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**Social Support: Age, Gender and Psychological Distress**

**Catherine Lacey  
BPsych (Hons)**

**A report submitted in partial requirement for the degree of Master of Psychology  
(Clinical) at the University of Tasmania, 2012.**

**Statement :**

I declare that this thesis is my own work and that, to the best of my knowledge and belief, it does not contain material from published sources without proper acknowledgement, nor does it contain material which has been accepted for the award of any other higher degree or graduate diploma in any university

**Signature:****Date:**

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### **Abstract**

The current study was conducted to investigate sex and age differences in various aspects of social support in a sample of 579 participants. The study also addressed possible links between particular forms of support, different support providers and psychological distress. Participants aged 18-71 all completed the Network of Relationships Inventory Social Provisions Version as well as the Depression, Anxiety and Stress Scale. It was revealed by a chi-square test that overall, the sample ranked their romantic partners, followed closely by their mothers, as the preferred support provider. Consistent with previous research, results of t-tests indicated that females reported higher levels of overall support than did males. Despite this, similar levels of support were reported by both males and females for their romantic partners, other sex friends and for most forms of support from fathers. When age differences were explored using a series of mixed model ANOVA's, younger participants were found to report higher levels of support from all providers, except romantic partners. Instead, older participants reported the highest mean level of support from their romantic partner for both instrumental and overall support types. Regression analyses involving possible links between support and psychological functioning, uncovered that males appeared to be more impacted by their support systems. This was indicated by support from multiple providers which were found to negatively and positively predict males levels of wellbeing. In comparison, only one provider was found to predict levels of psychological wellbeing in females. Despite significant amounts of research indicating the positive impacts of social support, the current study found that this relationship may be influenced by sex, support type and particular support provider.

Humans are described as innately social beings with a strong desire to belong and be in the company of others (Tuomela, 1995). Therefore, the role of social support in the lives of humans has been extensively discussed and researched. The definition of what social support consists of and how it should be measured has been a source of debate in relevant literature. This is because social support can be provided in various ways by one's support network and can be measured both qualitatively and quantitatively. Social support can also be provided in various forms such as physical, mental and emotional (Heitzman & Kaplan, 1988). Despite the complexity of defining this construct, researchers have been able to agree on the positive links that exist between having social support networks and overall psychological wellbeing. This has been demonstrated by a negative correlation between high levels of social support and negative affect such as depression, self-esteem and loneliness found consistently by numerous studies (e.g. Elliott, Marmarosh, & Pickelman, 1994; Lara, Leader, & Klein, 1997; White, Bruce, Farrell, & Kliewer, 1998). These results have all indicated that higher levels of support likely acts as a buffer against some forms of psychological distress, particularly in times of increased stress or crisis (Flannery & Wieman, 1989; Holahan & Moos, 1981; Matt & Dean, 1993).

There may, however, be other factors which mediate the relationship between social support and psychological well-being. These factors might include the actual individuals who make up one's support network and the level or type of support received from them. It has been suggested that this support also differs between sexes and age groups (Coventry, Gillespie, Heath, & Martin, 2004). Despite this, research in the area has lacked and further investigation has been required to determine just how the people who make up the support network were utilised differently by males and females, and if this differed throughout the lifespan.

Not only has it been identified that these aspects of social support required further investigation, but that there may also be possible links between particular types of support and psychological distress. Despite the clear findings regarding the protective nature of social supports on psychological wellbeing, emerging findings on its links with psychological distress identified an area that too required addressing (Avioli, 1989; Chen & Feeley, 2012; Fisher, Nadler, & Whitcher-Alagna, 1982; Merz, Consedine-Schulze, & Schuengel, 2010; Searcy & Eisenberg, 1992). These researchers indicated that previously held beliefs with regard to social support generally being a positive influence in one's life, were unfounded and that careful consideration should be given to the specific support provider and support type before predicting its level of usefulness.

The focus of much of the research in this area was conducted in the 1980's and 1990's with a large percentage of recent works shifting direction to topics such as the impact of support on health (Bennett et al., 2001; DiMatteo, 2004; Everard, Lach, Fisher, & Baum, 2000; Uchino, 2006; Wilkinson & Marmot, 2003; . One such example of this was recent works by Jetten, Haslam and Haslam (2011). This book provided an in-depth overview of social identity theory including points regarding just how essential social contact and belonging can be for human beings, to the extent that it can act as protective factor both from illness itself and to also aid a better recovery from illness.

In the literature review presented below the conceptualisation and measurement of the construct social support is firstly explored. The literature on the following areas of interest are then reviewed: sex and age differences in social support, and the relationship between social support and psychological distress. Aims and hypothesis for the current study are then outlined.

## **Defining and Measuring Social Support**

The definition of social support is something that has been extensively debated. Despite being heavily researched, researchers have been unable to develop one blanket definition for the construct (Barrera, 1986; Cohen & Wills, 1985; House, 1981; Langford, Bowsher, Maloney, & Lillis, 1997; Pearson, 1986). Although the term can be generally understood as the assistance provided by one's social network, there is still no precise definition of what social support should include or how this should be measured (Langford et al., 1997; Pearson, 1986). Heitzmann and Kaplan (1988) commented on this issue arguing this has been an issue for researchers in the area. They maintained that because there has been no one definition of social support that can be agreed upon, many of the studies within the topic differ in their conceptualisation of the construct and the way it is measured. Despite this, the researchers did note that although definitions varied considerably, most studies had at least included a form of tangible support e.g. financial assistance and some form of intangible support e.g. affection allowing for some comparison.

Despite some overlap between definitions, differences in how the construct has been described makes the comparison and interpretation of results somewhat difficult. For example, Barrera (1986) suggested three main ways in which social support can be, and has been, measured within studies. These include social embeddedness, level of perceived social support and enacted support. Barrera conceptualised social embeddedness as simply the measurement of one's support by their marital status or the number of relationships the person has. Therefore, it measures the individual's level of social involvement instead of their ability to access these supports or satisfaction from these relationships. Although this form of support has been utilised by studies as it is easily measured, it has also been criticised as it relies on quantity or existence of relationships but not on the quality or level of support these

relationships offer. As a result it makes it an ineffective measure when looking for links with psychological functioning.

Similarly, the measurement of social support based on the acts of support carried out by those within one's support network, also has its flaws (Barrera, 1986). Barrera defined this form of measurement as enacted support and it requires individuals to look back and recall actions of support that people have carried out. Positive aspects of this form of support include the ability to ascertain specific details regarding what tasks are performed for one another within a relationship. However, this form of measurement is heavily dependent on the personal reflection of the acts of support that have been provided. Therefore, this is a very specific measure of support as it is reliant on both the participant's memory of events and the particular support acts which have been carried out.

Perceived social support is described as similar to enacted support in that it too requires reflection. However, perceived support asks individuals to consider the usefulness and reliability of their relationships to assist them to cope (Furman & Buhrmester, 1985). Therefore, unlike social embeddedness, this measure does not require simply the number of relationships to be measured, but instead the level of support that is accessible if necessary and the subsequent level of satisfaction with this support. This form of measurement has a strong focus on the quality rather than the quantity of relationships or specific tasks completed within them.

It is therefore evident that without one accepted definition of social support the measurement of the construct differs between studies. It is also clear that all of the suggested conceptualisations have been utilised by various studies that have found them useful for particular purposes, but they too have their flaws. In the current study, perceived social support was the form of measurement selected. This method was selected not only because this assisted in the comparison of similar studies who too had used this form of measurement,

such as Chapman (2010), but it also reflected the level of satisfaction that participants had within their relationships. Perceived social support also allowed a breakdown of tangible and intangible components, providing extensive information on the availability of various aspects of support in relation to psychological wellbeing. Therefore, the form of support provided measurement of all aspects of the construct including access, availability and use of support provided and was therefore deemed to be more holistic than the other forms of measurement.

Not only have there been differing views on the definition of social support itself, but also on the elements which make up perceived social support. Langford et al., (1997) completed a conceptual analysis of past research in the area. The paper attempted to incorporate the views of many studies to form succinct categories and definitions of what constitutes perceived social support. The four components of perceived social support discussed and described by the paper were emotional support, instrumental support, informational support and appraisal support. Each form of support is described to have unique aspects, but all incorporate reciprocity within a relationship as an important factor in the satisfaction and continuation of the relationship.

Emotional support, similar to affection, has been described as the feeling of love, acceptance and respect within a relationship (Cohen & Wills, 1985). It is suggested by the authors that there may be three essential components of this form of support including: the act of being cared for and loved, feeling valued and respected and that support is reciprocated. This form of support incorporates feeling as though people are loved for who they are, instead of the things they can do for others (Cobb, 1976; Moss, 1973).

Instrumental support on the other hand incorporates tangible forms of support (Langford et al., 1997). Unlike emotional support, this form of support involves financial assistance, and providing material goods and services to others. This support incorporates the concrete assistance to make the person feel as though they are supported (House, 1981).

Informational support is outlined as guidance and advice provided (Cohen & Wills, 1985). This form of support is found to be particularly useful in a time of stress or crisis and is concrete assistance in the form of problem solving by providing suggestions and understanding (Langford et al., 1997). Both instrumental assistance and informational support together make up the elements of instrumental aid as a whole. For the purpose of the study, instrumental aid was described as both the guidance and tangible forms of assistance provided by support people.

Appraisal support also involves the communication of information, but unlike informational support this information is provided during times spent together not during times of crisis (Cohen & Wills, 1985; Lanford et al., 1997). Appraisal support involves sharing of information that is intimate, without the fear of judgement. This form of support allows people to feel as though their behaviour is appropriate, accepted and affirms the relationship (House, 1981).

