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GENDER, SOCIAL SUPPORT, AND STRAIN: WHAT IS HELPFUL TO WHOM?

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Abstract

This study had two major goals: (a) to test in a sample of managers for the relationship between strain and perceived and received social support; and (b) to assess the influence of manager sex on the effectiveness of perceived and received social support. Data was gathered from 108 female and 342 male managers. Perceived support was associated with reduced strain for both women and men. However, the effectiveness of received support was related to the gender congruence of the type of support received. Receiving emotional support was associated with increased strain for men, and those who received the support for an important stressor reported most strain. However, receiving emotional support was not associated with strain for women, and receiving information and tangible assistance was not associated with strain for managers of either sex. Additionally, an unexpected finding was that, for men, received emotional support and received tangible assistance buffered the effects of perceived support.

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Organizational stress research has consistently demonstrated the deleterious effects of stressors upon various indicators of strain (Cox, 1993; Scheck *et al.*, 1997; Terry *et al.*, 1993). In particular, the negative effect of stress on managers has been well documented (e.g., Burke, 1988; van der Pompe & de Heus, 1993). Stress may affect managers, and, through the diminution of their performance, may decrease the effectiveness and efficiency of their employing organizations (Greenglass, 1993). Strategies to reduce management stress are therefore worthy of research attention.

One strategy that has been cited is that of increasing social support. There is a general view that it is better for individuals to exist in a supportive environment (Koeske & Koeske, 1991), and that social support reduces work stress and strain. Thus social support may benefit managers irrespective of exposure to stressors (a main effect), or it may be related to health and well-being mainly for managers exposed to stressors, for whom it acts as an effect moderator (the buffering model; see Alloway & Bebbington, 1986, and House *et al.*, 1988, for reviews). However, it has also been suggested that there may be a positive relationship between support and distress for those exposed to stressors (the negative stress buffering model; see Coyne *et al.*, 1990).

These differences in the possible relationship between stress, social support and strain may be partly due to two factors. The first is differences in the conceptualization and measurement of social support (Cohen, 1992; O'Reilly, 1988; Sarason & Sarason, 1994). In particular, a distinction needs to be made between perceptions that social support will be available when needed (*perceived support*), and receiving social support when faced with a stressor (*received social support*) (Helgeson, 1993). Not only are the two forms of social support conceptually distinct, but there is also evidence that they have different relationships with stress and strain (Sarason & Sarason, 1994; Thoits, 1992). The first aim of this research is therefore to test, for managers, the relationship between strain and perceived and received social support. Secondly, sex differences may affect the relationship between social support, stress, and strain (Schwarzer & Leppin, 1989). The second aim of this research is to assess the influence of manager sex on the effectiveness of perceived and received social support.

Theoretically, the essence of perceived support is the belief that one is accepted and loved, and that emotional support is available (for a discussion of this issue see Pierce *et al.*, 1997; or Sarason, Shearin *et al.*, 1987). Thus perceived support can be thought of as the cognitive component of social support. In contrast, received social support can be viewed as the behavioral component of social support, as it requires activation in particular interpersonal transactions (Dunkel-Schetter & Bennett, 1990).

Although it is now largely acknowledged that perceiving that social support is available is beneficial, the evidence is divided upon whether these benefits apply to everyone (main effect), or mostly to those persons exposed to stressors (a stress-buffering effect). Some reviewers claim that the major benefit of perceived support is that it directly increases well-being and reduces strain (e.g., Procidano & Smith, 1997). Others claim there is more evidence that perceived support moderates the relationship between stress and strain (e.g., Kessler, 1992; Thoits, 1992).

Little research has been undertaken on the relationship between perceived social support and strain using a managerial sample. Nonetheless, a review of the effects of social support in the workplace by Kahn and Byosiere (1992) concluded that the majority of studies show evidence of main effects for perceived support. However, many of these studies used only a male sample, or did not analyze sex differences (Geller & Hobfoll, 1994). As a meta-analysis of studies examining the relationship between social support and health (Schwarzer & Leppin, 1989) showed that the relationship between perceived social support and reduced strain is, on average, stronger for women than for men, it is possible that this may also apply to managers. Therefore it is predicted that:

Hypothesis 1a: Irrespective of the level of stress, *perceived support* will be associated with lower strain for both male and female managers (main effect).
Hypothesis 1b: The relationship between *perceived support* and reduced strain will be stronger for female managers than for male managers.

In addition, relatively little research has been undertaken on received support with managerial or organizational samples. Theoretically, three types of support may be received (Greenglass, 1993; Jacobson, 1986). Emotional support contains love, acceptance, and respect. Information or cognitive support contains information, knowledge, and advice. Tangible assistance or materials support involves goods or services to assist with practical problems. In general, reviewers from other areas suggest that receiving support is not helpful. For example, Kessler (1992) argues "support receipt is either associated with poor adjustment, or, at best, leaves the recipient no better off than if no support had been received" (p. 260). However, the common assessment of received support as a unidimensional construct in most research may have obscured the different possible outcomes of receiving each type of support (Cutrona & Russell, 1990).

In addition, there has been little examination of sex differences in the relationship between stress, received social support and strain. This is important, for there is evidence that men seek (Lu & Argyle, 1992) and receive (Lu, 1995) less support than women. This difference in the amount of support sought and received may be associated with sex differences in the effectiveness of received support.

