 2. There was a significant difference in the overall GPA for *general* involvement (*M*=3.70, *SD*=0.44) and *control* (*M*=3.45, *SD*=0.42) conditions in Term 2: *t*(40)=-1.92, *p*<.1. On the other hand, the two groups did not display significant differences in Term 0 and Term 1 (two control conditions), which were before the treatment. There was no significant difference in the overall GPA for general involvement (*M*=3.54, *SD*=0.58) and control (*M*=3.39, *SD*=0.57) conditions in *Term 1*: *t*(40)=-0.85, *p* n.s. There was no significant difference in the overall GPA for general involvement (*M*=3.64, *SD*=0.58) and control (*M*=3.40, *SD*=0.71) conditions in *Term 0*: *t*(47)=-1.29, *p* n.s. In summary, the two control conditions showed no difference between groups, but the difference in academic achievement is evident in Term 2 (general and control conditions). Taken together, these results suggest that general parental involvement influences academic achievement (Figure 23).

Figure 23 *Study 3: Effect of Marketing Communication on Academic Achievement*



However, there is no significant difference between *focused* and *control* conditions for Term 2. There was no significant difference in the overall GPA for focused involvement (*M*=3.60, *SD*=0.60) and control (*M*=3.45, *SD*=0.42) conditions in Term 2: *t*(39)=-0.93, *p* n.s. There was no significant difference in the overall GPA for focused involvement (*M*=3.42, *SD*=0.86) and control (*M*=3.39, *SD*=0.57) conditions in *Term 1*: *t*(40)=-0.85, *p* n.s. There was no significant difference in the overall GPA for focused involvement (*M*=3.47, *SD*=0.55) and

[42] Also, we conducted a one-way ANOVA test. There was *no* significant effect of communication at the *p*<.05 level for the three conditions: on *Term 2* *F*(2, 59) = 1.43, *p* n.s.; on *Term 1* *F*(2, 59) = 0.29, *p* n.s.; and on *Term 0* *F*(2, 71) = 0.97, *p* n.s.

control (*M*=3.40, *SD*=0.71) conditions in *Term 0*: *t*(39)=-0.12, *p* n.s. In summary, focused and control conditions showed no difference between groups for Terms 0, 1, and 2.

Also, there was no significant difference between *focused* and *general* conditions. However, a positive, but not significant improvement in academic achievement could be observed (Figure 23). There was no significant difference in the overall GPA for focused involvement (*M*=3.6, *SD*=0.60) and general (*M*=3.70, *SD*=0.44) conditions in Term 2: *t*(39)=-0.64, *p* n.s. There was no significant difference in the overall GPA for focused involvement (*M*=3.42, *SD*=0.86) and general (*M*=3.54, *SD*=0.58) conditions in *Term 1*: *t*(39)=0.54, *p* n.s. There was no significant difference in the overall GPA for focused (*M*=3.47, *SD*=0.55) and general involvement (*M*=3.64, *SD*=0.58) conditions in *Term 0*: *t*(48)=1.05, *p* n.s. In summary, two conditions (focused and general) showed no difference between groups for Terms 0, 1, and 2.

In addition to already performed tests (e.g., independent sample test), we conducted a paired sample t-test to understand the effect of marketing communication within groups (Term 0 vs. Term 1 vs. Term 2). A paired-samples t-test was conducted to compare the GPA across three terms. *Control group.* There was no significant difference in the scores for Term 1 (*M*=3.39, *SD*=0.57) and Term 2 (*M*=3.45, *SD*=0.42) conditions, *t*(20)=-0.99, *p* n.s.; no significant difference in the scores for Term 0 (*M*=3.46, *SD*=0.68) and Term 2 (*M*=3.45, *SD*=0.42) conditions, *t*(20)=0.10, *p* n.s.; no significant difference in the scores for Term 0 (*M*=3.46, *SD*=0.68) and Term 1 (*M*=3.39, *SD*=0.57) conditions, *t*(20)=0.54, *p* n.s. *General involvement group.* There was *a significant difference* in the scores for Term 1 (*M*=3.54, *SD*=0.58) and Term 2 (*M*=3.70, *SD*=0.44) conditions, *t*(20)=-2.11, $p < 0.05$; no significant difference in the scores for Term 0 (*M*=3.69, *SD*=0.59) and Term 2 (*M*=3.70, *SD*=0.44) conditions, *t*(20)=-0.13, *p* n.s.; no significant difference in the scores for Term 0 (*M*=3.69, *SD*=0.59) and Term 1 (*M*=3.54, *SD*=0.58) conditions, *t*(20)=1.22, *p* n.s. *Focused involvement group.* There was *a significant difference* in the scores for Term 1 (*M*=3.42, *SD*=0.86) and Term 2 (*M*=3.60, *SD*=0.59) conditions, *t*(19)=-1.91, $p < 0.1$; no significant difference in the scores for Term 0 (*M*=3.64, *SD*=0.41) and Term 2 (*M*=3.60, *SD*=0.59) conditions, *t*(19)=0.47, *p* n.s.; no significant difference in the scores for Term 0 (*M*=3.64, *SD*=0.41) and Term 1 (*M*=3.42, *SD*=0.86) conditions, *t*(19)=1.70, *p* n.s. Taken together, these results suggest that general and focused parental involvement influences academic achievement.

Moreover, PI_{home} predicted academic achievement (Term 2), R^2 =.11, *F*(1, 60)=7.10, $p<.05$. Participants' GPA is equal to -0.09+0.54 (PI_{home}). Academic achievement increased by 0.54 for each unit of PI_{home}. Other types of parental involvement were not predictive of

academic achievement. Taken together, we can conclude that PI_{home} is the most predictive type of academic achievement among the parental involvement types tested. Hence, H_{8a}, which states that an increase in home parental involvement increases a child's academic achievement, was supported. However, H_{8b} (discussion improves academic achievement), H_{8c} (academic socialisation improves academic achievement), and H_{8e} (parental interest improves academic achievement) were not supported.

Soft Skills (Predicting Variable: Communication). *Self-esteem.* We conducted an independent sample t-test to test the effect of marketing communication on the self-esteem pride factor (SE_{pride}).[43] There was a significant difference in the scores for focused involvement (M=6.26, SD=0.67) and general (M=5.66, SD=1.33) conditions for SE_{pride}: $t(58)$=-2.24, p<.05. Taken together, these results suggest that focused parental involvement influences SE_{pride} stronger than does general parental involvement.

Additionally, *SE_{pride} correlated with academic achievement* (Term 2), R^2 =.26, $F(1, 52)$=3.84, p<.1. Participants' GPA is equal to 2.76+0.13 (SE_{pride}). Academic achievement increased by 0.13 for each unit of SE_{pride}. Other soft skills did not correlate with academic achievement. Taken together, of the skills tested, we can conclude that SE_{pride} is the soft skill most predictive of academic achievement.

We conducted an independent sample t-test to test the effect of marketing communication on self-esteem-guardians' influence factor (SE_{gi}).[44] There was a significant difference in the scores for focused involvement (M=5.98, SD=0.67) and general (M=5.43, SD=1.33) conditions for SE_{gi}: $t(41)$=-2.04, p<.05. Taken together, these results suggest that focused parental involvement influences SE_{gi} more strongly than does general parental involvement. Since focused parental involvement influences SE_{pride} and SE_{gi} greater than general parental involvement, H_{9a}, which states that focused parental involvement increases a child's self-esteem more so than general parental involvement, was supported.

[43] Also, we conducted a one-way ANOVA test. There was a significant effect of communication on SE_{pride} at the p<.05 level for the three conditions $F(2, 83) = 4.12$, $p = 0.02$. Post hoc comparisons using the Tukey HSD test indicated that the mean score for the focused condition (M=6.26, SD=0.67) was significantly different than the general condition (M=5.66, SD=1.33). However, the focused condition did not significantly differ from the control parental involvement condition (M = 6.23, SD = 0.63).

[44] Also, we conducted a one-way ANOVA test. There was a significant effect of communication on SE_{gi} at the p<.05 level for the three conditions $F(2, 83) = 3.12$, $p = 0.05$. Post hoc comparisons using the Tukey HSD test indicated that the mean score for the focused condition (M=5.98, SD=0.67) was significantly different than the general condition (M=5.43, SD=1.33). However, the focused condition did not significantly differ from the control parental involvement condition (M = 6.00, SD = 0.86).

Locus of control. We conducted an independent sample t-test to test the effect of marketing communication on the locus of control hard work factor (LC_{hw}).[45] There was a significant difference ($p<.1$) in the scores for focused involvement (M=6.11, SD=0.57) and general (M=5.76, SD=1.00) conditions for LC_{hw}: $t(58)$=-1.70, $p<.1$. Taken together, these results suggest that focused parental involvement influences LC_{hw} more so than does general parental involvement ($p<.1$).

We conducted an independent sample t-test to test the effect of marketing communication on locus of control guardians' aspirations factor (LC_{ga}).[46] There was no significant difference in the scores for focused involvement (M=4.76, SD=0.32) and general (M=4.66, SD=0.48) conditions for LC_{ga}: $t(58)$=-1.02, p n.s. Taken together, there is no evidence suggesting that focused parental involvement influences LC_{ga} stronger than general parental involvement does. However, since focused parental involvement influences LC_{hw} more than does general parental involvement, H_{12a}, which states that focused parental involvement increases a child's locus of control more so than general parental involvement, was supported.

Grit. We conducted an independent sample t-test to test the effect of marketing communication on the grit hard work factor (GR_{hw}).[47] There was a significant difference in the scores for focused involvement (M=2.38, SD=0.80) and general (M=2.90, SD=0.78) conditions for GR_{hw}: $t(58)$=2.57, $p<.05$. However, marketing communication had the opposite of the predicted effect. Taken together, these results suggest that focused parental involvement influences GR_{hw} *less* than does general parental involvement.

Next, we conducted an independent sample t-test to test the effect of marketing communication on the grit commitment factor ($GR_{commitment}$).[48] There was a significant difference in the scores for focused involvement (M=2.99, SD=0.88) and general (M=3.40,

[45] Also, we conducted a one-way ANOVA test. There was a significant effect of communication on LC_{hw} at the $p<.05$ level for the three conditions $F(2, 83) = 2.70$, $p = 0.07$. Post hoc comparisons using the Tukey HSD test indicated that the mean score for the focused condition (M=6.11, SD=0.57) was *not* significantly different than the general condition (M=5.76, SD=1.00) and control (M = 6.12, SD = 0.58) parental involvement conditions.
[46] Also, we conducted a one-way ANOVA test. There was *no* significant effect of communication on LC_{ga} at the $p<.05$ level: $F(2, 83) = 0.76$, p n.s.
[47] Also, we conducted a one-way ANOVA test. There was a significant effect of communication on GR_{hw} at the $p<.05$ level for the three conditions $F(2, 83) = 4.56$, $p = 0.01$. Post hoc comparisons using the Tukey HSD test indicated that the mean score for the focused condition (M = 2.38, SD = 0.80) was significantly different than the general condition (M = 2.90, SD = 0.78). However, the focused condition did not significantly differ from the control parental involvement condition (M = 2.40, SD = 0.61).
[48] Also, we conducted a one-way ANOVA test. There was a significant effect of communication on $GR_{commitment}$ at the $p<.05$ level for the three conditions $F(2, 83) = 2.66$, $p = 0.08$. Post hoc comparisons using the Tukey HSD test indicated that the mean score for the focused condition (M=2.99, SD=0.88) was *not* significantly different than the general (M=3.40, SD=0.76) and control (M = 2.97, SD = 0.73) parental involvement conditions.

SD=0.76) conditions for $GR_{commitment}$: $t(58)=1.90$, $p<.1$. However, marketing communication had the opposite of the predicted effect. Taken together, these results suggest that focused parental involvement influences $GR_{commitment}$ *less* than general parental involvement does. Since focused parental involvement influences GR_{hw} and $GR_{commitment}$ *less* than general parental involvement, H_{16a}, which states that focused parental involvement increases a child's grit greater than general parental involvement, was not supported. Although these results are not what we expected, the outcome suggests that marketing communication for grit related type involvement must be carefully crafted and tested further in the field studies. Since there is limited literature on ways that grit could be cultivated by parents and the type of marketing communication to which parents should be exposed, future research is needed.