Despite the aforementioned inconsistencies in conceptualisations of social support, the current study selected a definition and subsequent aspects of measurement which allowed for the collection of the most holistic information. This form of measurement provides the most information in terms of gaining participants' overall perceived level and satisfaction with their social support, to enable links to be suggested between this and psychological wellbeing. The Network Relationships Inventory Social Provisions Version (NRI-SPV) enables positive qualities subscales Companionship, Intimate Disclosure, Instrumental Aid, Nurturance, Reassurance of Worth, Reliable Alliance and Affection to be measured. It also includes subscales for negative subscales Conflict/Quarrelling and Antagonism as well as Relative Power. Particular subscales can also be averaged to create measures of overall support and negative interactions. For the purpose of the study, the scales that were selected

from this measure were affection, intimate disclosure, instrumental aid and overall support as they were the scales which best fit the theory of Langford et al., (1997).

Affection measured the essential aspects of emotional support, instrumental aid included both the informational and tangible forms of support outlined in informational and instrumental support, and intimate disclosure provided a measure of the sharing of personal information. The overall support measure was also included to provide an average measure of the level of perceived support rated by participants. These measures enabled a thorough investigation of perceived support levels without overlap to discover possible links with the variables outlined below.

The term aid was defined as the assistance provided to individuals, and aide as the person to provide this support. Aide and support provider were used interchangeably throughout the study.

### **Age and Sex Differences in Social Support**

A large amount of the research regarding links between social support and psychological wellbeing has considered age and sex differences. This is because the roles of both age and sex cannot easily be separated in their influence on social support systems. Therefore, many studies conducted in the area have included hypotheses regarding both sex and age of participants. This has been in an attempt to add to literature regarding how social supports differ over time and between sexes. Not only has it been noted that social support affected the wellbeing of individuals depending on sex and age differently, but these studies have also indicated that the people who made up one's social support system may have also differed, depending on their sex, and as they progressed throughout the lifespan.

As people progress through life, relationships change, evolve and new ones are formed. The different phases of life also often dictate both the level of social contact people receive and those who make up the support network. Of the studies that have included a

measure of social support in both a female and male sample, many have found various significant differences between males and females support networks (Furman & Burhmester, 1992; Helsen, Vollebergh, & Meeus, 2000; Kendler, Myers, & Prescott 2005; Shumaker & Hill, 1991). These studies have shown a general trend of higher levels of support reported by females and a more varied support system, compared to males. Despite their age, females have been found to have wider social networks preferring support from multiple people. When compared to men, men have been reported to have less individuals providing them with support, often placing a large amount of reliance on their spouse (Kendler, Myers, Prescott, 2005). This pattern of support has been consistently observed in adults, but some researchers have also focused on exploring how these differences presented in youth, by following the networks of child and adolescent participants.

Furman and Buhrmester (1992) conducted a study in to the pattern of support observed in youth. Their research aimed to investigate the important support providers in the lives of 554 female and male children and adolescents. Using a sample of children in fourth, seventh, and tenth grades and college, the study attempted to investigate age differences in the support system of young people. The results revealed a pattern of a changing social support system as children develop through childhood in to adolescence and then in to early adulthood. This research indicated that although the order of importance of particular support providers differed, depending on age and sex, there were common people found in most support networks. Parents, siblings, same sex friends, opposite sex friends and relatives were all found to play an important role throughout the beginning stages of life. Romantic partners were too found to be important providers once adolescence was reached. By comparing participants of differing ages, the study found that parents were the most important support providers in early childhood, but as children became more independent from their families, reliance on their friendship and romantic partners increased. Although the study provided an

important insight in to the changing support system of children and adolescents, the study relied on self report data. Due to the age of some participants, this may have been more reflective of parent's views of their child's support system as they may have been unable to complete measures independently. The study was also cross sectional meaning changes throughout the childhood lifespan were hypothesised by comparing age groups, rather than accurate reflections of the same child followed through these developmental milestones.

Other research in the area has attempted to extend and replicate this knowledge regarding the youth support system by investigating the particular individuals who make up this network in adolescents. When asked about individuals providing them support, adolescents and young adults were found to include fewer family members in their social network (Levitt, Weber, & Guacci, 1993). This indicated that as young people moved towards independence they began to report higher levels of perceived support from friends. Despite this change, other studies have shown a shift back towards family providers after adolescence as people moved in to early adulthood. These family providers included both individuals from their family of origin and from their family of creation (Antonucci & Akiyama, 1987).

Colarossi (2001) supported the above findings by using a sample of 364 adolescents aged between 15 and 18 years of age. This particular age group was selected as it has been a time of interest due to the dramatic changes in support requirements which occur at this time. Research has indicated that children go from being primarily supported by their immediate family, to adolescence where they begin to be supported by friends and romantic partners, and their relationship with their family, particularly parents, change dramatically (Furman & Buhrmester, 1985; Furman & Buhrmester, 1992; Furman & Shaffer, 1999). The study aimed to build on suggestions from Levitt et al., (1993) regarding the number of friends compared with family members in the youth network, but also to gather information regarding amount

and level of satisfaction with this support. The study found that adolescent females reported both higher levels of perceived support from their friends rather than from important adults in their lives and greater level of satisfaction with regard to the support given to them by their friends. Males, on the other hand, did not report a significant difference in the number of peers and adults who made up their support group. Although they did report that their friends provided them a higher level of support than adults in their life, there was no difference in the perceived level of satisfaction with the support from the different providers. The study suggested that these findings may be due to sex roles and maturity factors. Colarossi put forward the suggestion that these results were likely due to the female desire to have a more extensive network, and therefore an earlier need to diversify their support providers. Despite these findings, the study did not measure what types of support were sought from the various providers making it difficult to ascertain what specific aspects of support adolescents were aiming to gain from providers. The study also used a self report cross sectional design, allowing participants to simply write down any adult and child providers and then rank them. This therefore also allowed for the possibility of responses being affected by the adolescent current psychological state, which can be volatile particularly in terms of the child parent relationship.

Colarossi (2001) also found that the majority of participants, male and female, endorsed a female provider as the person who gave them the largest amount of support. Colarossi argued that these findings supported previous works such as those by Caldwell and Peplau (1982) and Kunkel and Burleson (1999). These studies indicated that both sexes utilised their female support providers more so than the males within their networks. Taken together these studies clearly suggested a trend of men turning to their opposite sex supports for assistance, such as their mothers, compared to females who often turn to their same sex supports such as their mother and same sex friends. These researchers maintained that

females have been socialised to reach out to multiple supports, including those within and outside the family. This has been suggested to be due to a female desire for multiple opinions but also for conversations around their thoughts and feelings, more so than what males require. To satisfy these needs, females will therefore seek further relationships.

Not only have females been found to have greater and more diverse social support networks, they too have been found to report higher levels of support from their providers (Chapman, 2010). Chapman conducted a study with university students which aimed to further investigate differences between males and females support systems, including the types of support from these providers. In this study, it was found that females reported higher levels of perceived social support than did male participants. These results also supported works by Caldwell and Peplau (1982) and Kunkel and Burleson (1999) as when utilising support from their friends and family, males received higher levels of support from their opposite sex support providers. In terms of family relationships, males were more likely to receive support from their mothers than fathers and from opposite sex friends than from same sex friends in their social network. Females on the other hand were again found to be more likely to receive their family and friend support from same sex support providers such as mothers and female friends. However, unlike previous studies mentioned, Chapman extended findings by measuring type of support and indicating that for both sexes, romantic partners in general were reported to be the most effective support providers for most forms of support. The exception to this was that in terms of affection, males were found to prefer to this form of support from their mothers rather than their spouse. These findings suggested that although romantic partners were the preferred support provider for both sexes for almost all forms of support, males preferred affection from their mothers than their spouse. Therefore the study provided important findings in relation to differences between males and females, support provider and type of support. However, as the study only used participants from a university

sample and failed to measure age, it made it difficult to generalise the results to the wider community, and to ascertain how these results would change as people age.

Research by Antonucci and Akiyama (1987) attempted to address a lack of research regarding how older adults support systems differ to those of adolescents and middle aged adults. The study aimed to investigate differences in both the size of networks, and the level satisfaction in both males and females. Using 380 participants aged between 65 and 95 years of age, the study showed that older females had a much more diverse support network than their spouse. Males were found to tend to rely almost exclusively on their spouse. In this age group, links between social support and overall wellbeing, were found to be related more to the quality of support received, rather than the quantity. Therefore, these findings suggested that generally females throughout the lifespan reported the inclusion of more support providers within their lives. This indicated that females overall required the support of numerous providers, likely having different strengths, compared to men who were content with using fewer providers, or simply just their spouse as their sole confidant. Although the study provided important insight in to the support system of older adults, it again relied on self report in a cross sectional design taking its data from a national wellbeing survey. The study also did not include participants from different stages of the lifespan, making direct comparison of different ages more difficult.

Previous research has indicated that as people age they begin to receive greater levels of support from different providers as their own families increase. Therefore, as people age, they create their own families including children of their own who can be providers of important support (Coventry, Gillespie, Heath, & Martin, 2004). Furman and Buhrmester (1992) suggested that the parent child relationship evolves from late adolescence onwards to become a form of mutual understanding and support for both parent and child. During this

time parents' social support networks also change as they may become carers of their own parents or as their own parents pass away.

Despite these theories, studies which include members of multiple life stages are lacking. Therefore, the current study hoped to address this by investigating age and sex differences further. Although sex differences have not been found to be stable throughout the lifespan, previous research indicated that there are some noticeable differences, particularly in the size of support systems and the sex of the providers they prefer. Age has also appeared to play a role in the inclusion of others, other than immediate family and spouses, in the social support circle. The study therefore aimed to replicate these findings, and to then investigate any other age and sex differences and similarities that were present in the sample with regard to support providers and type. Few studies have included the measurement of the differing forms of support. Therefore by doing this, it also enabled the current study to both replicate the findings in a different sample but also to extend these by measuring particular forms of support.