In studies that have separated the types of support received, receiving *emotional* support appears to be associated with strain for those in high stress conditions (Barrera, 1986; Coyne *et al.*, 1990; Dunkel-Schetter & Bennett, 1990). This is a negative stress buffering effect. Additionally, there is evidence that men seek (Ashton & Fuehrer, 1993) and receive (Olson & Shultz, 1994) less emotional support than women. An explanation for this is that seeking and receiving emotional support is inconsistent with the male gender role (Ashton & Fuehrer, 1993). Emotional support includes communication that a person is loved and cared for. This intimate behavior is opposite to the male gender role, which supports instrumental behaviors. Furthermore, such gender-role inappropriate behaviors may be detrimental (Nadler *et al.*, 1984). Thus it is possible that the negative stress-buffering effect of received emotional support found in many studies may be a reflection of the gender balance of the sample, and the cost felt by males. Thus it is predicted that:

Hypothesis 2a: For male managers reporting an important stressor, *receiving emotional support* for that stressor will be associated with higher strain (a negative stress-buffering effect).
Hypothesis 2b: For female managers, *receiving emotional support* for a stressor will not be associated with strain.

Similarly, Pretorius (1996) reported the receipt of high levels of tangible assistance in high stress men was associated with depression. This was not the case for women. He argued that the increase in depression among men might be due to the gender-appropriateness of receiving tangible assistance. Even though tangible assistance does not involve expressions of love and concern, Pretorius suggested that men who receive such assistance may feel that their masculine competence has been reduced. Thus they may feel more dependent, and this may lead to depression. It is therefore predicted that:

Hypothesis 3a: For male managers reporting an important stressor, *receiving tangible assistance* for that stressor will be associated with higher strain (a negative stress-buffering effect).
Hypothesis 3b: For female managers, *receiving tangible assistance* for a stressor will not be associated with strain.

In contrast, seeking and receiving information is not incongruent with either the male or female sex role. It is also an appropriate component of the managerial role. Furthermore, there is no evidence that receiving information is detrimental. It is therefore predicted:

Hypothesis 4a: For male managers, irrespective of the level of stress, *receiving information support* will not be associated with lower strain (no main or stress-buffering effect).
Hypothesis 4b: For female managers, irrespective of the level of stress, *receiving information support* will not be associated with lower strain (no main or stress-buffering effect).

Finally, research and theory have ignored potential relationships between the different types of social support (Scheck *et al.*, 1997). Of particular interest are the relation between perceptions of support availability and the receipt of social support.

Research Question 1: Does the receipt of information, tangible assistance, or emotional support buffer the effect of perceived support upon strain?

METHOD

Sample

The data for this study comes from a larger research project on stress among managers. Forty-one organizations chosen to represent the major organisational groupings in Australia participated in the project. Between 20 and 50 questionnaires were sent to the human resource department of each organization. Staff in these departments then randomly distributed the questionnaires to managers in each organization. Attached to each questionnaire was a letter explaining that the purpose of the research was to study stress among managers. A stamped addressed envelope was included for the direct return of the completed questionnaire to the researcher. Participation was voluntary and anonymous. One thousand and twenty one questionnaires were distributed, and 572 were returned, a response rate of 57%. This is slightly above the average response rate reported by Baruch (1999) for published studies in the managerial and behavioral sciences. Four hundred and fifty surveys reported a stressful event in the past month and had no missing responses to the stress and social support variables. This resulted in a final sample of 108 females and 342 males. Eleven percent of the sample were aged less than 30, 36% was between 30 and 39 years, 38% was between 40 and 49 years, and 15% were aged over 50. The female managers were younger than the males ($\chi^2 = 14.63$, df = 3, $p < .01$). Sixty three percent of the managers had completed a tertiary qualification, and there was no sex difference in education ($\chi^2 = 7.64$, df = 3, p = ns).

Measures

Stress. Respondents were asked to describe the most stressful event that had occurred during the past month. A work event was nominated by 306 respondents, a nonwork event by 132 respondents, and the presence of a stressful event was reported by a further 12 respondents, but no description was provided. There was no sex difference in the type of event reported ($\chi^2 = 3.11$, df = 2, p = ns). Following Dunkel-Schetter *et al.* (1987), respondents rated the importance of the stressor on a 4-point scale from 1 (event did not matter) to 4 (mattered a great deal). This rating was used as the measure of stress. The scale means and standard deviations for men and women separately are shown in Table 1.

Insert Table 1 about here

Perceived support. The support satisfaction scale of the six-item short form of the Social Support Questionnaire (SSQ6; Sarason, Sarason *et al.*, 1987) was used. This scale of the SSQ is an appropriate, and frequently used, measure of perceived support (Dunkel-Schetter & Bennett, 1990).

The SSQ6 has six items that require respondents to report their satisfaction with the support available in each of six areas from 1 (very dissatisfied) to 6 (very satisfied). Chronbach's alpha for this scale was 0.93. Following the normal scoring procedure, the mean of the 6 items was calculated to give the Satisfaction score. The scale means and standard deviations for men and women are shown in Table 1.

Received information, tangible assistance, and emotional support Received social support was measured using the social support scale of Dunkel-Schetter *et al.* (1987). Respondents were asked to think about the stressful situation described, and to nominate the three most helpful persons. For each supporter they were asked to report using a 5-point scale from 0 (not at all) to 4 (a lot) the extent to which that supporter provided

information or advice, tangible assistance or aid, and emotional support for the stressor. For each type of support (information, tangible assistance, and emotional support) the mean of the support received from the three sources was used to measure received support. Scale means and standard deviations are shown in Table 1.

Strain Respondents completed the 28-item version of the General Health Questionnaire (GHQ: Goldberg & Hillier, 1979). Strain was measured by the binary scoring method that shows the number of symptoms worsened (Goldberg & Williams, 1988). Chronbach alpha with this sample = .91.

Analyses

Separate regression analyses were conducted for males and females. The procedure for each followed that recommended by Cohen and Cohen (1983) when testing for main and interaction effects. To test for main effects, in each analysis the stress and two social support variables (perceived support with one type of received support) were entered together at the first step. To test for the stress-buffering effect of perceived support, in each set of analyses a stress by perceived support interaction term was formed and entered following the test for main effects. Similarly, to test for the stress-buffering effect of each type of received support, a stress by received support interaction term was formed, and the equations re-run, entering this interaction after the test for main effects. Each regression was then run a third time, with the perceived support by received support interaction added after the main effects. An additional regression was then performed for each stress, perceived support, and received support combination, with the main effects added at the first step, the three two-way interactions at the second step, and the three-way interaction term at the third step (see Cohen & Cohen, 1983, for a rationale).