The Mediating Effect of Parental Involvement on Soft Skills (Predicting Variable: Communication). To test hypotheses H_{21a-c}, which postulate that parental involvement mediated the relationship between marketing communication and children's soft skills (marketing communication → parental involvement → soft skills (e.g., locus of control)) PROCESS by Hayes (2013) was utilised. None of the three hypotheses was supported as the results did not show evidence of mediation by parental involvement. Hence, H_{21a-c} were not supported.

The Mediating Effect of Soft Skills on Academic Achievement (Predicting Variable: Communication). To test hypotheses H11 (self-esteem), H14 (locus of control), and H17 (grit) which postulate that soft skills mediated the relationship between parental involvement and children's academic achievement (marketing communication → soft skills (e.g., locus of control) → academic achievement) PROCESS by Hayes (2013) was utilised. None of the three hypotheses was supported as the results did not show evidence of mediation by soft skills. Hence, H11, H14, and H17 were not supported. A summary of the hypotheses testing results is given in Appendix 32.

4.13.6. Discussion

This study indicated that a focused on soft skills marketing communication could increase parental involvement (e.g., discussion, home, academic socialisation) more effectively than will general marketing communication. Uniquely, we, the student researcher and her supervisors showed that focused marketing communication could help parents to be involved in the cultivation of soft skills such as grit. This means that the marketing communication designed with a focus on selected soft skills was effective in stimulating

parental involvement in grit. Moreover, we saw increased self-esteem and locus of control in children, whose parents received focused marketing communication. However, we did not find that children, whose parents received the focused marketing communication, display higher levels of grit. Possibly, due to the shift to remote learning in 2020-2021, children were not as responsive to the cultivation of grit by parents as they would have during normal circumstances. This aspect needs further research.

Additionally, parental involvement was not a mediator between marketing communication and children's soft skills. Most likely this is due to the parental involvement scale being unable to capture all of the aspects of parental involvement during the pandemic. Since most parents are working from home during the pandemic, the nature of parental involvement has changed. However, the scale was designed before the pandemic and no adjustments were made to accommodate the pandemic situation. Future research could investigate differences between involvement before and during the pandemic.

Even so, we found that marketing communication increased academic achievement, PI_{home} predicted academic achievement, and SE_{pride} correlated with academic achievement, soft skills were not mediators between parental involvement and academic achievement. Most likely, these outcomes resulted from more generous grading during the pandemic (e.g., Flaherty, 2020), a combination of home and school learning, and a change in grading terms (from four to three grading periods during the pandemic). Hence, the greatest limitation of this study is that it was conducted during the pandemic and future research should replicate the study during more normal times (e.g., when the majority of parents return to work, and schools resume full-time, face-to-face instructions). The general conclusion, which will follow next, summarises the findings of all studies and discusses future research directions.

CHAPTER 5: CONCLUSION

This chapter starts with a summary of the findings from three main studies. Next, the theoretical, policy and managerial implications are discussed. The chapter concludes with a discussion of the limitations of this thesis, and proposals for future research.

5. General Conclusions

5.1. Summary of Results from Hypotheses Testing

5.1.1. Hypotheses Tested

To answer the three main research questions, three studies were conducted. The first question: "Does marketing communication increase parental involvement that improves children's academic achievement?" was answered by testing by H7 and H8. Indeed, we, the student researcher and her supervisors found supporting evidence that marketing communication can increase parental involvement (H7) and improve academic achievement (H8). Also, we found that, of the various types of parental involvement (home involvement, discussion, academic socialisation, school involvement, and parental interest), PI_{home} is the most predictive of academic achievement (as stated in H_{8a}: an increase in PI_{home} increases a child's academic achievement.).

The second research question was: "What is the mechanism by which parental involvement affects academic achievement in terms of the role of soft skills?" While this question was tested by H11, H14, H17, and H20, due to the data constraints (limited sample in private schools in Study 2) and the COVID limitations these hypotheses were not considered in Study 2 and H11, H14, H17 were not supported in Study 3. However, we found supporting evidence that parental involvement increases a child's internal locus of control (H12, tested in Study 2) and grit (H16, tested in Study 2). Moreover, we confirmed that focused parental involvement increases a child's self-esteem (H_{9a}, tested in Study 3) and locus of control (H_{12a}, tested in Study 3) more so than general parental involvement. Moreover, we found that SE_{pride} correlates with academic achievement (tested in Study 3). Future studies should revisit this research question to investigate the mediating effect of soft skills between parental involvement and academic achievement.

The third research question was: "Does parents' involvement with their children during childhood is associated with higher income in adulthood and are soft skills related to income?" Evidence indicated a positive relationship between parental involvement, academic

achievement, income (in adulthood) and self-esteem (H1, H2, and H3 tested in Study 1). Overall, we found supporting evidence that all of the research questions can be answered affirmatively, although the mechanism determining how parental involvement affects academic achievement needs more research. However, not all the hypotheses were tested due to several impediments.

5.1.2. Hypotheses not Considered

Inter-item reliability issues. Some hypotheses could not be tested for various reasons. H6 (locus → income) could not be considered due to sampling inadequacy. H_{8b}, H_{8c}, H_{8d}, H_{8e} which state that parental involvement in the form of discussion, academic socialisation, parental interest and school involvement (respectively) increase academic achievement could not be considered (in Study 2) due to the low levels of inter-item reliability (H_{8b}, H_{8c}, and H_{8d}) and failing the manipulation check (H_{8d}). H9, which states that parental involvement increases a child's self-esteem, was not considered as self-esteem did not meaningfully load on any factors and displayed sample inadequacy.

Self-control. Hypotheses related to self-control (H18, H19, H20, H_{21d}) were not considered as the majority of participants showed a preference for one of the options in Study 2 (e.g., all children in community schools chose to have the reward "now"). The following section will provide an overview of the most significant findings.

5.2. Summary of Findings

Numerous studies have been conducted on the role of cognitive development in academic achievement and income (e.g., Mateos et al. 2017). However, the role of soft skills has been less explored, despite them being critical for academic achievement (e.g., Krishnan & Krutikova, 2013) and income (e.g., Anghel & Balart, 2017). The thesis aimed to address this gap by examining the mediating effect of soft skills between parental involvement, academic achievement, and their association with income. We, the student researcher and her supervisors found that parental involvement could increase soft skills (grit and locus of control: Study 2; self-esteem and locus of control: Study 3). Moreover, we provided evidence that self-esteem positively correlates with academic achievement (tested in Study 3). We also found that adults with greater parental involvement as children tend to have higher self-esteem, attain a higher level of education, (e.g., tertiary degrees) and have a higher income (Study 1).

Moreover, we examined a less-studied soft skill: grit. The literature provided little guidance on whether and how parental involvement could foster grit (Lan et al., 2019; Dunn et al., 2018). We undertook to establish causal evidence for the cultivation of grit by parental involvement. The results indicated that parental involvement could foster grit in children (Study 2). Additionally, we found that focused on selected soft skills marketing communication is effective in stimulating parental involvement regarding grit cultivation. To date, the research on grit has been concentrated in developed countries, primarily in the U.S.A. However, we demonstrated that parental involvement improves the grit of children in highly impoverished and rural settings (Study 2).

Apart from soft skills, we also examined parental involvement as a multidimensional construct. While literature offers only a broad definition of parental involvement, which makes it difficult to determine the practices that are most conducive to improving children's academic results (Boonk et al., 2018), this work aimed to provide more clarity. Hence, we examined different types of parental involvement and their effects on academic achievement, namely home involvement, discussion practices, academic socialisation, involvement in school activities, and parental interest. The results consistently indicated that home involvement is the most predictive of academic achievement (Study 2 and Study 3), soft skills (e.g., locus of control: Study 2), and it relates to higher education level completed and income (Study 1).

The outcomes discussed so far in the thesis were made possible by effective social marketing communication, which was deployed in pre-tests, Study 2 and Study 3. We tested a low-cost sustainable social marketing communication strategy, which successfully increased parental involvement in studies 2 and 3. The marketing communication was successful in increasing parental involvement even among the most illiterate and poor participants (in community schools: Study 2). Hence, the marketing communication strategy is suitable for deployment in highly impoverished settings. And, as we found in Study 3 (conducted in the U.S.A.), marketing communication had also been effective in increasing parental involvement among middle- and high-income participants. We went a step further to test marketing communication, focusing on the cultivation of soft skills (mainly grit) and finding that, compared with general marketing communication, this focused marketing communication is a more effective means of fostering soft skills (locus of control and self-esteem) in children (Study 3). Moreover, a focus on soft skills marketing communication could increase parental involvement (e.g., discussion, home, academic socialisation) more effectively than general marketing communication can. We found that focused marketing communication increased parental involvement in the cultivation of soft skills such as grit more effectively compared to general marketing communication.

In line with the findings of numerous previous studies, we confirmed that parental involvement predicts academic achievement. However, this thesis found that home involvement is the most predictive of academic achievement (studies 2 and 3). Moreover, we found that parental involvement at home is associated with the highest educational level attained and higher income in adulthood. Since we tested multiple types of involvement, the consistent finding that home parental involvement is most beneficial for educational and income outcomes, revealed possibly the most critical type of involvement.

So far, we have discussed the results for the role of soft skills between parental involvement, academic achievement, and income. Moreover, we discussed the results of our analysis of grit, parental involvement as a multidimensional construct, and a low-cost marketing communication strategy deployed in our studies. Lastly, we revisited the findings from this thesis on the link between home parental involvement and academic achievement. This comprehensive research has theoretical and practical implications, which will be discussed next.

5.3. Theoretical Contributions

Context of the thesis. The thesis contributed to the existing literature by examining the relationships between parental involvement, education, and income in the context of poverty. By understanding the underlying force of this effect (soft skills), this work showed how parental involvement could be stimulated effectively via marketing communication tools. For example, we, the student researcher and her supervisors demonstrated that focused marketing communication is more effective in cultivating soft skills. Even though we conducted most of the studies in one of the poorest, rural, and under-investigated parts of the world (Kasama, Zambia), we found that marketing communication can stimulate parental involvement, soft skills and academic achievement despite everyday hardships people face. Additionally, we studied the effect of grit on children's academic achievement, who were from extremely rural places (Kasama, Zambia), when traditionally grit has been researched in the U.S.A. (Kwon, 2017). Moreover, we demonstrated that the findings apply to more developed contexts as well, as we completed the last study in the U.S.A. among middle- and upper-income class households.

Parental involvement types. This thesis also makes an important contribution to the marketing, psychological, and pedagogical literature. We studied the parental involvement construct comprehensively by including multiple types of involvement in our studies since the literature has not defined parental involvement cohesively (Fan & Chen, 2001). Moreover, this thesis helps to close the ongoing debate on what items home involvement should include (Boonk et al., 2018; Hill & Tyson, 2009) since we showed little item variation in home involvement across studies (in Zambia and the U.S.A) while examining multiple facets of parental involvement. Furthermore, we found in every study that home involvement (with little item variation) is the most predictive type of involvement of academic achievement (Study 2 and Study 3), soft skills (e.g., locus of control: Study 2), and income (Study 1). This finding is critical for informing future interventions (e.g., school interventions) and academic research intended to increase soft skills, academic achievement, and future income in the most effective way through greater parental involvement. We were able to direct future research to the exact type of involvement that is the most promising (among the types of involvement tested) for specific socialisation outcomes.

Investigation of multiple soft skills. While many studies have focused on only one or two soft skills (e.g., Heckman et al., 2006), we examined four soft skills. Moreover, we found evidence to suggest that three of them (grit, self-esteem, and locus of control) are related to

positive outcomes (e.g., self-esteem to income: Study 1). Grit is not a well-researched concept and, we showed that grit could be stimulated with parental involvement in an impoverished, rural and developing region (Study 2). We also showed that focused marketing communication increases parental involvement in the cultivation of grit more effectively than does general marketing communication. This contribution is especially valuable to the psychological and pedagogical literature as it directs future research on how grit could be stimulated with marketing communication on parental involvement that emphasises the cultivation of soft skills.