When considering an appropriate way to group participants according to age to make these comparisons, various theories were considered (Valliant, 1977; Furman and Buhrmester, 1992; Antonucci & Akiyama, 1987; Feldman, 2008; Hoffnung, Hoffnung, Seifert, Burton Smith, & Hine, 2010). Feldman (2008) described age ranges loosely as adolescence between 12 and 20 years of age, young adulthood as after this up until 40 and middle adulthood as approximately after 40 to the age of 65. Feldman also maintained that it is important to be aware that these age groups are social constructs and should reflect what is widely accepted in a particular culture. For example, in western culture, young adulthood is generally expected to start around the age of 20, as technically this is when adolescence ends, when people enter the workforce and begin their own families (Feldman, 2008; Hoffnung, Hoffnung, Seifert, Burton Smith, & Hine, 2010). This theory was adopted for the current

study and for this reason 18-20 year olds were given their own age category, and 21-39 year olds grouped together. The older participants of the study were then grouped together to make the final group of over 40 year olds. This aimed to reflect late adolescence, early adulthood and the beginning of forming one's own family, and finally mid adulthood moving towards older adulthood (Vaillant, 1977). These age ranges were also intended to be reflective of the changes in the support system spoken about by researchers such as Furman and Buhrmester (1992) and Antonucci and Akiyama (1987).

### **Social Support and Psychological Distress**

Despite several bodies of work relating to age and sex differences in social support networks, previous studies in relation to possible links between support and distress has lacked. Instead, previous research has tended to focus on the protective relationships between social support and depression, loneliness and self-esteem (Elliott et al., 1994; Lara et al., 1997; White et al., 1998). These studies have all indicated that social support acts as a buffer against these forms of psychological distress. Further, Bertera (2005) even argued for a relationship between positive support from relatives and fewer episodes of anxiety. Despite these consistent findings relating to the positive impacts of social support on levels of depression, loneliness, self-esteem, and anxiety, the possible relationship between support and psychological distress has also been identified by some researchers as requiring further attention.

There is a body of research indicating that some forms of support, particularly instrumental aid, may be linked with greater levels of psychological distress. Fisher, Nadler and Whitcher-Alagna (1982) noted that much research had focused on the conditions that had led up to providing aid, and conducted a review on research that had instead investigated reactions to the receipt of aid. This paper suggested that instrumental aid in particular, such as financial support and material aid may in fact be linked with negative reactions. Fisher et al.,

(1982) suggested that negative reactions to this form of support were often associated with the individual characteristics of the donor, the amount of aid that is provided and the degree to which it met the required need. For example, they suggested that when the aid provided is able to meet a need psychological distress in the recipient is lowered. However, if the need is not adequately met, psychological distress persists or is heightened. Fisher et al. failed to discuss particular facets of psychological functioning and instead focused on negative and defensive reactions in general. Therefore, although the paper provided an important review of research in the area of negative reactions to support, the authors focused primarily on impacts to self worth and self esteem. This paper indicated that past research had mostly focused on these constructs rather than psychological symptoms as a response to support, such as depression and anxiety.

Chen and Feeley (2012) investigated this further using 4032 participants in the United States of America, between the ages of 30 to 84. The study measured total emotional support, total unpaid assistance, total financial support, perceived control and subjective wellbeing. Wellbeing in this study was measured by participants' rating on an overall life wellbeing scale, and then their answers to further questions related to health, work, relationships with important support providers and wellbeing overall. This study aimed to investigate links between unpaid assistance, financial support and emotional support with wellbeing. The study found that although emotional support was associated with higher levels of wellbeing, the receipt of financial support was associated with lower levels of reported wellbeing. This study, like Fisher et al., (1982), too suggested this may have been because this form of aid did not meet the needs of participants, or that it may have impacted their self esteem. Merz, Consedine-Schulze and Schuengel (2010) then furthered this research by conducting a review focusing on the response to instrumental support provided by family members in particular.

This indicated that instrumental support between family members was also associated with lower levels of wellbeing.

When looking at results obtained within Australia, Chapman (2010) attempted to add to the above findings. This research investigated relationships between support provider, support type and defined psychological wellbeing as level of anxiety measured by the State Trait Anxiety Inventory (STAI; Spielberger, Gorsuch, & Lushene 1970). Chapman found that affection provided by mothers, intimacy from fathers and same sex friends, as well as instrumental support from romantic partners, were all negative predictors of trait anxiety. However, Chapman also found that instrumental support from fathers and affection from same sex friends were positive predictors of trait anxiety. These findings therefore added to previous literature by showing that support from particular providers may be associated with higher levels of dispositional anxiety as well as state anxiety. Unlike previous research that had focused on negative impacts to constructs such as self esteem and worth, this study measured psychological symptomology. This important research coupled with previous findings indicated that links between instrumental support and distress were not as simple as first thought and instead may depend on the provider of the support. However, the particular scale used only provided a measure of anxiety and in turn did not provide an accurate reflection regarding possible links between this type of support and other forms of distress including depression and stress.

The research in this area has also drawn attention to particular relationships, and elements of these relationships, which may have a detrimental impact on psychological wellbeing. A number of studies that have investigated links between social support and negative psychological consequences, have often focused on problematic relationships where conflict existed or where significant life stressors were present. This research focused on establishing a negative relationship between social support and psychological distress and a

positive relationship between amount of negative interactions and distress (Durdan, Hill, & Angel, 2007; Holahan & Moos, 1981; Horwitz, McLaughlin & White, 1998; Turner, 1981). One such example of research conducted in this area includes the work by Schuster, Kessler and Aseltine (1990). In their study they used a sample of 1755 participants aged 18 to 65. By collecting data in relation to interactions with participants and their spouses, friends and relatives they were able to investigate possible links between negative interactions and psychological distress. The study findings indicated that the important protective factor of social support may not be the supportive nature, but instead the absence of negative interactions. This study indicated that negative interactions with various support providers including spouses, friends and family members, were more predictive of depressed mood. Despite these important findings, the study focused primarily on the impact of negative interactions, and not the possible impact of general day to day interactions on wellbeing.

Research has aimed to address that issue and has indicated that it may not only be the negative interactions within the relationships which are associated with higher levels of distress. Instead researchers have suggested it may also be the perception of reasoning behind the aid offered. For example, sibling relationships in particular may be associated with feelings of rivalry, comparison and unwanted assistance (Searcy & Eisenberg, 1992). Searcy and Eisenberg investigated responses to help and support provided by siblings in 17 to 25 year old university students. The study aimed to investigate differing responses from siblings when support was provided by another sibling. The study showed that the quality of the relationship between siblings played a large role in whether the support provided was perceived as helpful or as causing further distress. This research provided important findings in relation to the reaction of siblings when support is provided to them. These results suggested that the perception of the reasoning behind the aid given, as supportive rather than unwarranted, played a considerable role in it contributing to a positive reaction from the

receiver. However, the research only included a measure of defensiveness to determine reaction to support and only included young adults so therefore requires further exploration. The study also only used younger participants therefore providing no indications about the response of older people to support from their siblings.

Avioli (1989) did attempt to draw attention to sibling interaction in later life by conducting a review of literature in the area. Avioli suggested that in later life, siblings play a similar role to friends. Siblings were suggested to be important in providing emotional support but also to have the added ability of relating to the older adult's view of themselves within the family context. Work by Seltzer (1989) and Avioli both differentiated the role of friends and siblings by raising the importance of the fact that brothers and sisters are consanguine. The authors defined this to mean that people often select their friends on the basis of common interests, but siblings are instead born in to the role. As a result, the level of support and involvement from a sibling in an older person's life is often dependent on the strength of the relationship and the interpretation of the reasoning behind the support provided. This indicated that again similar to young adults, older adults may too experience some distress related to support provided by their siblings. However, limited research has been conducted into the possible impacts of support provided by siblings throughout the lifespan by using a sample including multiple stages. Works such as Avioli have brought together the literature to make suggestions about how sibling interaction may impact people, but methodologies have differed making comparisons difficult. This area of research, therefore, also required further exploration.

Therefore the above research has cast doubt upon the general belief that social support is beneficial and protective in terms of wellbeing. Although some of the theories regarding support and negative impacts on wellbeing date back to the 1980's, this area was under researched and many studies have had differing ways of measuring the constructs being

investigated. The current study therefore aimed to address this by including a greater age range of participants and by measuring both support types and psychological wellbeing, using validated and reliable measures.

### **Rationale, aims and hypotheses**

From the studies outlined above, there were clear aspects of research which required replication, and gaps that required exploration. Hypotheses 1 through to 3 aimed to replicate the findings of the above work within a sample of both younger and older participants. The current study also aimed to further investigate the previous findings regarding sex and age, to discover if these factors played a role in the reported perceived level of different forms of support not frequently measured by other studies. The study wished to contribute to the emerging evidence regarding links between social support and psychological wellbeing. By using an Australian validated and reliable measure of depression, anxiety and stress, the study aimed to investigate links between these measures and overall support from various providers. It also identified a need for further investigation regarding possible specific links between distress and instrumental support. Due to the limited amount of research on relationships between social support and anxiety and other forms of distress, it was deemed important to attempt to further findings by Chapman (2010) and others such as Chen and Feeley (2012), Fisher et al., (1982), Schuster, Kessler and Aseltine (1990), and Whitcher-Alagna (1982).

### **Aims**

**The aims of the study were to investigate:**

1. The preferred support providers for the sample
2. Sex differences in support type and support provider
3. Age differences in support type and support provider
4. Support providers who were predictors of psychological wellbeing and distress

## Hypotheses

Based on the findings and limitations of research outlined above it is predicted that:

1. Romantic partners would be the preferred support provider selected by participants overall.
2. Females would report higher levels of perceived social support for all forms of support, and from all aides: family providers, friend providers, and extra providers. Males and females would however perceive a similar level of support from romantic partners.
3. Younger participants would report higher levels of perceived support for all forms of support, from all aides: family providers, friend providers, and extra providers. Older adults would however perceive a similar level of support from romantic partners.
4. Overall support, from most aides, would predict lower levels of psychological distress. However, Instrumental support from some aides, particularly family members, may predict higher levels of psychological distress.