RESULTS

The intercorrelations of the stress and social support variables are shown in Table 1. Results of the separate regression analyses for males and females are summarized in Table 2 and described below.

The relationship between stress, perceived support, and strain for male managers

The first set of regression analyses for the male managers tested Hypothesis 1a, which predicted that perceived support would be associated with lower strain, and hypothesis 2a, which predicted that received emotional support would be associated with strain for those in high stress conditions (a negative stress-buffering effect). It also examined if receipt of emotional support buffered the effect of perceived support upon strain (research question 1).

High stress, low perceived support, and high received emotional support were all associated with strain. Additionally, perceived support did not buffer stress. Hypothesis 1a was therefore supported for male managers.

In addition, received emotional support buffered the effects of stress. To study the direction of this relationship the regression lines of received emotional support as a moderator of the strain on stress regression were plotted, taking values of the stress and received emotional support variables one standard deviation above, and below, the mean. The graphs were constructed using the co-efficients obtained from the complete predictive model (see Cohen & Cohen, 1983, for a rationale). Examination of the regression lines of the interaction (Figure 1) showed that male managers receiving high levels of emotional support in a highly stressful situation felt most strain. This finding supported hypothesis 2a.

Insert Figure 1 about here

Moreover, received emotional support buffered the effect of perceived support on strain. Examination of the regression lines of this interaction (Figure 2) showed that this occurred as a reverse buffering effect. Strain was greatest for male managers who believed that they had little support available to them. Of those reporting low perceived support, those who received high levels of emotional support for the nominated stressor were most likely to report high strain. Finally, the three-way interaction between stress, perceived support, and received emotional support was not significant.

Insert Figure 2 about here

The second set of regression analyses tested hypothesis 3a, which predicted that received tangible assistance would be associated with strain for male managers in high stress conditions (a negative stress-buffering effect). It also examined if receipt of tangible assistance buffered the effect of perceived support upon strain (research question 1).

Table 2 shows there were no main or stress-buffering effects for received tangible assistance upon strain. Thus Hypothesis 3a was not supported. However, received tangible assistance buffered the effect of perceived support. The graphical representation in Figure 3 shows that, for male managers, the receipt of high levels of tangible assistance lessens the negative effects of low perceived support. Additionally, there was no significant three-way perceived support by received tangible assistance by stress interaction.

Insert Figure 3 about here

The third set of analyses for male managers tested hypothesis 4a, which predicted that received information support would not be associated with strain (no main or stress-buffering effect). It also examined the buffering effect of received information on perceived support (research question 1). The absence of a significant main or stress-buffering relationship between received information and strain supported Hypothesis 4a. Additionally, received information did not buffer the effect of perceived support. The three-way perceived support by received information by stress interaction was also not significant.

Insert Figure 3 about here

The relationship between stress, perceived support, and strain for female managers

The first set of regression analyses for the female managers tested hypothesis 1a, which predicted that perceived support would be associated with lower strain, hypothesis 1b, that the relationship between perceived support and reduced strain would be stronger for female managers than male managers, and hypothesis 2b, that receiving emotional support would not be associated with strain. It also examined if received emotional support buffered the effect of perceived support upon strain (research question 1).

The regression analysis showed that perceived support was associated with reduced strain. This supported hypothesis 1a. In addition, a comparison of the regression weights for perceived support for males ($\underline{B}$ = -.967) and females ($\underline{B}$ = -1.732) showed that the relationship between perceived support and strain was stronger for female managers. This finding supported hypothesis 1b. In addition, there was no main effect for received emotional support, and received emotional support did not buffer the effects of stress. Hypothesis 2b was therefore also supported. Moreover, the third interaction, which was designed to test research question 1, showed that, for women, received emotional support did not buffer the effects of

perceived support. The three-way interaction between stress, perceived support, and received emotional support was also not significant.

The second set of regression analyses for women tested hypothesis 3b, which predicted that, for female managers, received tangible assistance would not be associated with strain through either a main or a stress-buffering effect. It also examined if receipt of tangible assistance buffered the effect of perceived support upon strain (research question 1). The results supported hypothesis 3b. Received tangible assistance did not have a significant main effect upon strain. Additionally, received tangible assistance did not buffer the effects of stress. Moreover, with respect to research question 1, tangible assistance did not buffer the effect of perceived support upon strain. There was also no significant three-way perceived support by received tangible assistance by stress interaction.

The third set of analyses for female managers tested hypothesis 4b, which predicted that received information support would not be associated with strain (no main or stress-buffering effect). It also examined the buffering effect of received information on perceived support (research question 1). The absence of a significant main or stress-buffering relationship between received information and strain supported Hypothesis 4b. Additionally, received information did not buffer the effect of perceived support. The three-way perceived support by received informational support by stress interaction was also not significant.

DISCUSSION

These findings suggest that it is better for managers to perceive, rather than receive, social support. The results also provide evidence of sex differences in the relationship between stress, social support, and strain.

As predicted, for both male and female managers the perception that support is available is associated with lower strain. As expected, this effect is stronger for female managers. Additionally, there is no evidence to support the stress-buffering effect of perceived support for this group. Perceptions that support is available are beneficial to managers independent of exposure to stressors.

As this study is cross-sectional, the data do not allow the inference of causation. However, other research suggests several explanations for the positive role of perceived support.

The first explanation is that perceived support indicates a person's access to social resources that can be called upon to help cope with any stressors that occur (Holahan *et al.*, 1997). It is thus a measure of external resources. As life is full of major and minor stressors and hassles, these resources will provide on-going assistance. This will have a continuing positive effect upon well-being, and so will reduce strain.