Testing of low-cost marketing communication tools. The thesis contributed to the social marketing literature in several important ways. Many scholars have already identified that social marketing requires a participatory approach (e.g., Saunders et al., 2015). However, recent literature calls for greater stakeholder involvement as their participation is still inadequate (Truong & Dang, 2017). Since the area of interest is not well-researched (rural Zambia), insights from the target population were critical in designing marketing communication. This thesis involved customers in the design of the marketing communication by generating information from them about needs, barriers, and solutions. We contributed to the upstream marketing literature and developed low-cost effective marketing communication. This marketing communication was effective in stimulating parental involvement in developing counties (Zambia) and in developed countries (U.S.A.).

Multi-method approach. Moreover, the type of research, qualitative or quantitative, matters in establishing sufficient evidence. Social marketing agents rarely use quantitative methods of research (Truong, 2014) and even more infrequently experimental design and randomised control trials (RCT) (e.g., Evans et al., 2014). This work gathered quantitative evidence and supplemented it with qualitative data (exploratory studies). The multi-method approach, utilised in this thesis, allowed us to explore a less-known context (rural Zambia) and provided causal evidence via the quasi-experimental studies.

Consumer socialisation theory. Lastly, the thesis revealed the possible socialisation process (parental involvement → soft skills → academic achievement), which is generally not addressed in consumer socialisation theory (Moschis, 1985). Also, while Palmer et al. (2001) examined the effect of parental involvement on children's debt, we have extended the consumer socialisation theory by examining educational attainment and income as socialisation results. The findings will allow researchers to explore the socialisation mechanism further in terms of the consumer socialisation theory, especially within the parent-child relationship. Overall, the thesis has several implications for policymakers.

5.4. Policy Implications

Contextual understanding for policymakers in Zambia. Since there is a massive income gap (especially in rural areas) (World Bank, 2018b; Central Statistical Office, 2016), the deciding agents may not fully understand the low-income environment of a target population. The thesis offers policymakers contextual understanding (e.g., motivations, barriers for involvement), which is needed for any prescription of behaviour. The findings from this research (e.g., illiteracy in community schools, impoverished communities) may suggest ways by which policymakers can improve marketing tools that will facilitate communication with illiterate populations (e.g., by using pictures and simple messages). Hence, policymakers may be able to stimulate parental involvement (e.g., home involvement) using low-cost marketing communication tools if they desire to improve the academic achievement or soft skills of children. The evidence presented in the thesis may offer useful insights to policymakers who may be able to address the shortcomings of existing policies in Zambia intended to encourage parental involvement.

Policy implications for policymakers in the U.S.A. With a low-cost marketing communication, policymakers may encourage parental involvement, which has been shown to increase soft skills in children such as grit. As the gap in soft skills between children from families with different means keeps on increasing in the U.S.A., the policymakers could use marketing communication to improve the situation. And, academic achievement could be also improved by the same marketing communication narrowing the gap between the poor and well-off students.

Effective stimulation of parental involvement. Since we included parental involvement as a multidimensional construct it had further implications. The thesis helped to identify parental involvement components that enhance academic achievement in middle school (e.g., home involvement). The thesis also gave a better understanding of how these variables activate soft skills (e.g., locus of control). Such contributions are fundamental to informing the development of educational policies and parent-central programs. The findings have further managerial consequences.

Social tools advancement. This thesis showed that focused marketing communication stimulates parental involvement more effectively than does general marketing communication (tested in Study 3). Moreover, focused marketing communication stimulates soft skills (locus of control and self-esteem) more effectively than does general marketing communication (tested in Study 3). These findings signal to the policymakers that the correct

tailoring of marketing communication could produce the most favourable outcomes. Already-tested focused marketing communication could be used for policy design (e.g., school policies) to increase parental involvement and improve soft skills. Furthermore, the thesis has several managerial implications.

5.5. Managerial Implications (e.g., Managers of NGOs, Educational Institutions)

Poverty reduction in Zambia. The findings are especially critical in the context of extreme poverty. Not only do marketing communication tools increase parental involvement among the poorest people (e.g., in community schools), but the treatment also had a positive impact on students' academic performance. As shown by the results of the survey conducted in Study 1, parental involvement and academic achievement are associated with higher income. This connection is vital to creating instruments to reduce poverty among the rural population. Parents and educators can utilise marketing communication to improve socialisation outcomes.

Low-cost marketing communication. The low cost of the marketing communication tools could be advantageous for future interventions by social marketers. The tested marketing communication tool is suitable for usage in developing and developed countries. Low-cost social marketing communication instruments provide a sustainable solution and inclusive growth (children are participating in their advancement). Additionally, this thesis showed that low-cost social marketing communication means could produce not only a behavioural change (increase in parental involvement) but also have positive social consequences (e.g., higher academic achievement). Social marketing communication tools could produce high returns as it has low cost and yields significant positive results (e.g., higher academic achievement). Hence, social marketers (e.g., academia or NGOs affiliated) can utilise similar low-cost social marketing communication instruments to achieve sustainable positive change in social consequences along with inclusive growth.

Strategies to increase parental involvement and academic achievement. With a newfound understanding of the target audience and their environments, we aimed to influence the upstream agents (e.g., NGOs). The results of this thesis can inform educators and families about ways by which parents can increase their children's academic attainment and soft skills. The thesis provided information on several parental socialisation variables that require more attention (e.g., home involvement) as these have the largest impact on academic achievement and soft skills. Additionally, academic institutions could evaluate soft skills (e.g., self-esteem) to predict academic achievement in college as well as students' employment potential.

Specifically, for parents, results indicated that home involvement was critical for educational outcomes in middle school. Hence, educational programs may include the participation of parents to boost attainment. Such programs may need to help parents to

realise their role in the educational process. The challenge is that even if parents understand the importance of participating, they may not know exactly what to do to be involved (Chen & Gregory, 2010) or need to be motivated to act. Therefore, educational programs may be more effective if they include marketing communication instruments such as that used for studies 2 and 3, which has a motivational component to it. Despite the wide range of theoretical, policy and managerial implications derived from the research outcomes, this thesis has several limitations.

5.6. Limitations and Future Research

Sample size. Due to the many obstacles encountered during this research, a smaller than desirable sample size was obtained. For Study 2, the data collected was inadequate in terms of quality (e.g., missing responses) especially in community schools due to the low literacy of participants. This affected the sample size as we excluded responses that were of a low quality. Study 3 was conducted during the pandemic and face-to-face recruitment was not possible. We secured partnerships with nine schools comprising a pool of 2,700 qualifying participants. The communication was sent out by principals to parents at least twice encouraging parents to participate in the study. Unfortunately, only a handful of parents from each school decided to participate. With this unexpected result, we turned to an online platform to recruit participants and eventually secured a small but adequate sample of parents for the study. Hence, future research should replicate Study 3 outside of the pandemic situation, when multiple recruitment approaches could be deployed, and a larger sample secured.

Measurement of parental involvement. The limitations of the proposed measurement of parental involvement stand in the exclusion of community involvement and accessibility to the community. Since the focus of the study was parental involvement, community involvement or access to community resources were not considered. Moreover, since the third study was undertaken during the COVID-19 pandemic, most likely the parental involvement scale did not sufficiently capture the changing nature of parental involvement during his time.

Context. The research focused on Zambia and the U.S.A., and findings may not be fully applicable to other contexts (e.g., middle-income countries such as Russia). Replication of the studies may be beneficial for generalisation purposes, especially in areas where parental involvement is low. Moreover, a vast majority of Zambians are from one race and participants in the study in the U.S.A. were predominantly white; this raises a question of generalizability to other ethnicities (e.g., mixed races). Another potential limitation of the study completed in Zambia (Study 2) is the amount of the reward provided to the participants in the "high" condition, which was 5USD. While this may be a modest amount, for the lower-income households in Zambia 5USD is a significant amount. The reward may have influenced the responses; however, the information about the reward was not disclosed upfront, but rather only after families agreed to participate. Future studies may choose to implement a non-monetary reward or give a smaller amount. Last, some rural participants

(villagers in Study 1 and participants from community schools in Study 2) had very low literacy levels (e.g., not knowing how to hold a pen), which may have introduced a measurement error. While it may be difficult to overcome this constraint, future research may focus on verbal instruments to record responses.

The quality of data. Data collected in community schools (Study 2) may be of lower quality due to the participants' low level of literacy. *GPA.* GPA or a total score is only one of many indicators of academic achievement, although a widely used one. It will be also fruitful to obtain scores for each subject, utilise results from standard tests, and perform independent evaluations.

Limited soft skills. Only a handful of soft skills were tested in the experimental studies. Important abilities such as social skills and creativity were outside of the scope of this thesis. Hence, future research should test other soft skills and their relationship to academic achievement in the experimental settings to claim causation and to rule out other explanations.

Quantity vs quality of behaviour. We asked parents how often they are involved in certain activities, but the quality of these exchanges was not quantified. For example, positive interaction can turn into a negative one as the frequency increases (e.g., turns into nagging) (Wang & Sheikh-Khalil, 2014). To address this limitation, future studies could supplement self-response scales with observations.

Correlational study. Study 1 (with adults) was analysed with Crosstabs as income and education (and their residuals) were not normally distributed. The majority of responders had a monthly income below 300ZMW, which is about 13USD (most people picked one option as their answer). Many respondents completed education beyond high school (responses skewed to the right), which was somewhat surprising. Moreover, since Study 1 is correlational and could not claim causation, the directions of relationships between parental involvement, self-esteem, education, and income could not be determined. For example, self-esteem could increase parental involvement and not the other way around. Therefore, future studies should check the direction of the relations in a longitudinal setup.

COVID-19 pandemic. One of the biggest limitations of this thesis (of Study 3 completed in the U.S.A.) is that it was conducted during the pandemic. During this period, the grading rules were relaxed, and this might have influenced the GPA. Parental involvement during the pandemic could be different from that in "normal" times since many parents spent more time at home due to the pandemic. Future research should replicate the

study during more normal times (e.g., when the majority of parents return to work and schools resume face-to-face instructions full time).

General limitations. The characteristics of people who agreed to participate in a voluntary survey/study may be different from those who refused (Parkinson et al., 2018). It is possible to mitigate this limitation by obtaining a higher response rate. Another limitation is the use of ordinal scales as this can produce biased responses (e.g., social desirability) (Boonk et al., 2018), which can be difficult to overcome (Boonk et al., 2018). Future studies could include observations, where possible, to complement the data obtained from surveys (Boonk et al., 2018).

Additionally, future research could be conducted to investigate parental involvement in continuation (e.g., from elementary to high school). This thesis examined parental involvement in middle grades. However, to understand the effects of parental involvement more fully, involvement over a longer period must be examined due to the changing nature of involvement. For instance, the effect of involvement is likely to be different when it is consistent and continuous, compared to sudden involvement at some point in the child's education.

A final word

The effects of soft skills on academic achievement and income are gradually being discovered and acknowledged. We tapped into a generally under-researched topic in the fields of consumer research and behavioural change and provided evidence for the role of soft skills in socialisation outcomes. We drew attention to the impacts of low-cost social marketing communication tools on parental involvement, soft skills, and academic achievement in highly impoverished and middle- to high-income communities. We invite researchers to enthusiastically revisit the role of soft skills in a child's future successes and to undertake further experiments with low-cost social marketing communication tools.