## Method

### Participants

Participants were 579 students recruited from a number of schools within the University of Tasmania (UTas), and from the general community. When advertising for the study, people of all ages over 18 were invited to participate and no age limit was set. Of those who indicated their sex, 155 were male and 422 were female. Participants between 18 to 71 years of age took part in the study by completing the survey,  $M = 26.33$  ( $SD = 11.50$ ).

Of the 579 participants, 525 endorsed that they were either currently or had previously been in a relationship at some point of their lives (90.76%).

## Materials

As explained by Pearson (1986) level of social support can be measured in two ways. Quantitatively the construct can be measured as the number of people in one's support network and level of accessibility to these people. Qualitatively, the measure chosen by the current study, can be looked at as the perceived amount of support individuals feel they receive from a set number of support givers. The current study therefore measured the perceived level of particular forms of support from defined support providers.

**Network of Relationships Inventory Social Provision Version.** To assess this level of social support the NRI-SPV, a version of the Network of Relationship Inventory, was used (Furman & Buhrmester, 2010). This measure was selected as the measure closely aligned with the model of perceived social support types outlined by researchers (Barrera & Ainlay, 1983; Cohen & Wills, 1985; Langford et al., 1997).

The NRI-SPV scale is made up of 10 subscales. The subscales included within the whole measure are companionship, conflict, instrumental aid, antagonism, intimate disclosure, nurturance, affection, reassurance of worth, relative power and reliable alliance. Each of the subscales is made up of 3 items, all measured by a 5 point Likert scale. Overall support can also be calculated by adding together items which make up companionship, instrumental aid, intimate disclosure, nurturance, affection, admiration and reliable alliance subscales.

Based on the previously mentioned research, the subscales that were included for analysis in the current study were overall support, affection, instrumental and intimacy, as these were believed to include measures of the above mentioned constructs important in measuring perceived social support. Emotional support was measured by the affection scale, instrumental and instrumental supports were measured by the instrumental aspect of the measure and appraisal support was measured by intimate disclosure subscale, also called

intimacy support. The overall support aspect of the measure was also included to act as an average perceived support variable. This scale was made up of subscales companionship, instrumental aid, intimate disclosure, nurturance, affection, admiration, and reliable alliance.

The study also included the rating of nominated important support providers aspect of the NRI measure, allowing participants to rate a select 7 providers and one additional person. Chapman (2010) identified that not using this system within his study was problematic for utilising data and therefore this was rectified for the current study. Participants were asked to “rank the support provided by the 8 support providers you have described above using numbers 1 through to 8”. This instruction was then clarified by asking participants to “please rank your preferred support provider as 1 and your least preferred support provider as 8”. Although the current study used names aide and support provider interchangeably, to provide consistency for participants, the language of the original measure was used and providers are either named ‘support provider’ or participants were asked to rank to what extent the question applied to that ‘person’ and the providers role listed i.e. sibling.

This NRI- SPV measure has a reported mean internal consistency of .86 (Furman & Buhrmester, 2009). The internal consistency of the measure within the current study was found to range between .73 and .96. These are presented in Appendix G, Tables 1-4. In terms of validity, most psychometrics previously presented have been in relation to adolescents. In a book by Bukowski, Newcomb, and Hartup (1998), the description by adolescents of their friendships on the NRI overall were reported to found to be between moderately and highly related to one another with  $r$  values between .34 and .63.

**Depression, Anxiety and Stress Scale.** Psychological distress was measured by the Depression, Anxiety and Stress Scale (DASS; Lovibond & Lovibond, 1995). The DASS is a widely used measure in Australia of psychological distress in areas depression, anxiety and stress. The measure can be broken down in to subscales with a Cronbach’s alpha for

depression reported as .84, anxiety .91 and stress .90 (Lovibond & Lovibond, 1995). This particular measure was selected as it was developed using non clinical Australian samples and therefore has recent Australian norms, unlike the STAI (Lovibond & Lovibond, 1995; Spielberger, Gorsuch, & Lushene, 1970). The current study used the measure to investigate the level of anxiety, depression and stress in participants to examine possible links between participants support network and psychological distress.

**Demographic information.** The study also measured demographic information such as age and sex.

### **Procedure**

Ethics approval was obtained from the Social Sciences Human Research Ethics Committee (see Appendix F). Participants were then recruited within the University of Tasmania's Hobart, Launceston and Cradle Coast campuses. This was done by including the survey in some course units and by inviting students to complete the survey by advertisements (see Appendix A). Students within the university collected survey packs from the administration area of the School of Psychology or by emailing the researcher (information letter to students is included in Appendix A).

Participants from outside of the university were also recruited from businesses who agreed to advertise the research (see Appendix B and E). Interested employees from these businesses then contacted the researchers for a survey pack which was posted out in the mail (information letter to businesses is included in Appendix D). These surveys were then returned to the researcher in reply paid envelopes provided in the survey packs.

The survey took approximately half an hour in total to complete. Participants were also invited to enter the draw to win a hardware store voucher for \$50. A separate box was provided for university student participants next to where completed surveys were handed in outside the administration office in the School of Psychology. Participants in the general

public were able to send back their raffle ticket in the provided reply paid envelope with their survey. The raffle ticket and survey were separated immediately once received by the researcher to ensure anonymity. First year Psychology students were instead offered credit for their participation. Data was collected between May 2011 and July 2012.

### **Analysis and Design**

The study used a mixed model design. Prior to data analyses, assumptions of normality were tested and outliers were removed. The study used chi square analyses to determine the preferred support providers endorsed by participants. A series of t-tests were then carried out to investigate differences between mean level of support reported by males and females. A series of mixed model ANOVAs were also conducted to examine sex and age differences in the level of particular support perceived to be provided by each of the individual support aides. Backward stepwise regressions were the final analyses conducted to determine predictors of depression, anxiety and stress.

To obtain an overall measure of social support to enable means to be compared in t-tests, the overall support of each provider was added together to create a variable. The means for males and females on this measure were then compared. This was then broken down in to the individual providers of overall support and male and female mean responses were compared.

For analyses with age, participants were divided in to three age groups: 18-20, 21-39 and over 40. 269 participants were included in the 18-20 age group, 201 in the 21-39 group and 79 in the oldest age bracket.

When support types were investigated separately, it was found that they violated the assumption of multicollinearity and were therefore not independent of each other. For this reason they were collapsed and overall support from each individual provider was used when conducting the initial backwards stepwise regressions. These analyses were performed to

investigate, for males and females, possible links between particular support provider's level of overall support and links with depression, anxiety and stress. Predictor variables were therefore reported levels of perceived overall support from mothers, fathers, siblings, relatives, romantic partners, same sex friends, other sex friends and the extra person identified. These analyses were performed separately for males and females to allow comparison of the differences between sexes.

For further investigation on possible links between instrumental support and psychological distress, backwards stepwise regressions were also performed using specifically this support type. Investigations regarding normality were also undertaken for these analyses, and outliers removed. These analyses again compared results from males and females separately, investigating possible links between instrumental support from providers and levels of depression, anxiety and stress. Predictor variables in these analyses were instrumental support from all aide providers outlined above.

## **Results**

### **Preferred Support Provider**

A chi-square test for goodness of fit (with  $\alpha = .05$ ) was used to assess the preferred support provider endorsed by participants. Table 1 lists the percentage of the sample that nominated each aide as number one out of the eight possible options.

The chi-square test was statistically significant,  $\chi^2(7, N = 540) = 601.01, p < .001$ , indicating mothers and romantic partners were the most frequently endorsed preferred support provider by participants. with a Cohen's  $w$ , effect size, found to be 1.05.

Table 1

*Summary of the Preferred Support Provider endorsed by participants (N=540)*

Support Provider	Percentage (%) of Sample
Romantic Partner	36.30
Mother	32.96
Same Sex Friend	12.41
Father	6.67
Sibling	4.81
Other Sex Friend	2.41
Extra Person	2.22
Relative	2.22
<b>Total</b>	<b>100</b>

### Age and Sex Differences in Social Support

**Sex Differences.** When findings for the overall support construct were totalled, females ( $M = 24.52$ ,  $SD = 5.02$ ) were found to report higher levels of support compared to males ( $M = 22.88$ ,  $SD = 4.36$ );  $t(575) = -3.82$ ,  $p < .001$ , 95% CI [-2.47, -.79]. However, when overall support provided by individual aides were compared, no significant differences were found between the means reported by males and females for fathers  $t(575) = -.60$ ,  $p = .55$ , romantic partners  $t(575) = 1.15$ ,  $p = .25$  and other sex friends  $t(575) = 1.02$ ,  $p = .31$ . Significant differences were however found between the sexes levels of support reported to be provided by mothers, siblings, relatives, same sex friends and the extra person included, as reflected by the results shown in Table 2.

This indicated that when overall levels of support were investigated, females generally endorsed higher levels of support. When broken down in to individual aides of overall support, they endorsed higher levels of support from their mothers, siblings, relatives, same sex friends and extra supports when compared to the means reported by males.