Alternatively, perceived support may be a manifestation of a set of positive interpersonal schemas that include a "sense of acceptance" – a belief that others accept one totally. Such a schema is similar to a personality characteristic, and is defined by good interpersonal skills, high self-efficacy, low anxiety, and positive expectations of interactions with others (Sarason *et al.*, 1990). It is thus a measure of internal resources. This sense of acceptance may be associated with competence in dealing with stressful situations, and therefore may result in lower strain.

A third explanation is that perceived support and strain are negatively correlated due to the conceptual overlap between well-being and the sense of acceptance (i.e., high self-efficacy, low anxiety, and positive expectations) that underlies high perceived support. Alternatively, low strain, or a sense of well-being, may lead to a perception that support will be available should it be needed. Research is needed to test these alternatives.

The findings also show that the relationship between received social support, stress, and strain is dependent both upon manager sex, and also upon the type of social support received. Firstly, consistent with other research (see for reviews Cutrona *et al.*, 1990; Dunkel-Schetter & Bennett, 1990; or Sarason *et. al.*, 1994), these results show that receiving social support is not generally associated with lower strain.

In addition, male and female managers are different in their experiences of stress and received support. Stressor importance is associated with strain for men, but not for women. Additionally, there is no evidence of main or stress-buffering effects for received support for women. In contrast, for men there is a negative stress-buffering effect for received emotional support. For men, receiving emotional support is associated with higher strain. This strain is highest for men who receive the emotional support for an important stressor. Although this effect adds less than two percent to the explained variance, it is, nevertheless, statistically significant.

There are two alternative pathways by which this negative stress buffering may occur. The first pathway is from stress to strain to support. Important stressors may result in increased unhappiness and strain, which then attracts or demands high levels of emotional support (Buunk *et al.*, 1989). This research found a direct relationship between stressor importance and strain only for men. If those men who feel most strain seek, and receive, the most emotional support, there will be a positive relationship between received emotional support and strain for those men reporting an important stressor.

Alternatively, the pathway may be from stressor to received support to strain. Important stressors may attract or demand high levels of emotional support. These findings again show that this relationship applies only to men (Table 1). Alternatively, receiving this support may lower the recipient's self-esteem (Sarason *et al., 1990*), or may create social costs that lead to distress (Kessler, 1992). The gender congruence hypothesis suggests that such costs will be felt most by men, as seeking and receiving emotional support is not congruent with the masculine gender role of autonomy and instrumentality (Barbee *et al.*, 1993). Thus, for men, the receipt of emotional support for important stressors may lead to high strain.

Although this research cannot test these alternative pathways, these findings are congruent with other research that has shown women are less biologically reactive to stress than men (Schumaker & Hill, 1991). They are also consistent with the suggestion that the masculine gender role makes it difficult for men to receive emotional support.

In addition, contrary to prediction, this research shows that receiving tangible assistance does not have a negative stress-buffering effect for males. Receiving tangible assistance is also not directly related to strain. It may be that receiving such support does not have the social costs associated with receiving emotional support. Similarly, the absence for male managers of a clear relationship between received information and strain suggests that there is also no social cost to receiving information.

The social costs of receiving social support therefore appear to be limited to the receipt by men of emotional support. This finding provides further support for the gender congruence hypothesis. The receipt by men of information and tangible assistance, and the receipt by women of information, tangible assistance, and emotional support, does not conflict with accepted gender roles. Thus they will not be associated with strain. However, receiving emotional support may place men outside the boundaries of acceptable male behaviors, and this may result in strain.

In addition, the absence of other relationships between receiving support and strain supports the theory that the effectiveness of received support depends upon the situation. The matching or specificity hypothesis (Cutrona & Russell, 1990; Dunkel-Schetter & Bennett, 1990) focuses upon this issue. Its underlying thesis is that "if the right kind of support from the right source of support is matched to the kind of stressors faced, then specific strains will be reduced" (Viswesvaran *et al.*, 1999, p. 318). The effectiveness of received support will thus depend upon a match between support needs and support provision. It would not be expected that any type of support would be effective across all situations.

The matching hypothesis also explains the contrast between the ineffectiveness of received emotional support in this study, particularly for the male managers, and its effectiveness in studies of traumatic events such as cancer (e.g., Dakof & Taylor, 1990). Emotional support may be useful when dealing with uncontrollable events such as a severe medical illness (Cutrona & Russell, 1990), but the support requirements for managers facing the normal stressors of life may be different. In such situations, strategies based upon problem-solving may be more effective.

Furthermore, tests of the relationship between perceived support and received support (as recommended by Scheck *et al.*, 1997) show two relationships that were not predicted by theory or past research. Although these interactions each added less than two percent to the explained variance, they were statistically significant. For men only, received emotional support and received tangible assistance buffer the effects of perceived support upon strain. Men who believe that little support is available to them report greater strain, particularly if they receive high levels of emotional support when faced with a stressor. Those men who perceive that support is available to them report lower levels of strain, and are, on average, less affected by the level of emotional support they receive. Additionally, men who believe that little support is available to them report lower strain if they receive tangible assistance when faced with a stressor.

This relationship between perceived support and received emotional support is congruent with Wethington and Kessler's (1986) argument that the best psychological outcomes are associated with perceiving that support is available, but not receiving it. The process by which this occurs is, however, unclear. Why does receiving emotional support not help those men who believe that they have no support available to them? Why don't they feel better – and perhaps modify their perception of the support available?

One possibility is that perceptions of support may influence or negate any potential positive effects of receiving emotional support (Pierce *et al.*, 1997). Thus Mankowski and Wyer (1997) report that people think about experiences in which they are receiving support with reference to their general perceptions of support. A man who perceives that little support is available may anticipate receiving negative or unhelpful responses. Offers of sympathy, empathy or concern may be seen as threats to his masculinity or autonomy. Receiving high levels of emotional support may result in the man feeling particularly vulnerable, and may lead to feelings of increased isolation and strain. Thus the first possible pathway is from low perceived support to strain, moderated by received support.