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APPENDICES

Appendix 1. Psychological and Socio-Psychological Theories Related to a Behavioural Change

Classification	Theory/Model Name	Description	Source
Values, Beliefs and Attitudes	Expectancy Value Theory	Expectations in combination with a goal's value influence motivation, and in turn motivation forms behaviour (Fishbein & Ajzen, 1975).	Fishbein and Ajzen (1975)
	Protection Motivation Model	Fear appeal predicts cognitive process, including motivation; then, in turn, the attitude change occurs (Rogers, 1975).	Rogers (1975)
	Theory of reasoned action	"Value-action gap" addressed by including attitude and subjective norm as predictors of behavioural intention. The intention then predicts the behaviour (Chatterton, 2016).	Fishbein (1967); Ajzen and Fishbein (1980)
Norms and Identity	Norm Activation Theory	Personal norms influence behaviour and are activated by awareness of consequences and ascription of responsibility (Darnton, 2008).	Schwartz (1977)
	Focus Theory of Normative Conduct	Norms influence behaviour only if the norms are both injunctive and descriptive norms (Cialdini, Reno, Kallgren, & Cialdini, 1990).	Cialdini, Reno, Kallgren, and Cialdini (1990)
Agency, Efficacy and Control	Theory of Planned Behaviour	The stronger the intention to perform the behaviour, the more likely that the behaviour to occur (Ajzen, 1991).	Ajzen (1991)

Classification	Theory/Model Name	Description	Source
	Theory of Self-efficacy	Expectations of personal efficacy (resulting from information) determine coping behaviour, amount of effort, and duration of effort despite obstacles (Bandura, 1977a).	Bandura (1977a)
	Social Cognitive Theory of Self-Regulation	Self-regulation operates through self-monitoring, self-judgement, and self-reaction (Bandura, 1991). This mechanism facilitates self-directed change (Bandura, 1991).	Bandura (1991)
Habit and Routine	Theory of Interpersonal Behaviour	Intentions and habits influence behaviour in two different ways (Darnton, 2008).	Triandis (1977)

Note. Adapted from A. Darnton, 2008.

Appendix 2. Hypothetical Social Marketing Strategy

Steps in strategy development	Contextual application
I. Problem statement What is the social problem?	Increase academic achievement
II. Behaviour What action will best address the problem?	Increase parental involvement
III. Audience Who will be asked to act?	Parents
IV. Overall strategic options 1. Understand the audience	Identify the needs, wants and understand the environments of rural parents
2. Co-design the value and behavioural change: product	What behavioural change will bring the customers the most value? How does the audience see parental involvement? What is the value the parents' desire? Why do they desire it? Identify specific parental involvement that could be encouraged
3. Price of the new behaviour	What are the barriers to the change (e.g., no time, illiteracy)? Consider the cost and benefits of alternative behaviour (e.g., farming, attending to other kids). Price the new behaviour competitively
4. Place	The homes of families, school, some public places where parental involvement could be performed (depends on the type of involvement)
5. Promotion (communication) of the new behaviour to reduce or remove the barriers and support the new behaviour.	Meetings with parents to assist them with involvement; information on how they could get involved; provision of resources on how barriers could be reduced. For example, parents could take time to be involved during dinner instead of taking a separate time to be involved (barrier: no time)

Steps in strategy development	Contextual application
V. The final design of a campaign	1. Design low-cost sustainable and easy to understand instruments to encourage parental involvement. 2. Review the proposed tools with an audience and implement their feedback. 3. Test the instrument (manipulation check). 4. Alter the instruments as needed based on feedback from the audience and test results.
VI. Configure the evaluation methods for behavioural change and social outcome	1. Identify evaluation measures for behavioural change (increase in parental involvement): short and long terms. 2. Identify assessment criteria for a social outcome (increase in academic achievement): short and long terms.
VII. Data collection and analysis	Collect data in rural Zambia and analyse it utilising appropriate methods.
VIII. Communicate findings clearly to all stakeholders	Publications and output reports

Note. Adapted from "Social marketing: an overview of approach and effects," W.A. Smith, 2006, *Injury Prevention, 12(suppl_1)*; "Social Marketing: An Approach to Planned Social Change" by P. Kotler and G. Zaltman, 1971, *Journal of Marketing, 35*(3); "Origins, Qualities, and Envisionments of Transformative Consumer Research" by Mick et al., 2012, *Transformative Consumer Research for Personal and Collective Well-Being*; "Transformative social marketing: co-creating the social marketing discipline and brand" by R.C. Lefebvre, 2012, *Journal of Social Marketing, 2*(2); "Redefining social marketing: Beyond behavioural change," by S. Saunders et al., 2015, *Journal of Social Marketing, 5*(2).

Appendix 3. Definitions of Parental Involvement

Citation	Parental socialisation variables that explain parental involvement
Epstein (1992)	Parental obligations, parent/school communication, supporting the school, learning activities, decision-making, accessing the community
Sui-Chu and Willms (1996)	Home involvement: discuss school activities and monitor child's out-of-school activities School involvement: parent/school contacts and participation in school activities (volunteering, attending meetings and conferences in the school)
George and Kaplan (1998)	Discuss programs with parents, discuss school activities, discuss class activities, library/museum visits
McNeal (1999)	Parent-Teacher Organization (PTO) attendance, monitoring, parent-child discussions, and educational support
Catsambis (2001)	Parent obligations (includes e.g., communication), parent/school communication (e.g., academic contacts), supporting the school, learning activities (e.g., college encouragement), decision-making (e.g., PTO participation), accessing community (e.g., museum visits).
Sacker et al. (2002)	Father/mother's interest in a child's education, talks with a teacher, time spent with a child Parental aspirations: hopes for school leaving age/further education/a first job
Sylva et al. (2004)	Reading, teaching rhymes, learning numbers and alphabet, taking children on the trips and creating learning opportunities for them
Hango (2007)	Parent's interest in school
Kiernan and Huerta (2008)	Reading activities, mother-child relationships, and disciplinary practices

Citation	Parental socialisation variables that explain parental involvement
Hill and Tyson (2009)	Home involvement: communication with a child about school, homework help, library/museum visits, provision of adequate learning climate at home School involvement: communication with teachers, participation in school life and governance, volunteering at school Academic socialisation: communicating aspirations regarding education to a child, explaining learning strategies, discussing plans for the future, encouraging educational and career-related aspirations
Kiernan and Mensah (2011)	Promotion of reading and learning, discipline, care and nutrition, interactions with the child, and aspects of a family organisation
Sullivan et al. (2013)	Breastfeeding, regular bedtime, regular meal times, having strictly enforced rules, TV watching, daily reading to children, library visits and helping the child to learn the alphabet
Boonk et al. (2018)	Home involvement: communication with the child about school matters, school progress monitoring, homework help, learning activities guidance (possible: parental expectations) School involvement: participation in a variety of school activities, attendance of parent-teacher conferences
Day and Dotterer (2018)	Home involvement: having rules about how a child spends her/his time, homework help School involvement: parent/school communication, volunteering or attending meetings at school Academic socialisation: communication about the advantage of education for the future, discussions about occupational plans

Appendix 4. Soft Skills Classification and Impacts on Education and Income

Non-cognitive skills as defined by Gutman and Schoon (2013)	Term includes	Impact on academic achievement	Impact on income
1) self-perception	self-concept of ability, self-efficacy, self-esteem (Heckman, Stixrud, & Urzua, 2006; Krishnan & Krutikova, 2013)	CorrEv: Yes CasEv: Yes	CorrEv: Yes (Heckman, Stixrud, & Urzua, 2006; Krishnan & Krutikova, 2013) CasEv: No
2) motivation	achievement goal theory, intrinsic/extrinsic motivation, expectancy-value theory, sense of agency/locus of control (Krishnan & Krutikova, 2013)	CorrEv: Yes CasEv: Yes	CorrEv: Yes (Deke & Haimson, 2006; Heckman, Stixrud, & Urzua, 2006; Krishnan & Krutikova, 2013) CasEv: No
3) perseverance	engagement, grit	CorrEv: Yes CasEv: Yes	CorrEv: Yes (successful career) CasEv: No
4) self-control	self-discipline, delay of gratification, self-regulation, and impulse control	CorrEv: Yes CasEv: Yes	CorrEv: Yes CasEv: No
5) metacognitive strategies	-	CorrEv: Yes CasEv: Yes	CorrEv: No CasEv: No
6) social competencies	leadership skills, social skills	CorrEv: Yes CasEv: Yes	CorrEv: Yes (Deke & Haimson, 2006) CasEv: No
7) resilience and coping	-	CorrEv: Yes CasEv: No	CorrEv: No CasEv: No

Non-cognitive skills as defined by Gutman and Schoon (2013)	Term includes	Impact on academic achievement	Impact on income
8) creativity	-	CorrEv: Not conclusive CasEv: No	CorrEv: No CasEv: No

Notes. In regard to abbreviations: Correlation evidence- CorrEv, Causal evidence (experiments and quasi-experiments)-CasEv. Adapted from "The impact of non-cognitive skills on outcomes for young people," by L. Gutman and I. Schoon, 2013, *Education Endowment Foundation*; "Non-cognitive skill formation in poor neighbourhoods of urban India," by P. Krishnan and S. Krutikova, 2013, *Labour Economics, 24*(C); "Valuing Student Competencies Which Ones Predict Postsecondary Educational Attainment and Earnings and for Whom," by J. Deke and J. Haimson, 2006, *IDEAS Working Paper Series from RePEc*; "The Effects of Cognitive and Noncognitive Abilities on Labor Market Outcomes and Social Behavior," by Heckman et al., 2006, *Journal of Labor Economics, 24*(3).

Appendix 5. Communication Tools

A brochure (for community and private schools)

An action plan (for community and private schools)

At home:

1. Spend time with a child: play a game, go for a walk or shopping, cuddle
2. Talk to her/him about her/his school day, academic goals, hobbies and interests
3. Make sure that she/he does the homework
4. Encourage your child to study and do well
5. If a child needs discipline, try reasoning rather than spanking or yelling

Aspire:

1. Have high hopes about what age your child will be completing education
2. Have high hopes for hers/his further education
3. Have high hopes for what careers she/he will attain after completing education
4. Communicate your aspiration and discuss plans for your child's future with her/him

Take an interest:

1. Enquire about your child's academic successes and challenges
2. Ask her/him about his favorite subjects at school
3. Talk to your child about what she/he likes in school and why

Future of your child starts with you. It starts now.

At school:

1. Contact school if you have questions about your child's progress, about how you can help her/him, or about how you can become more involved
2. Volunteer in the classroom and see how the learning process might facilitate your child to gain an advantage

Tracker, sample questions and instructions for community schools ("high" condition)

Child's name_____

Please tick ✓ if an activity has been completed. It is suggested to complete each activity a few times per week.

	Activity/Week 3	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
1.	 Spend time together (for example, play a game, go shopping together)	☐	☐	☐	☐	☐	☐	☐
2.	 Talk to your child about her/his school day, academic goals, academic successes/challenges	☐	☐	☐	☐	☐	☐	☐
3.	 Talk to your child about her/his hobbies and interests	☐	☐	☐	☐	☐	☐	☐
4.	Check if your child has done homework	☐	☐	☐	☐	☐	☐	☐
5.	Encourage your child to study and do well	☐	☐	☐	☐	☐	☐	☐
6.	Reason with your child in a respectful manner	☐	☐	☐	☐	☐	☐	☐
7.	 Communicate your aspiration and discuss plans for your child's future with her/him	☐	☐	☐	☐	☐	☐	☐
8.	 Get involved in school' s activities/meetings or check on your child's progress	☐	☐	☐	☐	☐	☐	☐

Please, return trackers every two weeks. If all three sheets returned (6 weeks of participation), you will be rewarded **50 Kwacha**. The trackers could be returned in person or be sent with your child to school, where she/he can place trackers in the box labelled "Monash Study" located in the School's Office.

Sample questions and comments to your child that may assist in utilizing the tracker **(for community schools)**

1. *Spend time together with your child:*
   play a game, cuddle, have fun, go shopping together

2. *Talk to your child about her/his school day, academic goals, academic successes/challenges*
   How was your day today?
   What is the most difficult subject and why?
   What is your favorite subject?

3. *Talk to your child about her/his hobbies and interests*
   What sport do you like to play?
   What interests you the most?
   What books do you like to read?

4. *Check if your child has done homework*
   See your child's homework assignment and sign-off on homework when it has been completed.

5. *Encourage your child to study and do well*
   I know with some more effort you can do better.
   Let us try to solve this problem together.
   Set aside more time for studying if you think it's too challenging.

6. *Reason with your child in a respectful manner*
   Let us discuss what is causing your distraction.
   I am disappointed but let us see what we can do to improve the situation.

7. *Communicate your aspiration and discuss plans for your child's future with her/him*
   Who would you like to be when you grow up? What is needed to achieve it?
   How can I help you to become…

Instructions (for community schools)

Thank you very much for your participation. We value your input and efforts.

The tools are intended to be utilised by the parent/legal guardian, who is mainly responsible for the child's care.