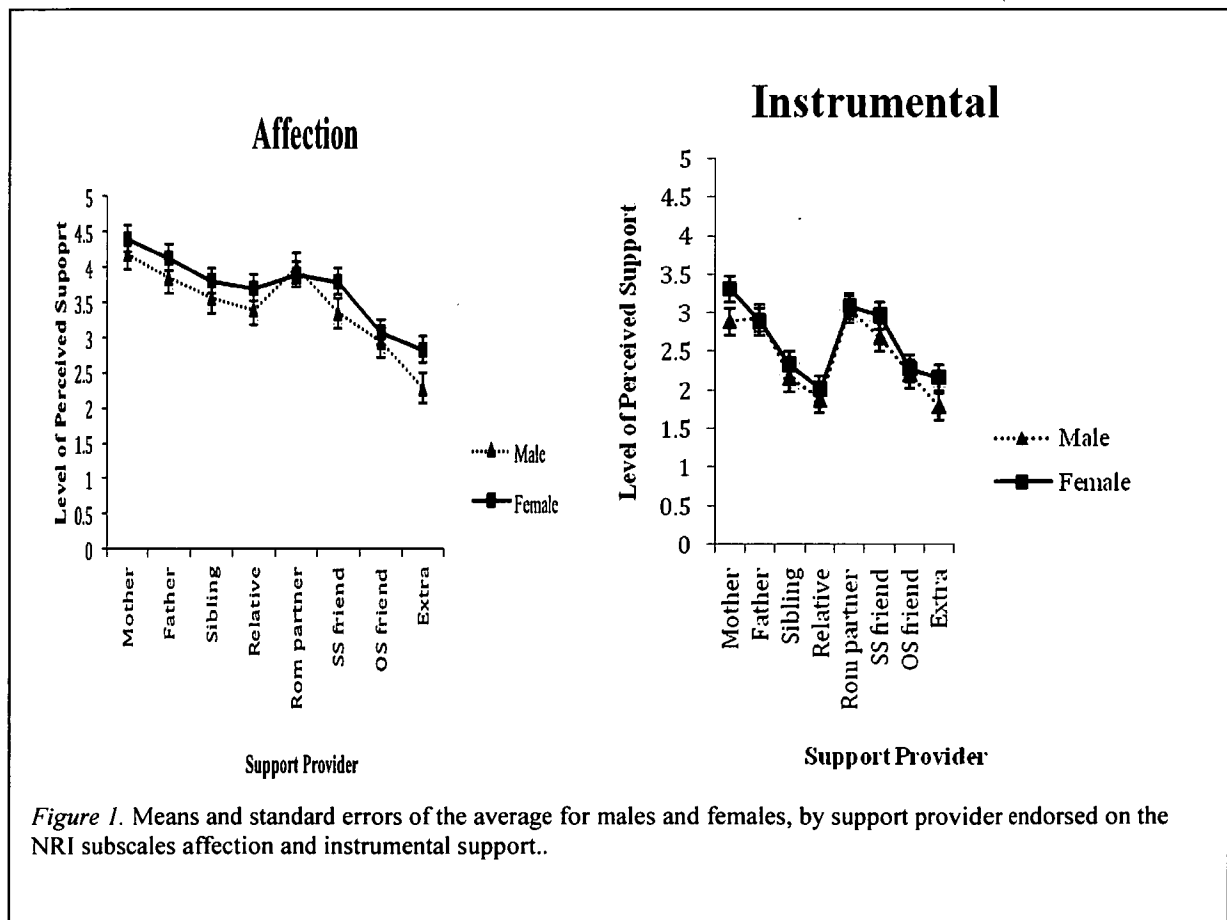
A series of mixed model ANOVAs were then carried out to determine if a main effect could be found between sex and age groups on specific forms of support provided. Mean

scores and standard errors for males and females and the differing age groups for each of the support types are shown in Figures 1, 2, 3, and 4.

Table 2

*Contrast of Male and Females Level of Support Reported for Mothers, Siblings, Relatives, Same Sex Friends and Extra Persons*

Support provider	Males		Females		<i>t</i> (575)	<i>p</i>	95% CI	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			<i>LL</i>	<i>UL</i>
Mother	3.20	.93	3.49	.92	-3.39	=.001	-.46	-.12
Sibling	2.84	1.14	3.06	1.12	2.00	<.05	-.42	-.00
Relative	2.46	.94	2.70	.94	-2.71	=.007	-.41	-.07
Same sex friend	3.10	.92	3.53	.81	-5.53	<.001	-.59	-.28
Extra person	2.08	1.48	2.53	1.48	-3.24	=.001	-.73	-.18



As can be seen from these graphs, the pattern of reported levels of different forms of support from different providers was relatively similar for both males and females. Although main effects were found for the two sex groups, the contrast between the differences observed between males and females, and the differences between age groups was evident in these figures. Males and females displayed similar patterns of reported support in Figures 1 and 2, whereas the older age groups reported levels appear very different from what was reported in the two younger age groups in Figures 3 and 4.

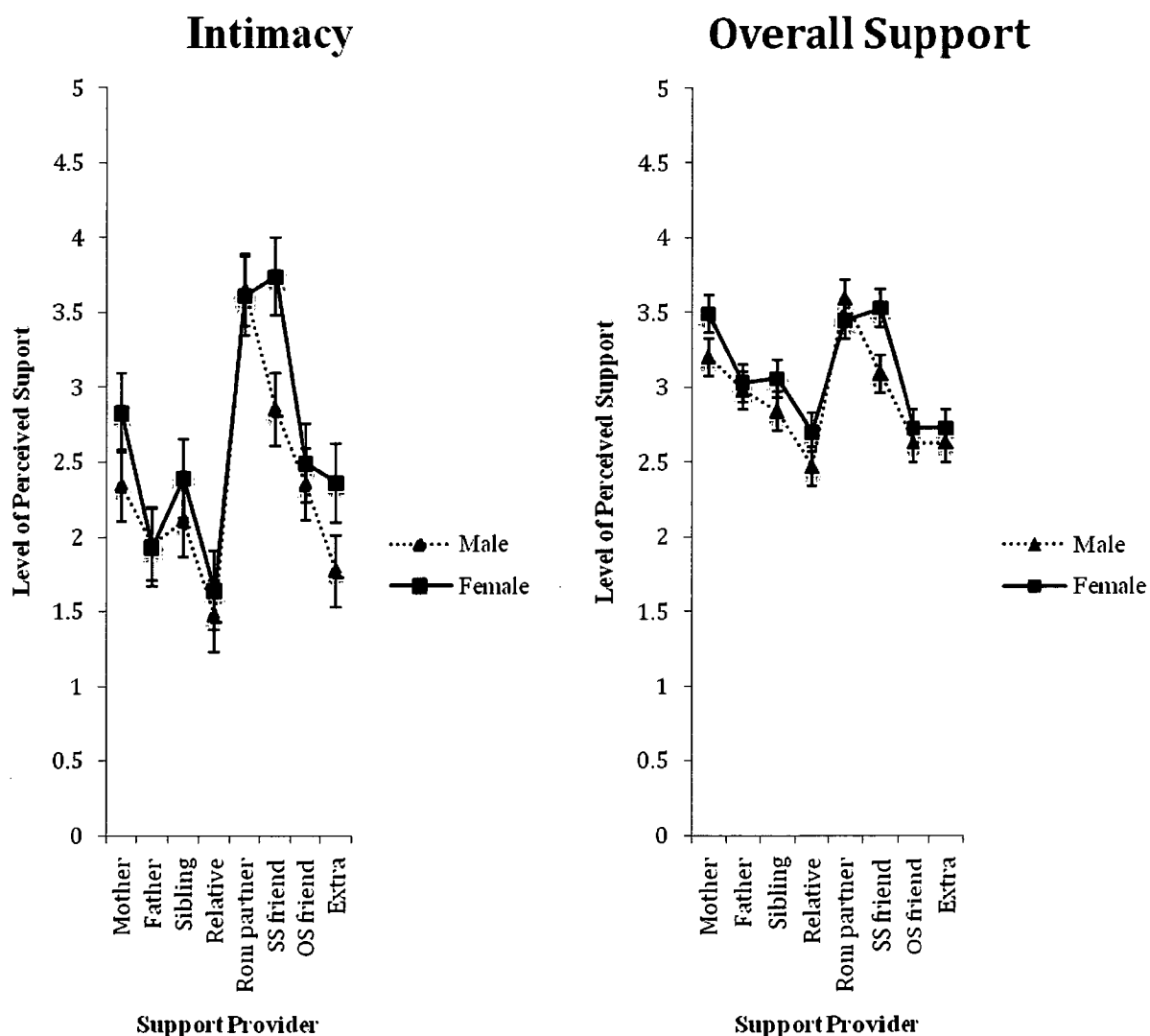


Figure 2. Means and standard errors of the average for males and females, by support provider endorsed on the NRI subscales intimacy and overall support.