Alternatively, high levels of perceived support might serve to protect against the negative effects of receiving emotional support. If, as discussed above, perceived support is associated with a sense of acceptance that includes high self-efficacy, low anxiety, and positive expectations of interactions with others, then this will protect a manager against the potential damaging effects of receiving emotional support. Receiving high levels of emotional support may thus result in strain only for those men with low levels of perceived support, or a low sense of acceptance.

Another possibility is that the direction of the support – strain relationship is from low perceived support to strain to the receipt of emotional support. This, and other research, shows that low levels of perceived support are associated with higher levels of strain. If those men who are most affected seek, and receive, the most emotional support, it will result in a positive relationship between received emotional support and strain for those with low levels of perceived support.

There is thus a need for further research into the relationship between perceived support, received emotional support, and strain. In addition, for male managers received tangible assistance buffered the effect of perceived support upon strain. The receipt of tangible assistance reduced strain for men with low perceived support. The receipt of such assistance may reduce the impact of the stressor, particularly if the stress is related to overload or difficulty in undertaking a task. Therefore, the receipt of tangible assistance may be helpful in reducing the symptomatology otherwise associated with beliefs that support is unavailable. However, it is not clear why this relationship holds for men, but not for women. It may be due to the absence of a relationship between stress and strain for the female managers. If a single stressor does not have a relationship with strain for women, then it would not be expected that the support received for that stressor could influence strain. Further research is required on this issue, and to identify situations in which receiving tangible assistance and information may be helpful or detrimental.

Additionally, the independence of perceived and received social support in this study is consistent with other research (for reviews see Cutrona *et al.*, 1990; Dunkel-Schetter & Bennett, 1990; Sarason *et. al.*, 1994). This independence may be due to the reality that no single act of support receipt can shape perceptions of support availability (Cutrona *et al.*, 1990). Rather, repeated sequences of support interactions need to be taken into account before making such judgements. Alternatively, as discussed above, perceived

social support may represent a sense of acceptance and be closer to a personality characteristic, whereas received support represents interpretations of the actions of others (Sarason *et al.*, 1990). Either explanation suggests that we should not expect that perceptions of social support availability would be associated with assessments of the support received for a particular stressor. Nor should it be expected that the outcome of a single act of support receipt would be related to the outcomes of underlying perceptions of support availability.

Moreover, it is not clear why received information, tangible assistance, and emotional support were generally unsuccessful in lowering strain when respondents were asked to describe the support received from the "most helpful persons". The only exception is that receiving tangible assistance is effective in reducing strain for male managers who report low levels of perceived support. It is possible that the useful components of received support lie outside the assessed received information, tangible assistance, and emotional support. Alternatively, "more" may not always "better". Receiving high levels of support may lead to feeling "helped", but it may decrease self-efficacy and problem-focused coping. High levels of received support may be reported as "most helpful" because they made the respondent feel better in the short-term, but they may not have resulted in resolving the problem. Hence, strain may not have been reduced. Longitudinal research is needed to help resolve this issue.

In summary, these results show that male managers reporting important stressors also report higher levels of strain. They also demonstrate that managers of both sexes benefit from perceptions that support will be available to them should they need it. In the absence of this belief, practical assistance may assist a male manager to cope with a particular stressor. Providing emotional support to managers faced with stress, particularly to men who believe that little support is available, is unlikely to be helpful.

Practically, the focus should therefore be placed upon increasing managers' underlying perceptions of support, rather than only providing support to a manager when she or he is faced with a particular stressor. However, this is difficult to do until research has clarified the way in which perceptions of support availability develop.

Strengths of this study were the use of conceptually distinct measures of perceived support and received social support, and a measure of stress that allowed for inclusion of a major stressor, whatever the source. However, its cross-sectional nature limited the conclusions that can be made from the findings. Additionally, the study did not test the probability that each type of received support may be effective in alleviating particular categories of stressor.

This research provides further evidence that the role of social support in the stressor-strain relationship is dependent upon the conceptualisation and measurement of social support, and that the relationship is affected by sex. There is a need for continuing research into sex differences in the relationship between stress, received support, and strain, and into the process that results in a positive relationship between the receipt of emotional support and increased strain for men who believe that little support is available.

REFERENCES

ALLOWAY, R., & BEBBINGTON, P. (1986). The buffer theory of social support - A review of the literature. *Psychological Medicine, 17*, 91-108.

ASHTON, W.A., & FUEHRER, A. (1993). Effects of gender and gender-role identification of participamt and type of social support resource on support seeking. *Sex Roles, 28*, 461-476.

BARBEE, A.P., CUNNINGHAM, B.A., DERLEGA, V.J., GULLEY, M.R., YANKEELOV, P.A. & DRUEN, P.B. (1993). Effects of gender role expectations on the social support process. *Journal of Social Issues, 49*, 175-191.

BARRERA, M. (1986). Distinctions between social support concepts, measures, and models. *American Journal of Community Psychology, 14*, 413-445.

BARUCH, Y. (1999). Response rate in academic studies – A comparative analysis. *Human Relations, 52*, 421-438.

BUUNK, B.P., JANSSEN, P.P.M., & VAN YPEREN, N.W. (1989). Stress and affiliation reconsidered: Effects of social support in stressful and non-stressful work units. *Social Behavior, 4*, 155-171.

BURKE, R.J. (1988). Sources of managerial and professional stress in large organizations. In C.L. COOPER & R. PAYNE (Eds.), *Causes, Coping, and Consequences of Stress at Work* (pp. 77-114). Chichester: John Wiley & Sons.

COHEN, J., & COHEN, P. (1983). *Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences*. Hillsdale, New Jersey: Lawrence Erlbaum.