1. The first sheet, an informational brochure, is for your reference. Please, read it and refer to it as needed.
2. The next sheet is the tracker. Please, complete each activity a few times per week and mark the tracker on which days the activity is completed. There are sample questions provided that you can utilise to complete each activity.
3. Please, return the tracker every two weeks and your child will be send home with a new tracker.
4. The participation is 6 weeks long. At the end of 6 weeks, you will receive a survey to complete.

Once again, thank you very much for participating.

Tracker, sample questions and instructions for private schools ("high" condition)

Child's name_____

Please tick ✓ if an activity has been completed. It is suggested to complete each activity a few times per week.

	Activity/Week 3	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
1.	Spend time together (for example, play a game, go shopping together)	□	□	□	□	□	□	□
2.	Talk to your child about her/his school day, academic goals, academic successes/challenges	□	□	□	□	□	□	□
3.	Talk to your child about her/his hobbies and interests	□	□	□	□	□	□	□
4.	Check if your child has done homework	□	□	□	□	□	□	□
5.	Encourage your child to study and do well	□	□	□	□	□	□	□
6.	Reason with your child in a respectful manner	□	□	□	□	□	□	□
7.	Communicate your aspiration and discuss plans for your child's future with her/him	□	□	□	□	□	□	□
8.	Get involved in school' s activities/meetings or check on your child's progress	□	□	□	□	□	□	□

Please, send the completed sheet (2 weeks) with your child to school on **the 17th of June 2019**. Your child will be sent back with the new sheet. If all three sheets returned (6 weeks of participation), you will be rewarded 50 Kwacha. The trackers could be returned to the box labelled "Monash Study" located in the School's Office.

Sample questions and comments to your child that may assist in utilizing the tracker **(for private schools)**

1. *Spend time together with your child:*
   play a game, cuddle, have fun, go shopping together

2. *Talk to your child about her/his school day, academic goals, academic successes/challenges*
   How was your day today?
   What is the most difficult subject and why?
   What is your favorite subject?

3. *Talk to your child about her/his hobbies and interests*
   What sport do you like to play?
   What interests you the most?
   What books do you like to read?

4. *Check if your child has done homework*
   See your child's homework assignment and sign-off on homework when it has been completed.

5. *Encourage your child to study and do well*
   I know with some more effort you can do better.
   Let us try to solve this problem together.
   Set aside more time for studying if you think it's too challenging.

6. *Reason with your child in a respectful manner*
   Let us discuss what is causing your distraction.
   I am disappointed but let us see what we can do to improve the situation.

7. *Communicate your aspiration and discuss plans for your child's future with her/him*
   Who would you like to be when you grow up? What is needed to achieve it?
   How can I help you to become…

Instructions (for private schools)

Thank you very much for your participation. We value your input and efforts.

The tools are intended to be utilised by the parent/legal guardian, who is mainly responsible for the child's care.

1. The first sheet, an informational brochure, is for your reference. Please, read it and refer to it as needed.
2. The next sheet is the tracker. Please, complete each activity a few times per week and mark the tracker on which days the activity is completed. There are sample questions provided that you can utilise to complete each activity.
3. Please, return the tracker every two weeks and your child will be send home with a new tracker.
4. The participation is 6 weeks long. At the end of 6 weeks, you will receive a survey to complete.

Once again, thank you very much for participating.

Appendix 6. List of Hypotheses

Hypothesis	Statement	Study 1	Pre-test	Study 2	Study 3
H1	Parental involvement is positively related to an academic achievement (level of schooling completed).	√			
H2	Parental involvement is positively related to a child's higher income in adulthood.	√			
H3	Self-esteem is positively related to a higher income in adulthood.	√			
H4	Grit is positively related to a higher income in adulthood.	X			
H5	Self-control is positively related to a higher income in adulthood.	X			
H6	Internal locus of control is positively related to a higher income in adulthood.	NC			
H7	**Marketing communication** about parental involvement increases parental involvement.				
H_{7a}	Marketing communication about home parental involvement increases home parental involvement.		√	√	√
H_{7b}	Marketing communication about discussion increases discussion as a form of parental involvement.		√	NC	√
H_{7c}	Marketing communication about academic socialisation increases academic socialisation.			NC	√
H_{7d}	Marketing communication about school parental involvement increases school parental involvement.		X	X	
H_{7e}	Marketing communication about parental interest increases parental interest.			NC	X
H8	**Parental involvement** increases a child's academic achievement.				

Hypothesis	Statement	Study 1	Pre-test	Study 2	Study 3
H_{8a}	An increase in home parental involvement increases a child's academic achievement.			√	√
H_{8b}	An increase in discussion as a form of parental involvement increases a child's academic achievement.			NC	X
H_{8c}	An increase in academic socialisation increases a child's academic achievement.			NC	X
H_{8d}	An increase in school parental involvement increases a child's academic achievement.			NC	
H_{8e}	An increase in parental interest increases a child's academic achievement.			NC	X
H9	Parental involvement increases a child's **self-esteem**.			NC	
H_{9a}	Focused parental involvement increases a child's self-esteem greater than general parental involvement.				√
H10	Self-esteem increases a child's academic achievement			NC	
H11	Self-esteem mediates the relationship between parental involvement and academic achievement.			NC	X
H12	Parental involvement increases a child's internal **locus of control**.			√	
H_{12a}	Focused parental involvement increases a child's locus of control greater than general parental involvement.				√
H13	Internal locus of control increases a child's academic achievement.			NC	
H14	Internal locus of control mediates the relationship between parental involvement and academic achievement.			NC	X
H15	**Grit** increases a child's academic achievement.			NC	

Hypothesis	Statement	Study 1	Pre-test	Study 2	Study 3
H16	Parental involvement increases a child's grit.			√	
H_{16a}	Focused parental involvement increases a child's grit greater than general parental involvement.				X
H17	Grit mediates the relationship between parental involvement and academic achievement.			NC	X
H18	**Self-control** increases a child's academic achievement.			NC	
H19	Parental involvement increases a child's self-control.			NC	
H20	Self-control mediates the relationship between parental involvement and academic achievement.			NC	
H21	Marketing communication increases soft skills through parental involvement.				
H_{21a}	Parental involvement mediates the effect of marketing communication on self-esteem.			NC	X
H_{21b}	Parental involvement mediates the effect of marketing communication on locus of control.			√	X
H_{21c}	Parental involvement mediates the effect of marketing communication on grit.			X	X
H_{21d}	Parental involvement mediates the effect of marketing communication on self-control.			NC	

Notes. In regard to abbreviations: "√" supported, "X" not supported, "NC" not considered as the hypothesis could not be tested (e.g., inadequate scale reliability, sampling inadequacy).

Appendix 7. Interview Protocol Exploratory Study 1A (Adults)[49]

Time of the interview:
Date:
Place:
Interviewer:
Interviewee:
Position of the interviewee:
Comments:

The study aims to better understand how children raised in low-income families were able to achieve higher income in adulthood.

I. Explain Exploratory Statement and Obtain Consent Form

II. Introduction:

1. Would you please, tell me about your childhood?
2. Did your family had limited resources?
3. Did you grow up in a rural area?
4. Do you think you are successful in your career?
5. What do you think helped you?

III. General information related to the topic:

6. What personal qualities helped you to succeed in your career?
7. Out of these qualities, which are three that are most helpful?

IV. The focus of the study:

8. Have you possessed these personal qualities in your childhood?
9. Do you think you acquired them in adulthood?

[49] Interviewed four successful adults with origins from Northern Province.

10. How do acquired these personal qualities?
11. What else helped you in your childhood to succeed in your career?
12. Were your parents involved with you?
13. If so, how they were involved?
14. How important parental involvement was for your career success?

V. Ending:

Thank you very much for your time. It was a pleasure.

15. Is there anything you would like to add?
16. Will you be willing to meet for some follow-up questions and to review the findings?

Appendix 8. Interview Protocol Exploratory Study 1B (Teachers)[50]

Time of the interview:

Date:

Place:

Interviewer:

Interviewee:

Position of the interviewee:

The study aims to better understand how children from low-income families are able to succeed in school.

I. Explain Exploratory Statement and Obtain Consent Form

II. Introduction:

1. What do you think helps children to earn good grades?
2. Can you describe a typical high achieving student?

III. General information related to the topic:

3. What personal qualities help children to earn good grades?
4. Out of these qualities, which are three that are most helpful?

IV. The focus of the study:

5. How do you think children obtain these qualities?
6. What else helps children to succeed in school?
7. Do you think parental involvement helps?
8. If so, how does it help?
9. What activities of parental involvement are beneficial for child's grades?

[50] Interviewed five teachers (not from the schools, where main studies took place).

V. Ending:

Thank you very much for your time. It was a pleasure.

10. Is there anything you would like to add?

11. Will you be willing to meet for some follow-up questions and to review the findings?

Appendix 9. Interview Protocol Exploratory Study 2A (Parents)[51]

Time of the interview:
Date:
Place:
Interviewer:
Interviewee:
Position of the interviewee:

The study aims to better understand what motivates and helps parents to be involved. And, the study would like to know what are the obstacles hinder the ability of parents to be involved with their children.

I. Explain Exploratory Statement and Obtain Consent Form

II. Introduction:

1. Would you, please, describe your normal day to me?

III. General information related to the topic:

2. How do you involve with your child?

IV. The focus of the study:

3. Why do you want to be involved with your child?
4. What helps you to get involved?
5. What prevents you from being involved?
6. What would help you to be more involved?
7. Will information about involvement and on how to get involved help you to be more involved?
8. If so, what information will be most helpful?

[51] Four parents with school age children from Kasama and suburbs were interviewed.

9. How this information will help you?

V. Ending:

Thank you very much for your time. It was a pleasure.

10. Is there anything you would like to add?
11. Will you be willing to meet for some follow-up questions and to review the findings?

Appendix 10. Interview Protocol Exploratory Study 2B (Teachers)[52]

Time of the interview:
Date:
Place:
Interviewer:
Interviewee:
Position of the interviewee:

The study aims to better understand what motivates and helps parents to be involved. And, the study would like to know what are the obstacles hinder the ability of parents to be involved with their children.

I. Explain Exploratory Statement and Obtain Consent Form

II. Introduction:

1. Do you think a typical parent from this area has an ability to be involved with a child?
2. Are most parents of your students involved with them?

III. General information related to the topic:

3. How are they involved?

IV. The focus of the study:

4. What motivates parental involvement?
5. What helps parents to be involved?
6. What prevents parents from being involved?
7. What would help parents to be more involved?
8. Will information about involvement and on how to get involved help parents to be more involved?

[52] Interviewed four teachers (not from the schools, where main studies took place).

9. If so, what information will be most helpful?
10. How this information will help parents?

V. Ending:

Thank you very much for your time. It was a pleasure.

11. Is there anything you would like to add?
12. Will you be willing to meet for some follow-up questions and to review the findings?

Appendix 11. Interview Protocol Exploratory Study: Feedback on Communication Tools[53]

Time of the interview:
Date:
Place:
Interviewer:
Interviewee:
Position of the interviewee:

The study aims to better understand which marketing communication tools are the most beneficial for parental involvement, why, and how the tools could be improved.

I. Explain Exploratory Statement and Obtain Consent Form

II. Introduction:

1. Here are the three sets of marketing communication tools, can you, please, review them carefully?

III. General information related to the topic:

2. Do you think tools such as these are helpful to you?
3. Can you, please, rate from 1-10 each set of tools on how likely they would increase your parental involvement if you were to use them. Where "1" is for the tools that will not increase your involvement and "10" is for the tools that will definitely increase your involvement.

IV. The focus of the study:

4. Please, explain why you rated the tools as you did.
5. What do you like and what you do not like about each set?

[53] Interviewed two participants. Further feedback on the tools received from parents after the pre-test.

6. Please, provide suggestions on how the tools could be modified to better help parents to be involved with their children?
7. What information should be included?
8. What should be excluded?
9. How the presentation of the tools should be changed?

V. Ending:

Thank you very much for your time. It was a pleasure.

10. Is there anything you would like to add?
11. Will you be willing to meet for some follow-up questions and to review the findings?