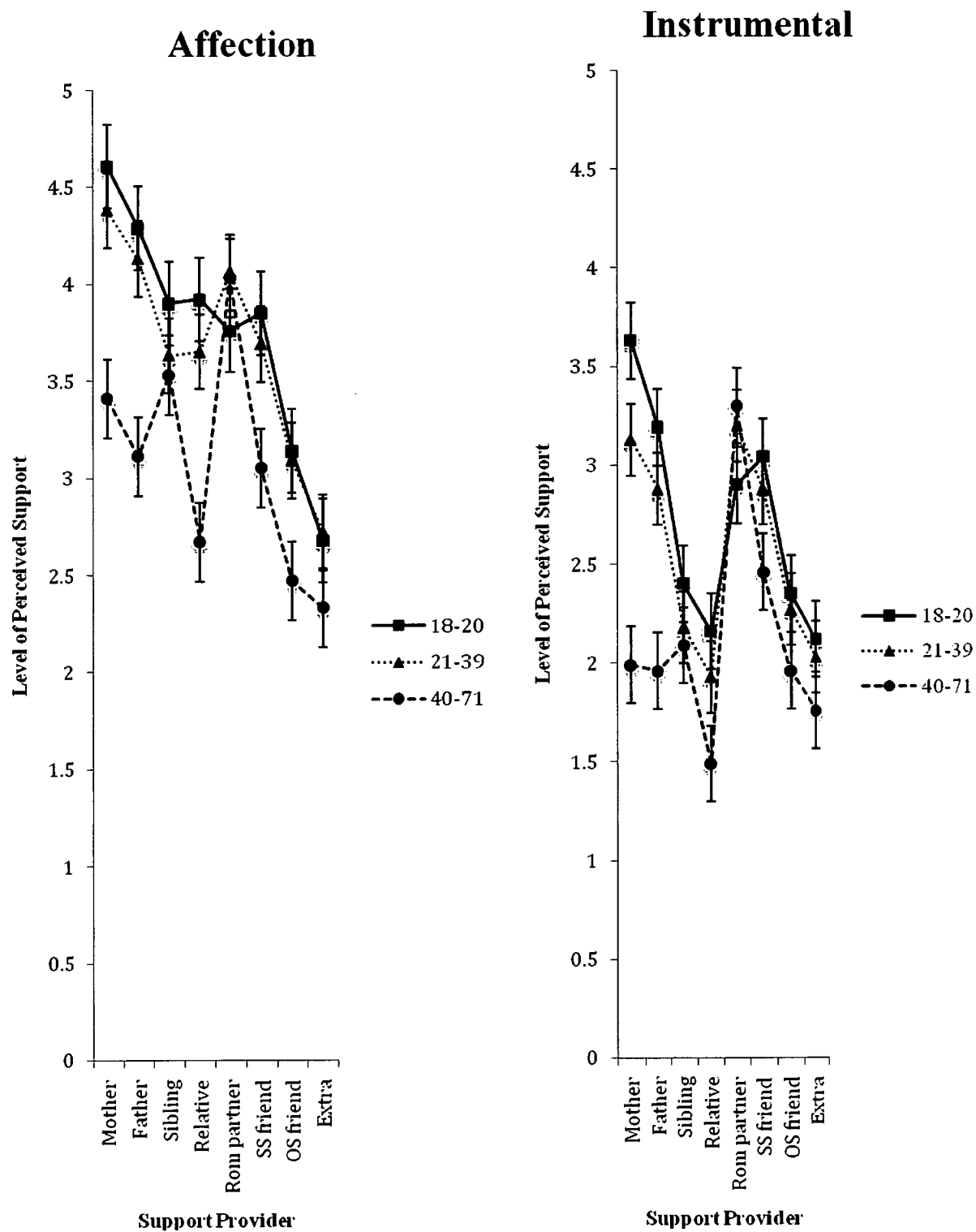


Figure 3. Means and standard errors of the average for 3 age groups, by support provider endorsed on the affection and instrumental subscales of the NRI.

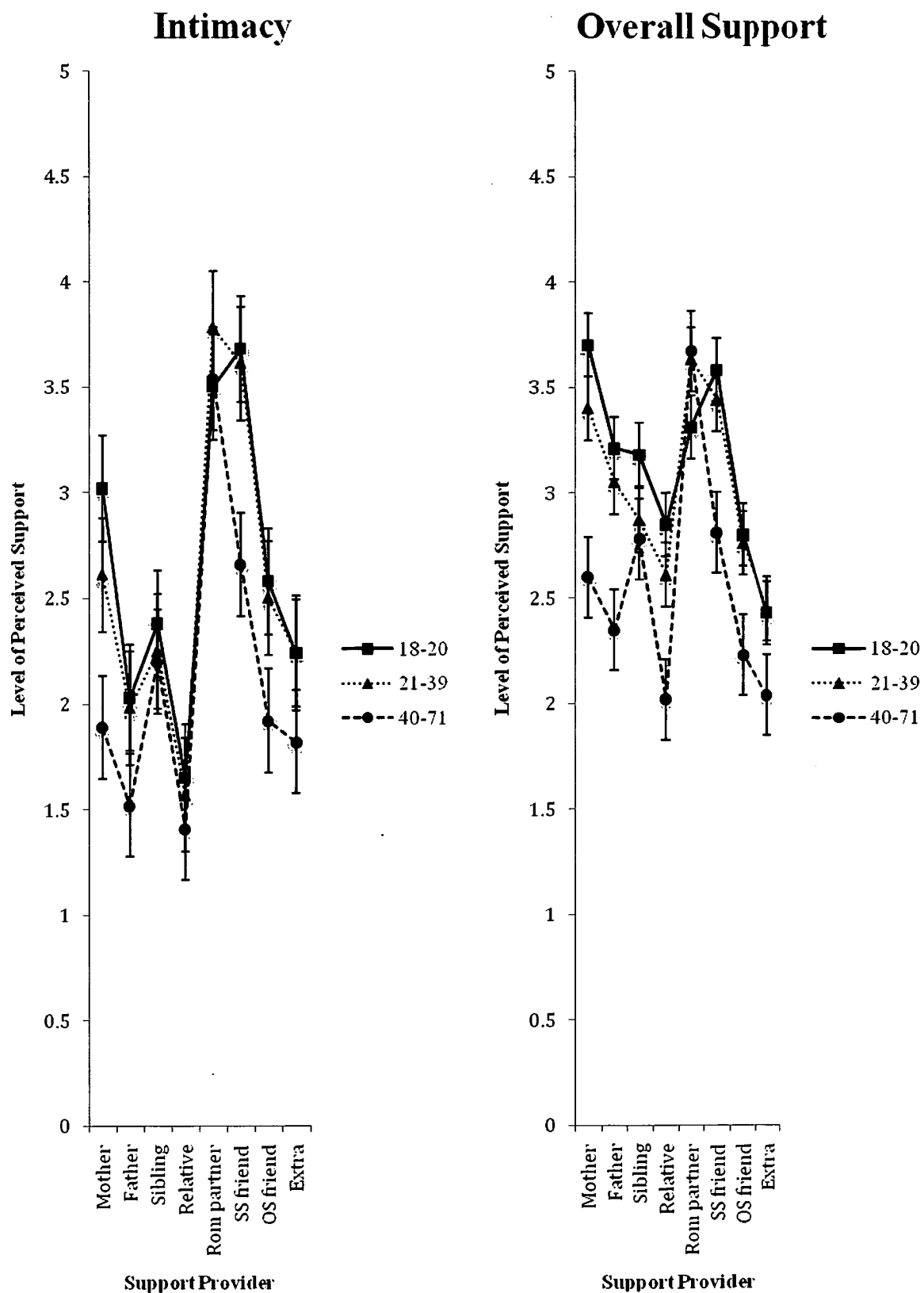


Figure 4. Means and standard errors of the average for 3 age groups, by support provider endorsed on the intimacy and overall support subscales of the NRI .

A number of mixed model ANOVA's were conducted to investigate main effects for sex and level of perceived support from each aide on each of the individual support types: instrumental, affection, intimacy and overall support. The independent between subjects factor for these analyses were either sex or age group, with the within subjects factor being each of the support types from the various providers. Bonferroni adjustment was conducted for all pairwise post hoc comparisons to correct for multiple comparisons. The alpha level of .002 was adopted for these analyses.

**Affection support.** A significant sex of participant x support provider interaction was revealed,  $F(1, 575) = 3.11, p < .05, \eta^2 = .38$ . Pillai's Trace indicated a significant main effect for support provider  $F(1, 575) = 80.74, p < .001, \eta^2 = .50$ . A significant sex difference was also found  $F(1, 575) = 18.35, p < .001, \eta^2 = .03$ , indicating that females reported receiving greater levels of affection than males.

Post hoc pairwise comparisons indicated significant differences between most providers of affection. Table 3 shows that affection from mothers was greater than affection received from all other support providers. Affection from fathers was greater than affection from siblings, same- and opposite- sex friends and other relatives. Interestingly, affection from fathers was rated similarly to affection from romantic partners. Affection from romantic partners was rated higher than affection from same- and opposite- sex friends. Sibling affection was rated higher than affection from opposite-sex friends and was rated similarly to affection from romantic partner.

**Instrumental support.** A significant sex of participant x support provider interaction was also found,  $F(1, 575) = 3.79, p < .001, \eta^2 = .05$ . Pillai's Trace again indicated a significant main effect for support provider,  $F(1, 575) = 91.33, p < .001, \eta^2 = .53$ . A significant sex main effect was then also found for instrumental support,  $F(1, 575) = 8.92, p <$

.001,  $\eta^2 = .02$ , indicating that females perceived a higher level of instrumental support than males

Table 4 shows post hoc pairwise comparisons between providers of instrumental support. Similar to affection, mothers were reported to have higher means than most providers. However, unlike affection, instrumental support from mothers and romantic partners as well as mothers and fathers were not significantly different. Instrumental support from fathers was rated significantly higher than instrumental support from siblings and opposite-sex friends. There was no significant difference between instrumental aid from fathers and romantic partners and fathers and same-sex friends. Instrumental support from romantic partners was also rated at a similar level to same sex friends. Instrumental support from siblings was only significantly higher than instrumental support from same-sex friends.

**Intimacy support.** The sex of participant x type of support provider was also found to be significant,  $F(1, 575) = 11.83, p < .001, \eta^2 = .13$ . Pillai's Trace revealed a significant main effect for intimacy support provider,  $F(1, 575) = 179.57, p < .001, \eta^2 = .69$  and a significant main effect for sex,  $F(1, 575) = 88.45, p < .001, \eta^2 = .05$ , indicating that females reported higher levels of intimacy than did male participants.

When looking at the results of post hoc pairwise comparisons, the pattern of differences between support providers was in contrast to the pattern found for affection and instrumental support. Table 5 shows that intimacy from romantic partner was significantly higher than intimacy from all support providers, apart from same sex friends. Intimacy from mothers was significantly higher than intimacy from fathers, sibling and same-sex friends. However, intimacy from mothers and opposite-sex friends were not significantly different from each other. Intimacy from fathers was only significantly greater than intimacy from other relatives. Intimacy from siblings was significantly greater than from intimacy from

fathers and other relatives. Intimacy from same-sex friends was significantly greater than intimacy from siblings and opposite-sex friends.