COHEN, S. (1992). Stress, social support and disorder. In: H.O.F. VEIEL & U. BAUMANN (Eds.), *The Meaning and Measurement of Social Support* (pp. 109-124). New York: Hemisphere.

COYNE, J.C., ELLARD, J.H., & SMITH, D.A.F. (1990). Social support, interdependence, and the dilemmas of coping. In: B.R. SARASON, I.G., SARASON, & G.R. PIERCE (Eds.), *Social Support: An Interactional View* (pp. 129-149). New York: John Wiley & Sons.

COX, T. (1993). *Stress Research and Stress Management: Putting Theory to Work. Report to Health and Safety Executive No. 61/1993.* London: HMSO.

CUTRONA, C.E., COHEN, B.B., & IGRAM, S. (1990). Contextual determinants of the perceived supportiveness of helping behaviors. *Journal of Social and Personal Relationships, 7*, 553-562.

CUTRONA, C.E., & RUSSELL, D.W. (1990). Type of social support and specific stress: Toward a theory of optimal matching. In: B.R. SARASON, I.G., SARASON, & G.R. PIERCE (Eds.), *Social Support: An Interactional View* (pp. 319-366). New York: John Wiley & Sons.

DAKOF, G., & TAYLOR, S.E. (1990). Victims' perceptions of support: What is helpful from whom? *Journal of Personality and Social Psychology, 58*, 80-89.

DUNKEL-SCHETTER, C., & BENNETT, T.L. (1990). Differentiating the cognitive and behavioral aspects of social support. In: B.R. SARASON, I.G., SARASON, & G.R. PIERCE (Eds.), *Social Support: An Interactional View* (pp. 267-296). New York: John Wiley & Sons.

DUNKEL-SCHETTER, C., FOLKMAN, S., & LAZARUS, R.S. (1987). Correlates of social support receipt. *Journal of Personality and Social Psychology, 53*, 71-80.

GELLER, P.A., & HOBFOLL, S. (1994). Gender differences in job stress, tedium and social support in the workplace. *Journal of Social and Personal Relationships, 11*, 555-572.

GOLDBERG, D.P., & HILLIER, V.F. (1979). A scaled version of the General Health Questionnaire. *Psychological Medicine, 9*, 139-145.

GOLDBERG, D.P., & WILLIAMS, P. (1988). *A User's Guide to the General Health Questionnaire*. Windsor: NFER Nelson.

GREENGLASS, E. (1993). The contribution of social support to coping strategies. *Applied Psychology: An International Review, 42*, 323-340.

HELGESON, V.S. (1993). Two important distinctions in social support: Kind of support and perceived versus received. *Journal of Applied Social Psychology, 23,* 825-845.

HOLAHAN, C.J., MOOS, R.H., & BONIN, L. (1997). Social support, coping, and psychological adjustment. In: G.R. PIERCE, B. LAKEY, I.G. SARASON, & B.R. SARASON (Eds.), *Sourcebook of Social Support and Personality* (pp. 169-186). New York: Plenum Press.

HOUSE, J.S., UMBERSON, D., & LANDIS, K.R. (1988). Structures and processes of social support. *Annual Review of Sociology, 14,* 293-318.

JACOBSON, D.E. (1986). Types and timing of social support. *Journal of Health and Social Behavior, 27,* 250-264.

KAHN, R.L., & BYOSIERE, P. (1992). Stress in organizations. In M.D. DUNNETTE & L.M. HOUGH (Eds.), *Handbook of Industrial and Organizational Psychology* (pp. 571-650). Palo Alto, CA: Consulting Psychologists Press.

KESSLER, R.C. (1992). Perceived support and adjustment to stress: Methodological considerations. In: H.O.F. VEIEL & U. BAUMANN (Eds.), *The Meaning and Measurement of Social Support* (pp. 259-271). New York: Hemisphere.

KOESKE, G.F. & KOESKE, R.D. (1991). Underestimation of social support buffering. *Journal of Applied Behavioral Science, 27,* 475-490.

LU, L. (1995). Correlates of social support: Personal characteristics and social resources. *Counselling Psychology Quarterly, 8,* 173-182.

LU, L., & ARGYLE, M. (1992). Receiving and giving support: Effects on relationships and well-being. *Counselling Psychology Quarterly, 5,* 123-134.

MANKOWSKI, E.S., & WYER, R.S. (1997). Cognitive causes and consequences of perceived social support. In: G.R. PIERCE, B. LAKEY, I.G. SARASON, & B.R. SARASON (Eds.), *Sourcebook of Social Support and Personality* (pp. 141-165). New York: Plenum Press.

NADLER, A., MALER, S., & FRIEDMAN, A. (1984). Effects of helper's sex, subject sex, subject androgyny, and self-evaluation on male's and female's willingness to seek and receive help. *Sex Roles, 10,* 327-33.

OLSON, D.A., & SHULTZ, K.S. (1994). Gender differences in the dimensionality of social support. *Journal of Applied Social Psychology, 24,* 1221-1232.

O'REILLY, P. (1988). Methodological issues in social support and social network research. *Social Science and Medicine, 26,* 863-873.

PIERCE, T, BALDWIN, M.W., & LYDON, J.E. (1997). A relational schema approach to social support. In: G.R. PIERCE, B. LAKEY, I.G. SARASON, & B.R. SARASON (Eds.), *Sourcebook of Social Support and Personality* (pp. 19-47). New York: Plenum Press.

PRETORIUS, T.B. (1996). Gender and the health-sustaining and stress-reducing functions of social support: A South African study. *Journal of Social Behavior and Personality, 11,* 193-209.

PROCIDANO, M.E., & SMITH, W.W. (1997). Assessing perceived social support: The importance of context. In: G.R. PIERCE, B. LAKEY, I.G. SARASON, & B.R. SARASON (Eds.), *Sourcebook of Social Support and Personality* (pp. 93-106). New York: Plenum Press.