Appendix 12. Explanatory Statements and a Consent Forms

EXPLANATORY STATEMENT

(Children)

Project ID: 12964

Title: Poverty and Education

Chief Investigator's name Dr. Dominic Thomas
Department of Marketing
Phone: +61 3 990 32059
email: dominic.thomas@monash.edu

Co-Investigator's name Dr. Asadul Islam
Department of Economics
Phone: +61 3 9903 2783
email: asadul.islam@monash.edu

Student's name Yuliya Lynch
Phone : +19177337354
email: yuliya.lynch@monash.edu

You are invited to take part in this study. Please read this Explanatory Statement in full before deciding whether or not to participate in this research. If you would like further information regarding any aspect of this project, you are encouraged to contact the researchers via the phone numbers or email addresses listed above.

What does the research involve?

The current project will review parental involvement. The study aims to understand if parental involvement helps children to do better in school. The study will also estimate what abilities parental involvement affects and if these abilities play a role in academic achievement in childhood.

Both, parents and children, are asked to answer survey questions. Since the study would like to investigate the effect of parental involvement on academic achievement, the parents of students might be asked to be involved with a child (e.g., spend time with a child, discuss future academic plans). Informational brochures will be provided to the parents with details about parental involvement. Children's grade point averages will be collected.

Slight discomfort to the participants is anticipated. Free counselling services available via phone: Childline 116 and Social and Health Helpline 933.

Why were you chosen for this research?

Rural Kasama area was chosen due to the high levels of poverty and because limited research was done in rural Zambia.

Source of funding:

PhD student research support fund (Monash University)

Consenting to participate in the project and withdrawing from the research

(i) The Permission Letter/Consent Form/Assent form (whichever is applicable) must be signed and returned to the researcher (physical or scanned) (ii) the participant can withdraw at any stage before data is aggregated, which is approximately six weeks after the beginning of the study.

Possible benefits and risks to participants

The community might benefit in a way that the project will raise the awareness of the importance of parental involvement and its effects on academic achievement among participants, their parents and the school staff.

No discomfort to the participants is anticipated.

Confidentiality

After the data collection, each participant will be assigned an anonymised name. The data will be published on an aggregated level. Only researchers will have access to data.

Storage of data

Data is to be stored in a password protected file (Excel, Word) and shared with the student researcher and co-researchers. Physical copies will be shredded after the information is computerised.

Results

The results will be available in the Thesis and in any applicable to this research publications.

Complaints

Should you have any concerns or complaints about the conduct of the project, you are welcome to contact the Executive Officer, Monash University Human Research Ethics Committee (MUHREC):

Executive Officer

Monash University Human Research Ethics Committee (MUHREC)

Room 111, Chancellery Building D,

26 Sports Walk, Clayton Campus

Research Office

Monash University VIC 3800

Tel: +61 3 9905 2052 Email: muhrec@monash.edu Fax: +61 3 9905 3831

CONSENT FORM

(Children)

Project ID: 12964

Title: Poverty and Education

Chief Investigator's name Dr. Dominic Thomas
Department of Marketing
Phone: +61 3 990 32059
email: dominic.thomas@monash.edu

Student's name Yuliya Lynch
Phone : +19177337354
email: yuliya.lynch@monash.edu

Co-Investigator's name Dr. Asadul Islam
Department of Economics
Phone: +61 3 9903 2783
email: asadul.islam@monash.edu

My child has been asked to take part in the Monash University research project specified above. I have read and understood the Explanatory Statement, and I hereby consent for my child to participate in this project.

Data is to be stored in a password protected file and shared with the student researcher and co-researchers. Physical copies will be shredded after the information is computerised.

Slight discomfort to the participants is anticipated. Free counselling services available via phone: Childline 116 and Social and Health Helpline 933.

I agree for my child to:	Yes	No
Answer survey questions	☐	☐
I agree for my child's school to:		
Provide my child's grade point average	☐	☐

Name of Participant (child's name) **Child's grade**

Name of Parent/Guardian

Signature of Parent/Guardian Date

Your child should drop off the Consent Form in a box named « Monash Study » located in the school's office within 7 days.

CONSENT FORM

Project ID: 12964

Title: Poverty and Education

Chief Investigator's name Dr. Dominic Thomas
Department of Marketing
Phone: +61 3 990 32059
email: dominic.thomas@monash.edu

Student's name Yuliya Lynch
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Co-Investigator's name Dr. Asadul Islam
Department of Economics
Phone: +61 3 9903 2783
email: asadul.islam@monash.edu

I have been asked to take part in the Monash University research project specified above. I have read and understood the Explanatory Statement, and I hereby consent to participate in this project.

Data is to be stored in a password protected file and shared with the student researcher and co-researchers. Physical copies will be shredded after the information is computerised.

Slight discomfort is anticipated. Free counselling services available via phone: Childline 116 and Social and Health Helpline 933.

I consent to the following (please, mark the boxes "yes" or "no"):	Yes	No
Answer survey questions	☐	☐
To utilise the materials provided to me (if any)	☐	☐

Your child's name _____ **Child's grade** _____

Name of Parent/Guardian (participant) _____

Signature of Parent/Guardian _____ Date _____

Your child should drop off the Consent Form in a box named « Monash Study » located in the school's office within 7 days.

ASSENT FORM

(Children)

Project ID: 12964

Title: Poverty and Education

Chief Investigator's name Dr. Dominic Thomas
Department of Marketing
Phone: +61 3 990 32059
email: dominic.thomas@monash.edu

Student's name Yuliya Lynch
Phone : +19177337354
email: yuliya.lynch@monash.edu

Co-Investigator's name Dr. Asadul Islam
Department of Economics
Phone: +61 3 9903 2783
email: asadul.islam@monash.edu

I have been asked to join in this Monash University study. The letter that explained everything about this study has been read to me, and I have had a chance to ask questions about it. I understand what this research project is about and would like to join in.

I understand that being in this study is my choice and that I can change my mind and choose to not be part of this study any time I like and that no one will be angry with me if I change my mind. I know that if I have any questions, I can ask my teacher/parents or the student researcher at any time.

Slight discomfort is anticipated. Free counselling services available via phone: Childline 116 and Social and Health Helpline 933.

I agree to:	Yes	No
Answer survey questions	☐	☐
Collection of my grade point average from the school	☐	☐

Name _____ Date _____

_____

Appendix 13. Study 1: Measures of Prenatal Involvement

Type of involvement	Parental socialisation variables
Home-based	Time spent with the child (Sacker et al., 2002)
	Home Discussion: discuss school programs and academic plans (Sui-Chu & Willms, 1996)
	Home Supervision: Limit Going Out, Monitor Homework and Parent Home After School (Sui-Chu & Willms, 1996)
	Negative interactions: slapping or spanking, scolding or physically restraining the child (Kiernan & Mensah, 2011)
	Parental responsibilities and encouragement: making sure that the child is in school on time, attends school regularly, and has food to eat in school; encouraging the child to do well in school (exploratory studies February 2019).
Parental interest	Discuss activities interesting to the child (Sui-Chu & Willms, 1996)

Appendix 14. Study 1: Factor Analysis for Parental Involvement Scale

Items	Factor		
	Home	**Discussion**	**Positive Parenting**
Tardiness: *9PIES made sure that you got to school on time?*	.875		
Attendance: *10PIES made sure that you attended school regularly?*	.871		
Encouragement: *12PIES encouraged you to study and do well in school?*	.792		
Homework: *5PIHB checked on whether you have done your homework?*	.604		
Home upon child's return: *7PIHB was at home when you returned home from school?*			
Discussion/interest: *4PIHB discussed with you activities or events of particular interest to you?*			
Discussion academic: *3PIHB discussed with you path selection in senior secondary?*		.797	
Discussion academic: *2PIHB talked to you about planning your senior secondary program?*		.608	
Time outside on school nights: *6PIHB limited the amount of time you went out with friends on school nights?*		.376	

Items	Factor		
	Home	**Discussion**	**Positive Parenting**
Time together: *1PIHB gone with you on walks and outings?*			.618
Negative interactions (reversed): *8PIHB Revers slapped, spanked, scolded or physically restrained you?*			.499
Food to eat: *11PIES made sure that you had food to eat in school (if you spent most of the day in school)?*	.333		.406

Notes. Extraction Method: Principal Axis Factoring. Rotation Method: Oblimin with Kaiser Normalization. Rotation converged in 9 iterations. Loadings less than .30 were suppressed.

Appendix 15. Study 1: Factor Analysis for Grit Involvement Scale

Items	Factor	
	Commitment[54]	**Hard work**[55]
Interest short time (reversed): *3GR Revers I have been obsessed with a certain idea or project for a short time but later lost interest.*	.916	
Goal setting (reversed): *5GR_Revers I often set a goal but later choose to pursue a different one.*	.689	
New ideas (reversed): *1GR_Revers New ideas and projects sometimes distract me from previous ones.*	.478	
Focus long-term (reversed): *6GR Revers I have difficulty maintaining my focus on projects that take more than a few months to complete.*	.465	
Setbacks: *2GR Setbacks don't discourage me.*		
Diligence: *8GR I am diligent.*		.820
Completion of a project: *7GR I finish whatever I begin.*		.652
Hard work: *4GR I am a hard worker.*		.650

Notes. Extraction Method: Principal Axis Factoring. Rotation Method: Oblimin with Kaiser Normalization. Rotation converged in 5 iterations. Loadings less than .30 were suppressed.

[54] Also, could be called "consistency of interest" (Kwon, 2017).
[55] Also, could be called "perseverance of effort" (Kwon, 2017).

Appendix 16. Study 1: Crosstab Education and Parental Involvement

			Parental Involvement		
			Low	High	Total
Education	Low	Count	52	14	66
		% within Education	78.8%	21.2%	100.0%
		% within Parental Involvement	72.2%	26.4%	52.8%
		% of Total	41.6%	11.2%	52.8%
	High	Count	20	39	59
		% within Education	33.9%	66.1%	100.0%
		% within Parental Involvement	27.8%	73.6%	47.2%
		% of Total	16.0%	31.2%	47.2%
Total		Count	72	53	125
		% within Education	57.6%	42.4%	100.0%
		% within Parental Involvement	100.0%	100.0%	100.0%
		% of Total	57.6%	42.4%	100.0%

Appendix 17. Study 1: Crosstab Income and Parental Involvement

			Parental Involvement		
			Low	High	Total
Income	Low (below 200ZMW)	Count	53	18	71
		% within Income	74.6%	25.4%	100.0%
		% within Parental Involvement	73.6%	33.3%	56.3%
		% of Total	42.1%	14.3%	56.3%
	High (above 201ZMW)	Count	19	36	55
		% within Income	34.5%	65.5%	100.0%
		% within Parental Involvement	26.4%	66.7%	43.7%
		% of Total	15.1%	28.6%	43.7%
Total		Count	72	54	126
		% within Income	57.1%	42.9%	100.0%
		% within Parental Involvement	100.0%	100.0%	100.0%
		% of Total	57.1%	42.9%	100.0%

Appendix 18. Study 1: Crosstab Self-esteem and Income

			Self-esteem		
			Low	High	Total
Income	Low (below 200ZMW)	Count	26	3	29
		% within Income	89.7%	10.3%	100.0%
		% within Self_esteem	76.5%	12.0%	49.2%
		% of Total	44.1%	5.1%	49.2%
	High (above 201ZMW)	Count	8	22	30
		% within Income	26.7%	73.3%	100.0%
		% within Self_esteem	23.5%	88.0%	50.8%
		% of Total	13.6%	37.3%	50.8%
Total		Count	34	25	59
		% within Income	57.6%	42.4%	100.0%
		% within Self_esteem	100.0%	100.0%	100.0%
		% of Total	57.6%	42.4%	100.0%

Appendix 19. Study 1: Crosstab Self-esteem and Education

			Self-esteem		
			Low	High	Total
Education	Low	Count	24	4	28
		% within Education	85.7%	14.3%	100.0%
		% within Self-esteem	70.6%	16.7%	48.3%
		% of Total	41.4%	6.9%	48.3%
	High	Count	10	20	30
		% within Education	33.3%	66.7%	100.0%
		% within Self-esteem	29.4%	83.3%	51.7%
		% of Total	17.2%	34.5%	51.7%
Total		Count	34	24	58
		% within Education	58.6%	41.4%	100.0%
		% within Self-esteem	100.0%	100.0%	100.0%
		% of Total	58.6%	41.4%	100.0%