**Overall support.** A sex of participant x type of support provider, was also found to be significant for overall support,  $F(1, 575) = 5.28, p < .001, \eta^2 = .06$ . Pillai's Trace revealed a significant main effect for overall support provider,  $F(1, 575) = 82.62, p < .001, \eta^2 = .50$  and a significant main effect for sex,  $F(1, 575) = 14.62, p < .001, \eta^2 = .025$ , indicating a higher level of overall support reported by females in the study.

Post hoc pairwise comparisons between support providers of overall support can be seen in Table 6. Support from mothers was significantly greater than support from fathers, siblings and opposite-sex friends. Support from mothers and romantic partners was not significantly different. Support from romantic partners was similar to support from same-sex friends, but significantly higher than support from fathers, siblings and opposite-sex friends. Support from same-sex friends was significantly greater than support from opposite-sex friends, siblings and fathers. Support from fathers was significantly greater than support from opposite sex-friends and other relatives and it was similar to the support levels reported from siblings.

In summary, results of the post hoc analyses comparisons showed that mothers and romantic partners appeared to be the most highly rated support providers for all support types investigated. Support from friends also appeared to play an important role.

Table 3

*Pairwise Comparisons Using Bonferonni Adjustments for Comparisons of Support Providers of Affection Support*

Support Provider	Compared to Support Provider	<i>p</i>	> or <
Mother	Father	< .001	Mother > Father
Mother	Sibling	< .001	Mother > Sibling
Mother	Relative	< .001	Mother > Relative
Mother	Romantic Partner	< .001	Mother > Rom Partner
Mother	Same Sex Friend	< .001	Mother > SS Friend
Mother	Other Sex Friend	< .001	Mother > OS Friend
Mother	Extra Provider	< .001	Mother > Extra Prov
Father	Sibling	< .001	Father > Sibling
Father	Relative	< .001	Father > Relative
Father	Romantic Partner	= 1.00	Father ≈ Rom Partner
Father	Same Sex Friend	< .001	Father > SS Friend
Father	Other Sex Friend	< .001	Father > OS Friend
Father	Extra Provider	< .001	Father > Extra Prov
Sibling	Relative	= 1.00	Sibling ≈ Relative
Sibling	Romantic Partner	= .139	Sibling ≈ Rom Partner
Sibling	Same Sex Friend	= 1.00	Sibling ≈ SS Friend
Sibling	Other Sex Friend	< .001	Sibling > OS Friend
Sibling	Extra Provider	< .001	Sibling > Extra Prov
Relative	Romantic Partner	< .001	Relative < Rom Partner
Relative	Same Sex Friend	= 1.00	Relative ≈ SS Friend
Relative	Other Sex Friend	< .001	Relative > OS Friend
Relative	Extra Provider	< .001	Relative > Extra Prov
Romantic Partner	Same Sex Friend	< .001	Rom Partner > SS Friend
Romantic Partner	Other Sex Friend	< .001	Rom Partner > OS Friend
Romantic Partner	Extra Provider	< .001	Rom Partner > Extra Prov
Same Sex Friend	Other Sex Friend	< .001	SS Friend > OS Friend
Same Sex Friend	Extra Provider	< .001	SS Friend > Extra Prov
Other Sex Friend	Extra Provider	< .001	OS Friend > Extra Prov

Table 4  
*Pairwise Comparisons Using Bonferonni Adjustments for Comparisons of Support Providers of Instrumental Support*

Support Provider	Compared to Support Provider	<i>p</i>	> or <
Mother	Father	= .029	Mother $\approx$ Father
Mother	Sibling	< .001	Mother > Sibling
Mother	Relative	< .001	Mother > Relative
Mother	Romantic Partner	= 1.00	Mother $\approx$ Rom Partner
Mother	Same Sex Friend	= .001	Mother > SS Friend
Mother	Other Sex Friend	< .001	Mother > OS Friend
Mother	Extra Provider	< .001	Mother > Extra Prov
Father	Sibling	< .001	Father > Sibling
Father	Relative	< .001	Father > Relative
Father	Romantic Partner	= 1.00	Father $\approx$ Rom Partner
Father	Same Sex Friend	= 1.00	Father $\approx$ SS Friend
Father	Other Sex Friend	< .001	Father > OS Friend
Father	Extra Provider	< .001	Father > Extra Prov
Sibling	Relative	< .001	Sibling > Relative
Sibling	Romantic Partner	< .001	Sibling < Rom Partner
Sibling	Same Sex Friend	< .001	Sibling < SS Friend
Sibling	Other Sex Friend	= 1.00	Sibling = OS Friend
Sibling	Extra Provider	= .013	Sibling $\approx$ Extra Prov
Relative	Romantic Partner	< .001	Relative < Rom Partner
Relative	Same Sex Friend	< .001	Relative < SS Friend
Relative	Other Sex Friend	< .001	Relative < OS Friend
Relative	Extra Provider	= 1.00	Relative $\approx$ Extra Prov
Romantic Partner	Same Sex Friend	= .036	Rom Partner $\approx$ SS Friend
Romantic Partner	Other Sex Friend	< .001	Rom Partner > OS Friend
Romantic Partner	Extra Provider	< .001	Rom Partner > Extra Prov
Same Sex Friend	Other Sex Friend	< .001	SS Friend > OS Friend
Same Sex Friend	Extra Provider	< .001	SS Friend > Extra Prov
Other Sex Friend	Extra Provider	= .001	OS Friend > Extra Prov

Table 5  
*Pairwise Comparisons Using Bonferonni Adjustments for Comparisons of Support Providers of Intimacy Support*

Support Provider	Compared to Support Provider	<i>p</i>	> or <
Mother	Father	< .001	Mother > Father
Mother	Sibling	< .001	Mother > Sibling
Mother	Relative	< .001	Mother > Relative
Mother	Romantic Partner	< .001	Mother < Rom Partner
Mother	Same Sex Friend	< .001	Mother < SS Friend
Mother	Other Sex Friend	= 1.00	Mother ≈ OS Friend
Mother	Extra Provider	< .001	Mother > Extra Prov
Father	Sibling	< .001	Father < Sibling
Father	Relative	< .001	Father > Relative
Father	Romantic Partner	< .001	Father < Rom Partner
Father	Same Sex Friend	< .001	Father < SS Friend
Father	Other Sex Friend	< .001	Father < OS Friend
Father	Extra Provider	= 1.00	Father ≈ Extra Prov
Sibling	Relative	< .001	Sibling > Relative
Sibling	Romantic Partner	< .001	Sibling < Rom Partner
Sibling	Same Sex Friend	< .001	Sibling < SS Friend
Sibling	Other Sex Friend	= .909	Sibling ≈ OS Friend
Sibling	Extra Provider	= 1.00	Sibling ≈ Extra Prov
Relative	Romantic Partner	< .001	Relative < Rom Partner
Relative	Same Sex Friend	< .001	Relative < SS Friend
Relative	Other Sex Friend	< .001	Relative < OS Friend
Relative	Extra Provider	< .001	Relative < Extra Prov
Romantic Partner	Same Sex Friend	= .003	Rom Partner ≈ SS Friend
Romantic Partner	Other Sex Friend	< .001	Rom Partner > OS Friend
Romantic Partner	Extra Provider	< .001	Rom Partner > Extra Prov
Same Sex Friend	Other Sex Friend	< .001	SS Friend > OS Friend
Same Sex Friend	Extra Provider	< .001	SS Friend > Extra Prov
Other Sex Friend	Extra Provider	< .001	OS Friend > Extra Prov

Table 6  
*Pairwise Comparisons Using Bonferonni Adjustments for Comparisons of Support Providers of Overall Support*

Support Provider	Compared to Support Provider	<i>p</i>	> or <
Mother	Father	< .001	Mother > Father
Mother	Sibling	< .001	Mother > Sibling
Mother	Relative	< .001	Mother > Relative
Mother	Romantic Partner	= .490	Mother ≈ Rom Partner
Mother	Same Sex Friend	= 1.00	Mother ≈ SS Friend
Mother	Other Sex Friend	< .001	Mother > OS Friend
Mother	Extra Provider	< .001	Mother > Extra Prov
Father	Sibling	= 1.00	Father ≈ Sibling
Father	Relative	< .001	Father > Relative
Father	Romantic Partner	< .001	Father < Rom Partner
Father	Same Sex Friend	< .001	Father < SS Friend
Father	Other Sex Friend	< .001	Father > OS Friend
Father	Extra Provider	< .001	Father > Extra Prov
Sibling	Relative	< .001	Sibling > Relative
Sibling	Romantic Partner	< .001	Sibling < Rom Partner
Sibling	Same Sex Friend	< .001	Sibling < SS Friend
Sibling	Other Sex Friend	= .001	Sibling > OS Friend
Sibling	Extra Provider	< .001	Sibling > Extra Prov
Relative	Romantic Partner	< .001	Relative < Rom Partner
Relative	Same Sex Friend	< .001	Relative < SS Friend
Relative	Other Sex Friend	= 1.00	Relative ≈ OS Friend
Relative	Extra Provider	= .006	Relative > Extra Prov
Romantic Partner	Same Sex Friend	= .126	Rom Partner ≈ SS Friend
Romantic Partner	Other Sex Friend	< .001	Rom Partner > OS Friend
Romantic Partner	Extra Provider	< .001	Rom Partner > Extra Prov
Same Sex Friend	Other Sex Friend	< .001	SS Friend > OS Friend
Same Sex Friend	Extra Provider	< .001	SS Friend > Extra Prov
Other Sex Friend	Extra Provider	< .001	OS Friend > Extra Prov

**Family Support Providers.** Follow up one-way ANOVAs were conducted to investigate sex differences between aides. Females reported higher levels of support from their mothers than males for all forms of support: affection,  $F(1, 576) = 6.11, p < .05$ , instrumental support,  $F(1, 576) = 13.68, p < .001$ , intimacy,  $F(1, 576) = 17.30, p < .001$  and overall support,  $F(1, 576) = 11.46, p < .05$ . In relation to support from fathers, a sex difference was only found for affection  $F(1, 576) = 6.32, p < .05$ , with females again reporting higher levels of affection from fathers than did males.