SARASON, B.R., & SARASON, I.G. (1994). Assessment of social support. In: S.A. SCHUMAKER & S.M. CZAJKOWSKI (Eds.), *Social Support and Cardiovascular Disease* (pp. 41-60). New York: Plenum Press.

SARASON, B.R., SHEARIN, E.N., PIERCE, G.R., & SARASON, I.G. (1987). Interrelations of social support measures: Theoretical and practical implications. *Journal of Personality and Social Psychology, 52,* 813-832.

SARASON, I.G., PIERCE, G.R., & SARASON, B.R. (1994). General and Specific Perceptions of Social Support. In W.R. AVISON & I.H. GOTTLIB (Eds.), *Stress and Mental Health.* New York: Plenum.

SARASON, I.G., SARASON, B.R., & PIERCE, G.R. (1990). Social support: The search for theory. *Journal of Social and Clinical Psychology. 9,* 133-147.

SARASON, I.G., SARASON, B.R., SHEARIN, E.N., & PIERCE, G.R. (1987). A brief measure of social support: Practical and theoretical implications. *Journal of Social and Personal Relationships, 4,* 497-510.

SCHECK, C.L., KINICKI, A.J., & DAVY, J.A. (1997). Testing the mediating processes between work stressors and subjective well-being. *Journal of Vocational Behavior, 50,* 96-123.

SCHWARZER, R., & LEPPIN, A. (1989). Social support and health: A meta-analysis. *Psychology and Health, 3,* 1-15.

SCHUMAKER, S.A., & HILL, D.R. (1991). Gender differences in social support and physical health. *Health Psychology, 10,* 102-111.

TERRY, D.J., NIELSEN, M., & PERCHARD, L. (1993). Effects of work stress on psychological well-being and job satisfaction: The stress-buffering role of social support. *Australian Journal of Psychology, 45,* 168-175.

THOITS, P.A. (1992). Social support functions and network structures: A supplemental view. In: H.O.F. VEIEL & U. BAUMANN (Eds.), *The Meaning and Measurement of Social Support* (pp. 57-62). New York: Hemisphere.

VAN DER POMPE, G., & DE HEUS, P. (1993). Work stress, social support, and strains among male and female managers. *Anxiety, Stress, and Coping, 6,* 215-229.

VISWESVARAN, C., SANCHEZ, J.I. & FISHER, J. (1999). The role of social support in the process of work stress: A meta-analysis. *Journal of Vocational Behavior, 54,* 314-334.

WETHINGTON, E., & KESSLER, R.C. (1986). Perceived support, received support, and adjustment to stressful life events. *Journal of Health and Social Behavior, 27,* 78-89.

Table 1

Scale means and intercorrelations of social support variables and stress

		Intercorrelations					M	sd
		1	2	3	4	5		
Males								
1	Perceived emotional support	-					4.99	1.13
Received								
2	Information	.12*	-				2.04	1.01
3	Tangible assistance	.05	.43***	-			1.32	1.14
4	Emotional support	.09	.37***	.11*	-		2.15	1.07
5	Stress	-.01	.13*	.06	.15**		3.46	0.80
6	Strain	-.27***	.04	-.05	.15**	.15**	2.49	3.91
Females								
1	Perceived emotional support	-					5.11	0.94
Received								
2	Information	.17	-				1.97	1.12
3	Tangible assistance	.29**	.50***	-			1.22	1.19
4	Emotional support	.27**	.39***	.30**	-		2.66	0.96
5	Stress	-.09	.05	.04	.05		3.48	0.76
6	Strain	-.31**	-.10	-.07	-.09	.06	3.55	5.36

* $p < .05$

** $p < .01$

*** $p < .001$

Table 2

Summarised multiple regression analyses for the effects of stress and combined perceived and received social support variables upon strain

Predictor	Males						Females					
	R^2	ΔR^2	Δ F	B	Beta	Sig Beta	R^2	ΔR^2	Δ F	B	Beta	Sig Beta
Step 1:	.114	.114	14.47***				.095	.095	3.62*			
Stress				.651	.132	.01				.106	.015	.87
Perceived support				-.967	-.277	.00				-1.732	-.301	.00
Received emotional support				.536	.145	.01				-.086	-.015	.87
Step 2:												
a Stress x perceived support	.119	.006	2.2	-.329	-.475	.13	.106	.011	1.27	-.950	-.880	.26
b Stress x received emotional support	.132	.018	7.06**	.620	.680	.01	.096	.001	0.14	-.264	-.203	.71
c Perceived support x received emotional support	.124	.010	3.92*	-.316	-.493	.049	.119	.024	2.82	-.877	-.961	.10
Step 3:												
Stress x perceived emotional support x received information	.150	.003	1.08	-.201	-1.236	.30	.129	.008	0.90	.912	4.051	.35

Table continues

Table 2 (cont'd)

Predictor	Males						Females					
	R^2	ΔR^2	Δ F	B	Beta	Sig Beta	R^2	ΔR^2	Δ F	B	Beta	Sig Beta
Step 1	.097	.097	12.09***				.095	.095	3.64*			
Stress				.774	.157	.00				.082	.012	.90
Perceived support				-.908	-.260	.00				-1.804	-.314	.00
Received tangible assistance				-.203	-.059	.26				.127	.028	.77
Step 2:												
a Stress x perceived support	.102	.006	2.08	-.317	-.458	.15	.106	.011	1.22	-.925	-.856	.27
b Stress x received tangible assistance	.097	-	0.04	.042	.044	.84	.095	.000	.00	.020	.017	.97
c Perceived support x received tangible assistance	.114	.017	6.60*	.416	.651	.01	.117	.022	2.50	-.952	-1.208	.12
Step 3:												
Stress x perceived support x received tangible assistance	.117	-	0.02	.026	.147	.88	.145	.021	2.44	1.290	6.123	.12

Table continues

Table 2 (continued)