Appendix 20. Study 1: Crosstab Self-esteem and Parental Involvement

			Parental Involvement		
			Low	High	Total
Self-esteem	Low	Count	23	11	34
		% within Self-esteem	67.6%	32.4%	100.0%
		% within Parental Involvement	79.3%	37.9%	58.6%
		% of Total	39.7%	19.0%	58.6%
	High	Count	6	18	24
		% within Self-esteem	25.0%	75.0%	100.0%
		% within Parental Involvement	20.7%	62.1%	41.4%
		% of Total	10.3%	31.0%	41.4%
Total		Count	29	29	58
		% within Self-esteem	50.0%	50.0%	100.0%
		% within Parental Involvement	100.0%	100.0%	100.0%
		% of Total	50.0%	50.0%	100.0%

Appendix 21. Pre-test: Factor Analysis Parental Involvement

Items	Factor			
	Home	**School**	**Discussion**	**Positive Parenting**
Attendance: *7PIES make sure that your child attends school regularly?*	0.875			
Food to eat: *8PIES make sure that your child has food to eat in school (if she/he spends most of the day in school)?*	0.830			
Encouragement: *9PIES encourage your child to study and do well in school?*	0.780			
Tardiness: *6PIES make sure that your child gets to school on time?*	0.667			
Homework: *2PIHB check on whether your child has done her/his homework?*	0.499			
Time outside on school nights: *3PIHB limit the amount of time your child goes out with friends on school nights?*				
Contact with school: *14PISC contacted the school about your child's academic program for this year?*		0.799		
Contact with school: *15PISC contacted the school about your child's path selection in senior secondary?*		0.731		
Contact with school: *13PISC contacted the school about your child's academic performance?*		0.727		

Items	Factor			
	Home	**School**	**Discussion**	**Positive Parenting**
Discussion/interest: *12PIIN discussed with your child activities or events of particular interest to your child?*			0.844	
Discussion academic: *10PIHB talked to your child about planning her/his senior secondary program?*			0.788	
Discussion academic: *11PIHB discussed with your child path selection in senior secondary?*			0.634	
Time together: *1PIHB go with a child on walks and outings?*				0.603
Negative interactions (reversed): *5PIHB_Reverse slap, spank, scold or physically restrain your child?*				0.482
Home upon child's return: *4 PIHB at home when your child returns home from school?*				0.303

Notes. Extraction Method: Principal Axis Factoring. Rotation Method: Oblimin with Kaiser Normalization. Rotation converged in 9 iterations. Loadings less than .30 were suppressed.

Appendix 22. Study 2: Factor Analysis Parental Involvement

Items	Factor			
	Home	**School**	**Positive Parenting**	**Discussion**
Tardiness: *6PIES make sure that your child gets to school on time?*	0.913			
Encouragement: *9PIES encourage your child to study and do well in school?*	0.892			
Attendance: *7PIES make sure that your child attends school regularly?*	0.841			
Homework: *2PIHB check on whether your child has done her/his homework?*	0.750			
Time outside on school nights: *3PIHB limit the amount of time your child goes out with friends on school nights?*	0.508			
Home upon child's return: *4PIHB at home at the time your child gets home from school in the afternoon?*	0.384			
Contact with school: *14PISC contacted the school about your child's academic program for this year?*		0.880		
Contact with school: *13PISC contacted the school about your child's academic performance?*		0.836		
Contact with school: *15PISC contacted the school about your child's path selection in senior secondary?*		0.666		

Items	Factor			
	Home	**School**	**Positive Parenting**	**Discussion**
Negative interactions (reversed): *5PIHB_Reverse slap, spank, scold or physically restrain your child?*			0.654	
Time together: *1PIHB go with a child on walks and outings?*			0.512	
Food to eat: *8PIES make sure that your child has food to eat in school (if she/he spends most of the day in school)?*	*0.342*		0.394	
Discussion academic: *10PIHB talked to your child about planning her/his senior secondary program?*				0.722
Discussion/interest: *12PIIN discussed with your child activities or events of particular interest to your child?*				0.668
Discussion academic: *11PIHB discussed with your child path selection in senior secondary?*	*0.385*			0.466

Notes. Extraction Method: Principal Axis Factoring. Rotation Method: Oblimin with Kaiser Normalization. Rotation converged in 15 iterations. Loadings less than .30 were suppressed. Loadings excluded from the factor are in italic.

Appendix 23. Study 2: Factor Analysis for Grit Involvement Scale

Items	Factor	
	Commitment[56]	**Hard worker**[57]
Goal setting (reversed): *5GR_Reverse I often set a goal but later choose to pursue (follow) a different one.*	.734	
Setbacks: *2GR Setbacks (delays and obstacles) don't discourage me. I bounce back from disappointments faster than most people.*	.614	
Focus long-term (reversed): *6GR_Reverse I have difficulty maintaining (keeping) my focus on projects that take more than a few months to complete.*	.583	
Interest short time (reversed): *3GR_Reverse I have been obsessed with a certain idea or project for a short time but later lost interest.*	.458	
New ideas (reversed): *1GR_Reverse New ideas and projects sometimes distract me from previous ones.*	.435	-*.387*
Diligence: *8GR I am diligent (hard working and careful).*		.803
Hard work: *4GR I am a hard worker.*		.744
Completion of a project: *7GR I finish whatever I begin.*		.684

Notes. Extraction Method: Principal Axis Factoring. Rotation Method: Oblimin with Kaiser Normalization. Rotation converged in 5 iterations. Loadings less than .30 were suppressed. Loadings excluded from the factor are in italic.

[56] Also, could be called "consistency of interest" (Kwon, 2017).
[57] Also, could be called "perseverance of effort" (Kwon, 2017).

Appendix 24. Summary of Hypotheses Tested in Study 2

Hypothesis	Statement	Study 1	Pre-test	Study 2	Study 3
H7	**Marketing communication** about parental involvement increases parental involvement.				
H_{7a}	Marketing communication about home parental involvement increases home parental involvement.		√	√	
H_{7b}	Marketing communication about discussion increases discussion as a form of parental involvement.		√	NC	
H_{7c}	Marketing communication about academic socialisation increases academic socialisation.			NC	
H_{7d}	Marketing communication about school parental involvement increases school parental involvement.		X	X	
H_{7e}	Marketing communication about parental interest increases parental interest.			NC	
H8	**Parental involvement** increases a child's academic achievement.				
H_{8a}	An increase in home parental involvement increases a child's academic achievement.			√	
H_{8b}	An increase in discussion as a form of parental involvement increases a child's academic achievement.			NC	
H_{8c}	An increase in academic socialisation increases a child's academic achievement.			NC	
H_{8d}	An increase in school parental involvement increases a child's academic achievement.			NC	
H_{8e}	An increase in parental interest increases a child's academic achievement.			NC	
H9	Parental involvement increases a child's **self-esteem**.			NC	

Hypothesis	Statement	Study 1	Pre-test	Study 2	Study 3
H10	Self-esteem increases a child's academic achievement.			NC	
H11	Self-esteem mediates the relationship between parental involvement and academic achievement.			NC	
H12	Parental involvement increases a child's internal **locus of control**.			√	
H13	Internal locus of control increases a child's academic achievement.			NC	
H14	Internal locus of control mediates the relationship between parental involvement and academic achievement.			NC	
H15	**Grit** increases a child's academic achievement.			NC	
H16	Parental involvement increases a child's grit.			√	
H17	Grit mediates the relationship between parental involvement and academic achievement.			NC	
H18	**Self-control** increases a child's academic achievement.			NC	
H19	Parental involvement increases a child's self-control.			NC	
H20	Self-control mediates the relationship between parental involvement and academic achievement.			NC	
H21	Marketing communication increases soft skills through parental involvement.				
H_{21a}	Parental involvement mediates the effect of marketing communication on self-esteem.			NC	
H_{21b}	Parental involvement mediates the effect of marketing communication on locus of control.			√	
H_{21c}	Parental involvement mediates the effect of marketing communication on grit.			X	
H_{21d}	Parental involvement mediates the effect of marketing communication on self-control.			NC	

Notes. In regard to abbreviations: "√" supported, "X" not supported, "NC" not considered as the hypothesis could not be tested (e.g., inadequate scale reliability, sampling inadequacy).

Appendix 25. Study 3 U.S.A.: Explanatory Statements and a Consent Forms

EXPLANATORY STATEMENT
(Parents with school-aged children/U.S.A., Utah)

Project ID: 12964
Title: Poverty and Education
Chief Investigator's name Dr. Dominic Thomas
Department of Marketing
Phone: +61 3 990 32059
email: dominic.thomas@monash.edu

Co-Investigator's name Dr. Asadul Islam
Department of Economics
Phone: +61 3 9903 2783
email: asadul.islam@monash.edu
Student's name Yuliya Lynch
Phone : +19177337354
email: yuliya.lynch@monash.edu

You are invited to take part in this study. Please read this Explanatory Statement in full before deciding whether or not to participate in this research. If you would like further information regarding any aspect of this project, you are encouraged to contact the researchers via the phone numbers or email addresses listed above.

What does the research involve?
The current project will review parental involvement. The study aims to understand if parental involvement helps children to do better in school. The study will also estimate what abilities parental involvement affects and if these abilities play a role in academic achievement in childhood.

Both, parents and children, are asked to answer survey questions. Since the study would like to investigate the effect of parental involvement on academic achievement, the parents of students might be asked to be involved with a child (e.g. spend time with a child, discuss future academic plans). Informational brochures will be provided to the parents with details about parental involvement.

Slight discomfort to the participants is anticipated. Free counselling services available via phone: Crisis Call Center (775) 784 8090 or Depression Hotline (630) 482 9696.

Why were you chosen for this research?
We are looking to recruit parents with school-aged children (ages 10-17).

Source of funding:
PhD student research support fund (Monash University)

Consenting to participate in the project and withdrawing from the research
(i) The Permission Letter/Consent Form/Assent form (whichever is applicable) must be signed and returned to the researcher (physical or electronic) (ii) the participant can withdraw at any stage before data is aggregated, which is approximately six weeks after the beginning of the study.
Possible benefits and risks to participants
The community might benefit in a way that the project will raise the awareness of the importance of parental involvement and its effects on academic achievement among participants, their parents and the school staff.
No discomfort to the participants is anticipated.

Confidentiality
After the data collection, each participant will be assigned an anonymised name. The data will be published on an aggregated level. Only researchers and student researcher will have access to data.

Storage of data
Data is to be stored in a password-protected file (Excel, Word) and shared with the student researcher and co-researchers.

Results

The results will be available in the Thesis and any journal publications.

Complaints

Should you have any concerns or complaints about the conduct of the project, you are welcome to contact the Executive Officer, Monash University Human Research Ethics Committee (MUHREC):

Executive Officer
Monash University Human Research Ethics Committee (MUHREC)
Room 111, Chancellery Building D,
26 Sports Walk, Clayton Campus
Research Office
Monash University VIC 3800

Tel: +61 3 9905 2052 Email: muhrec@monash.edu Fax: +61 3 9905 3831

CONSENT FORM

Project ID: 12964
Title: Poverty and Education
Chief Investigator's name Dr. Dominic Thomas
Department of Marketing
Phone: +61 3 990 32059
email: dominic.thomas@monash.edu

Co-Investigator's name Dr. Asadul Islam
Department of Economics
Phone: +61 3 9903 2783
email: asadul.islam@monash.edu
Student's name Yuliya Lynch
Phone: +19177337354
email: yuliya.lynch@monash.edu

My child and I have been asked to take part in the Monash University research project specified above. I have read and understood the Explanatory Statement, and I hereby consent for myself and my child to participate in this project.

Data is to be stored in a password protected file and shared with the student researcher and co-researchers. Physical copies will be shredded after the information is computerised.

Slight discomfort is anticipated. Free counselling services available via phone: Crisis Call Center (775) 784 8090 or Depression Hotline (630) 482 9696.