Predictor	Males						Females					
	R^2	ΔR^2	ΔF	B	Beta	Sig Beta	R^2	ΔR^2	ΔF	B	Beta	Sig Beta
Step 1:	.095	.095	11.89***				.097	.097	3.71*			
Stress				.732	.149	.01				.122	.017	.60
Perceived support				-.937	-.269	.00				-1.705	-.297	.00
Received information support				.173	.044	.40				-.240	-.050	.86
Step 2:												
a Stress x perceived support	.101	.006	2.19	-.325	-.470	.14	.106	.009	1.09	-.879	-.814	.30
b Stress x received information	.100	.005	1.71	.310	.318	.19	.107	.010	1.19	-.604	-.495	.28
c Perceived support x received information	.095	-	0.01	.016	.024	.92	.104	.007	0.84	-.489	-.596	.36
Step 3:												
Stress x perceived support x received emotional support	.108	.001	0.47	-.125	-.728	.49	.137	.012	1.44	1.200	5.643	.17

* $p < .05$ ** $p < .01$ *** $p < .001$

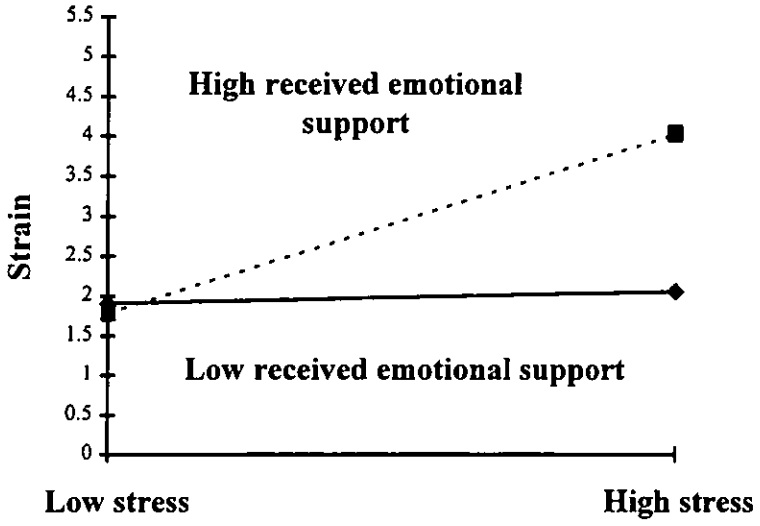

Figure 1

Interaction for males between stress and received emotional support on strain

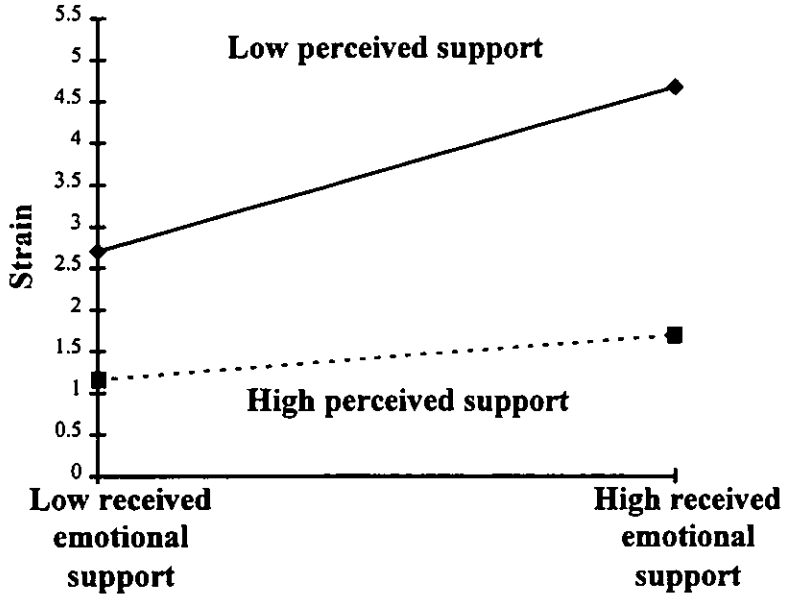

Figure 2

Interaction for males between perceived support and received emotional support on strain

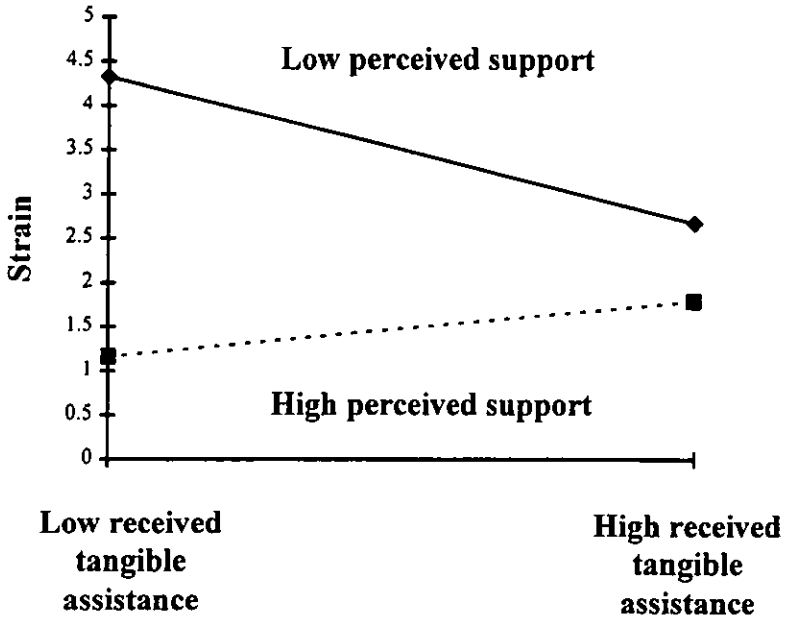

Figure 3

Interaction for males between perceived support and received tangible assistance on strain

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