I consent to answer survey questions

- ○ Yes
- ○ No

I consent to utilise the materials provided to me (if any)

- ○ Yes
- ○ No

I consent for the school or the district to provide my child's GPA by subject and/or an overall score for three school terms

- ○ Yes
- ○ No

I agree for my child to answer survey questions

- ○ Yes
- ○ No

Appendix 26. Study 3 U.S.A.: Communication and Sample Questions for $PI_{focused}$

Parental Involvement

Why Parental Involvement is important?

Parental Involvement ⇒ Higher educational achievement ⇒

Better job: education beyond the high school level may increase income by 64% (from $712 to $1,173 in weekly pay) (U.S. Bureau of Labor Statistics, 2018)

Parental involvement starts with you, it starts now

How can I get involved?

At home: spend time with a child, talk to him/her, have positive interactions, do things together (e.g. cooking)

Aspire for your child: have high hopes about the child's success in school and what type of career she/he will have after completing her/his education, communicate your aspirations openly

Take an interest in your child's education and her/his hobbies

Help your child to strive in school in 5 steps

1. Communicate to your child that with effort, she/he can improve her/his **abilities** and **intelligence**.

2. Encourage your child to find what **interests** her/him and help your child to pursue it (for example, a subject in school or a particular sport).

3. Help your child to set up **educational goals** for the next two school terms and work together on a plan.

4. Talk to your child about a time you wanted to quit something, but you did not (for example, writing a difficult report at work).

5. Praise your child's efforts!

Sample questions and comments to your child which may assist you in getting the conversation started

1. *Spend time together with your child:*

   play a game, cuddle, have fun, go shopping together (even virtual shopping 😉)

2. *Talk to your child about her/his school day, academic goals, academic successes/challenges*

   How was your day today?

   What is the most difficult subject and why?

   What is your favorite subject?

3. *Talk to your child about her/his hobbies and interests*

   What interests you the most?

   What books do you like to read and why?

4. *Encourage your child to pursue what he likes in school*

   I noticed that you like math, tell me about it.

   I think you will like this math game; I used to play it when I was a kid.

   I know you can do harder math tasks than this, let me show you how.

5. *Provide examples about how pursuing your goal/interest could be hard*

   I remember when I was asked at work to prepare a presentation on a short notice. I worked really hard for two days, but my computer broke down and my presentation was not saved. I was devastated, but….

6. *Communicate your aspiration and discuss plans for your child's future with her/him*

   Who would you like to be when you grow up? What is needed to achieve it?

   How can I help you to become…

   What can we do this school term to help you to move a bit closer to your goal?

Appendix 27. Study 3 U.S.A.: Communication and Sample Questions for $PI_{general}$

Parental Involvement

Why Parental Involvement is important?

Parental Involvement ⇒ Higher educational achievement ⇒

Better job: education beyond the high school level may increase income by 64% (from $712 to $1,173 in weekly pay) (U.S. Bureau of Labor Statistics, 2018)

Parental involvement starts with you, it starts now

How can I get involved?

At home: spend time with a child, talk to him/her, have positive interactions, do things together (e.g. cooking)

Aspire for your child: have high hopes about the child's success in school and what type of career she/he will have after completing her/his education, communicate your aspirations openly

Take an interest in your child's education and her/his hobbies

Here is how the educational system in Finland keeps children happy in 5 steps:

1. **One-on-one** help for struggling students.

2. There are **no mandated standardized tests**, no comparison between students and school ranking. Hence, students do not feel stressed or pressured.

3. Play is a critical part of any day in a classroom. Students take **active outdoor breaks** between classes.

4. The homework is minimal, and kids spend more time playing than studying.

5. Compulsory studies begin only at age 7 when children are ready to learn.

Sample questions and comments to your child which may assist you in getting the conversation started

7. *Spend time together with your child:*

   play a game, cuddle, have fun, go shopping together (even virtual shopping😉)

8. *Talk to your child about her/his school day, academic goals, academic successes/challenges*

   How was your day today?

   What is the most difficult subject and why?

   What is your favorite subject?

9. *Talk to your child about her/his hobbies and interests*

   What interests you the most?

What books do you like to read and why?

10. *Encourage your child to pursue what he likes in school*

    I noticed that you like math, tell me about it.

    I think you will like this math game; I used to play it when I was a kid.

    I know you can do harder math tasks than this, let me show you how.

11. *Provide examples about how pursuing your goal/interest could be hard*

    I remember when I was asked at work to prepare a presentation on a short notice. I worked really hard for two days, but my computer broke down and my presentation was not saved. I was devastated, but….

12. *Communicate your aspiration and discuss plans for your child's future with her/him*

    Who would you like to be when you grow up? What is needed to achieve it?

    How can I help you to become…

    What can we do this school term to help you to move a bit closer to your goal?

Appendix 28. Study 3 U.S.A.: Factor Analysis Parental Involvement

Items	Factor		
	Discussion and Grit	**Home**	**Controlling practices**
Discussion academic: *Q13_How likely will you talk to your child about planning her/his future studies?*	0.799		
Educational goals: *Q11_How likely will you help your child to set up educational goals and work together on a plan on how to achieve them?*	0.709		
Effort improves abilities: *Q9_How likely will you communicate to your child that with effort, she/he can improve her/his abilities and intelligence?*	0.69		
Encourage interest: *Q10_How likely will you encourage your child to find what interests her/him and help your child to pursue it?*	0.681		
Discussion/interest: *Q19_How likely will you discuss with your child activities or events of particular interest to your child?*	0.601		
Praise efforts: *Q12_How likely will you praise your child's efforts?*	*0.388*		
Attendance: *Q6_How likely will you make sure that your child attends school regularly?*		0.813	
Encouragement: *Q7_How likely will you encourage your child to study and do well in school?*		0.793	

Items	Factor		
	Discussion and Grit	**Home**	**Controlling practices**
Discussion academic: *Q14_How likely will you discuss with your child selection of courses or programs at school?*	*0.359*	0.69	
Tardiness: *Q5_How likely will you make sure that your child gets to school on time?*		0.514	
Encouragement to pursue: *Q20_How likely will you talk to your child about a time you wanted to quit something, but you did not?*			
Limit amount of TV: *Q8_How likely will you limit the amount of time your child can spend watching TV/tablet?*			0.706
Time outside on school nights: *Q3_How likely will you limit the amount of time your child goes out with friends on school nights?*		*0.36*	0.694
Homework: *Q2_How likely will you check on whether your child has done her/his homework?*		*0.464*	0.667
Time together: *Q1_How likely will you go with a child on walks and outings?*	*0.355*		0.416
Negative interactions (reversed): *Q4_How likely will you slap, spank, scold or physically restrain your child?*			*0.302*

Notes. Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. Rotation converged in 6 iterations. Loadings less than .30 were suppressed. Loadings excluded from the factor are in italic.

Appendix 29. Study 3 U.S.A.: Factor Analysis Self-esteem

Items	Factor		
	Pride	**Guardians' influence**	**Shame**
Proud parents: *Q9SE_My parents/guardians are proud of my achievements at school.*	0.9		
I proud my achievements: *Q3SE_I am proud of my past achievements at school.*	0.855		
I proud of my parents: *Q2SE_I feel proud of the job the main breadwinner in my family does.*	0.659	0.459	
Proud parents: *Q7SE_My parents/guardians feel proud of the job they do.*	0.594	0.549	
Shy (reversed): *Q4SE_rev_I am not comfortable with/feel shy around members of the opposite sex.*			
Proud of where I live: *Q1SE_I feel proud to show my friends or other visitors where I live.*		0.868	
Proud parents: *Q5SE_My parents/guardians feel proud to show friends or other visitors where we live.*		0.778	
Parents ashamed (reversed): *Q8SE_rev_My parents/guardians are embarrassed by/ashamed of the work they have to do*			0.887
Parents ashamed (reversed): *Q6SE_rev_My parents/guardians are ashamed of their clothes.*		*0.341*	0.772

Notes. Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. Rotation converged in 5 iterations. Loadings less than .30 were suppressed. Loadings excluded from the factor are in italic.

Appendix 30. Study 3 U.S.A.: Factor Analysis Locus of Control

Items	Factor		
	Hard work	**Guardians' aspirations**	**Decisioning**
Reward from working hard: *Q4LC_Working hard will be rewarded by a better job in the future.*	0.802		
Effort: *Q1LC_If I try hard, I can improve my situation in life.*	0.801		
Future plans: *Q3LC_I like to make plans for my future work or studies.*	0.728		*-0.368*
Parents' beliefs regarding efforts: *Q5LC_My parents/guardians believe that if one tries hard, one can improve one's situation in life.*	0.643	0.472	
Parents' beliefs regarding hard work: *Q7LC_My parents/guardians believe that working hard would be rewarded by a better job in the future.*		0.828	
Parents make future plans: *Q6LC_My parents/guardians like to make plans for the future.*		0.787	
Others make decisions for me (reversed): *Q2LC_rev_It feels as if other people in my family make all the decisions about how I spend my time.*			0.922

Notes. Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. Rotation converged in 5 iterations. Loadings less than .30 were suppressed. Loadings excluded from the factor are in italic.

Appendix 31. Study 3 U.S.A.: Factor Analysis Grit

Items	Factor	
	Hard work[58]	**Commitment**[59]
Diligence: *Q8GR_I am diligent (hard working and careful).*	.918	
Hard work: *Q4GR_I am a hard worker.*	.812	
Setbacks: *Q2GR_Setbacks (delays and obstacles) don't discourage me. I bounce back from disappointments faster than most people.*	.601	
Completion of a project: *Q7GR_I finish whatever I begin.*	.603	.548
Interest short time (reversed): *Q3GR_rev_I have been obsessed with a certain idea or project for a short time but later lost interest.*		.823
Focus long-term (reversed): *Q6GR_rev_I have difficulty maintaining (keeping) my focus on projects that take more than a few months to complete.*	.398	.747
Goal setting (reversed): *Q5GR_rev_I often set a goal but later choose to pursue (follow) a different one.*		.676
New ideas (reversed): *Q1GR_rev_New ideas and projects sometimes distract me from previous ones.*		.449

Notes. Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. Rotation converged in 3 iterations. Loadings less than .30 were suppressed.

[58] Also, could be called "perseverance of effort" (Kwon, 2017).
[59] Also, could be called "consistency of interest" (Kwon, 2017).

Appendix 32. The Summary of Hypotheses Tested in Study 3

Hypothesis	Statement	Study 1	Pre-test	Study 2	Study 3
H7	**Marketing communication** about parental involvement increases parental involvement.				
H_{7a}	Marketing communication about home parental involvement increases home parental involvement.		√	√	√
H_{7b}	Marketing communication about discussion increases discussion as a form of parental involvement.		√	NC	√
H_{7c}	Marketing communication about academic socialisation increases academic socialisation.			NC	√
H_{7e}	Marketing communication about parental interest increases parental interest.			NC	X
H8	**Parental involvement** increases a child's academic achievement.				
H_{8a}	An increase in home parental involvement increases a child's academic achievement.			√	√
H_{8b}	An increase in discussion as a form of parental involvement increases a child's academic achievement.			NC	X
H_{8c}	An increase in academic socialisation increases a child's academic achievement.			NC	X
H_{8e}	An increase in parental interest increases a child's academic achievement.			NC	X
H_{9a}	Focused parental involvement increases a child's self-esteem greater than general parental involvement.				√
H11	Self-esteem mediates the relationship between parental involvement and academic achievement.			NC	X

Hypothesis	Statement	Study 1	Pre-test	Study 2	Study 3
H_{12a}	Focused parental involvement increases a child's locus of control greater than general parental involvement.				√
H14	Internal locus of control mediates the relationship between parental involvement and academic achievement.			NC	X
H_{16a}	Focused parental involvement increases a child's grit greater than general parental involvement.				X
H17	Grit mediates the relationship between parental involvement and academic achievement.			NC	X
H21	Marketing communication increases soft skills through parental involvement.				
H_{21a}	Parental involvement mediates the effect of marketing communication on self-esteem.			NC	X
H_{21b}	Parental involvement mediates the effect of marketing communication on locus of control.			√	X
H_{21c}	Parental involvement mediates the effect of marketing communication on grit.			X	X

Notes. In regard to abbreviations: "√" supported, "X" not supported, "NC" not considered as the hypothesis could not be tested (e.g., inadequate scale reliability, sampling inadequacy).