In the case of siblings, females reported higher levels of intimacy  $F(1, 576) = 5.52, p < .05$ , and overall support  $F(1, 576) = 3.99, p < .05$  than did males. Females reported higher levels of affection  $F(1, 576) = 7.37, p < .05$ , and overall support  $F(1, 577) = 7.32, p < .05$ , from their relatives than did males.

**Romantic Support Provider.** No significant differences were found in the levels of perceived support between males and females from their romantic partners on any of the forms of support. This indicates that both sexes reported similar levels of overall support, intimacy, affection and instrumental support from their romantic partners.

**Friend Support Providers.** Females reported significantly higher levels of affection  $F(1, 576) = 25.74, p < .001$ , instrumental support  $F(1, 576) = 9.57, p < .05$ , intimacy  $F(1, 576) = 76.29, p < .001$  and overall support  $F(1, 576) = 30.62, p < .001$  from same-sex friends than did males. No significant sex differences were found for all support types from opposite-sex friends.

**Extra Support Provider.** Participants were asked to rank one additional support provider. Despite variation in the chosen additional support providers, females reported significantly greater levels of affection  $F(1, 576) = 12.16, p < .05$ , instrumental support  $F(1, 576) = 8.12, p < .05$ , intimacy  $F(1, 576) = 16.75, p < .001$ , and overall support  $F(1, 576) = 10.52, p < .05$ , from these providers than did males..

**Age Differences.** When investigating differences in support networks across age, participants were split in to three age groups (18-20, 21-39 and 40+). These groups were then compared in terms of main effects for support provider and age differences, and possible age group x support provider interactions. Post hoc pairwise comparisons are displayed in Tables 3-6 and are discussed above.

**Affection support.** A significant age group x support provider interaction was also revealed,  $F(1, 546) = 5.94, p < .001, \eta^2p = .47$ . Pillai's Trace indicated a significant main effect for support provider,  $F(1, 546) = 68.11, p < .001, \eta^2p = .47$  and a significant main effect for age group,  $F(2, 546) = 36.54, p < .001, \eta^2p = .12$ .

**Instrumental support.** A significant interaction of age group of participant x type of support provider was also found for instrumental support,  $F(1, 546) = 8.79, p < .001$ . Pillai's Trace showed a significant main effect for support provider of instrumental support,  $F(1, 546) = 81.05, p < .001, \eta^2p = .51$  and a significant main effect for age group,  $F(2, 546) = 30.93, p < .001, \eta^2p = .10$ . Again younger participants reported the highest mean level of support.

**Intimacy support.** A significant age group of participant x support provider for intimacy interaction was found,  $F(1, 546) = 5.25, p < .001, \eta^2p = .06$ . Pillai's Trace for intimacy revealed a significant main effect for support provider,  $F(1, 546) = 166.95, p < .001, \eta^2p = .68$  and a significant main effect for age group, with younger participants reporting instrumental support at the highest level, followed by the 21-39 year olds and then the 40+ participants.  $F(2, 546) = 23.65, p < .001, \eta^2p = .08$ .

**Overall support.** A significant age group x type of support providers was also found for overall support  $F(1, 546) = 5.84, p < .001, \eta^2p = .07$ . Pillai's Trace indicated a significant main effect for provider type for overall support,  $F(1, 546) = 79.71, p < .001, \eta^2p = .51$ . For this kind of support, a significant main effect was also found for age group,  $F(2, 546) =$

35.23,  $p < .001$ ,  $\eta^2 = .11$ , indicating a significant difference in the level of overall support reported by the three age groups. The same pattern was again observed, with mean overall support reported at the highest level by the 18-20 year old age group, followed by the 21-39 year olds and then the 40+ participants.

**Family Support Providers.** Further follow up one-way ANOVAs were conducted to investigate age differences in reported levels of perceived support from the various providers. Significant differences were found between the age groups' perceived levels of all forms of support from their mothers and fathers. Therefore, significant results were found for mother affection  $F(2, 548) = 49.29$ ,  $p < .001$ , mother instrumental support  $F(2, 548) = 73.13$ ,  $p < .001$ , mother intimacy  $F(2, 548) = 27.81$ ,  $p < .001$ , and mother overall support  $F(2, 548) = 51.49$ ,  $p < .001$ , and father affection  $F(2, 548) = 31.10$ ,  $p < .001$ , father instrumental support  $F(2, 548) = 33.56$ ,  $p < .001$ , father intimacy  $F(2, 548) = 7.92$ ,  $p < .001$ , and father overall support  $F(2, 548) = 25.05$ ,  $p < .001$ . For all of these aides, the youngest age group reported the highest means, followed by the middle aged participants, with the older group in the study reporting the lowest mean level of parental support.

Significant differences were also found between age groups in the level of perceived support of particular types from siblings. These significant differences were found in reported level of sibling affection  $F(2, 548) = 3.49$ ,  $p < .05$ , instrumental support  $F(2, 548) = 3.61$ ,  $p < .05$ , and overall support  $F(2, 548) = 6.54$ ,  $p < .05$ . Again, younger participants had the highest mean response, followed by the middle aged group, with the older participants of the study recording the lowest level of sibling support.

When examining support from relatives significant differences were found between the age groups for affection  $F(2, 548) = 31.77$ ,  $p < .001$ , instrumental support  $F(2, 548) = 13.23$ ,  $p < .001$ , and overall support  $F(2, 549) = 27.26$ ,  $p < .001$ . The same pattern of

younger participants reporting significantly higher levels of support from this provider compared to the other age groups was observed.

**Romantic Support Provider.** Non-significant age differences between participants' levels of perceived romantic affection and intimacy were found. Significant differences were found between age groups for instrumental support from romantic partners,  $F(2, 548) = 4.47$ ,  $p < .05$ , and overall support  $F(2, 548) = 4.50$ ,  $p < .05$ . In this case, the older age group reported higher means followed by the middle group and younger participants on both forms of support.

**Friend Support Providers.** The age groups were found to significantly differ on all forms of support from both same sex and other sex friends. Results indicated a significant difference between the groups' same sex friends' affection  $F(2, 548) = 22.29$ ,  $p < .001$ , instrumental support,  $F(2, 548) = 11.72$ ,  $p < .001$ , intimacy  $F(2, 548) = 26.59$ ,  $p < .001$ , and overall support  $F(2, 548) = 27.73$ ,  $p < .001$ . These differences were then also observed between the groups' level of other sex friends' affection,  $F(2, 548) = 11.93$ ,  $p < .001$ , instrumental support,  $F(2, 548) = 4.32$ ,  $p < .05$ , intimacy  $F(2, 548) = 9.48$ ,  $p < .001$ , and overall support  $F(2, 548) = 11.40$ ,  $p < .001$ . For all of these types of support the younger age group reported significantly higher means than the other age groups.

**Extra Support Provider.** No significant differences were found between the age groups' mean level of reported support from the additional support provider for all support types.

### **Social Support and Psychological Distress**

Means and standard deviations were calculated for female and male responses to the Depression, Anxiety and Stress Scale and are presented in Table 7. Standard deviations are presented in the parenthesis.

Table 7

*Male and Female Mean Responses and Standard Deviations on the Depression, Anxiety and Stress Scales of the DASS*

	Male	Female
Depression	7.95 (9.76)	7.86 (9.04)
Anxiety	5.75 (6.87)	6.87 (7.58)
Stress	11.11 (9.41)	12.80 (9.55)

One-way ANOVA revealed non-significant sex differences between reported levels of Depression, Anxiety and Stress.

**Overall Support.** To look at relationships between variables prior to conducting regression analyses, the intercorrelations between the support providers of both instrumental and overall support and the subscales of the DASS were completed. Correlations between each of the subscales of the DASS were also calculated. These are shown in Appendix G, Tables 5 and 6.

Backwards stepwise regressions were then conducted to investigate predictors of depression, anxiety and stress measured by the DASS. Results for these analyses are displayed in Tables 8 and 9. The overall support measure was used as this is the average of many of the support types. Focusing on overall support also addressed the issue of multicollinearity between the other support types. The overall support from mother, father, sibling, relative, romantic partner, same sex friend, other sex friend and extra support provider were all entered in to the regression as predictor variables for each psychological distress measure (depression, anxiety and stress) as the outcome variables separately. Males and females were analysed separately to investigate any difference in the level of prediction of psychological wellbeing. The same was then performed using instrumental support.

The final model for males  $F(3, 150) = 6.56, p < .001$ , predicting 11.6% of the variance in anxiety, was better than the null model. However, no predictors of females' anxiety were found amongst the providers described in this study  $F(1, 415) = 2.91, p = .09$ . In the case of male anxiety it can be seen from Tables 8 and 9 that support from both siblings and extra support providers positively predicted anxiety. Romantic support negatively predicted male anxiety.

Table 8

*Predictor Coefficient Details of the Final Regression Model for Predicting Levels of Anxiety, Depression and Stress in Males*

Predictors	<i>b</i>	95% CI			<i>p</i>
		Lower	B	Upper	
Anxiety					
Constant		-.14	3.87 (2.03)	7.88	= .059
Sibling Support	.22	.42	1.35 (.47)	2.27	= .004
Romantic Support	-.21	-1.89	-1.08 (4.1)	-.27	= .009
Extra Support	.20	.24	.95 (.36)	1.65	= .009
Depression					
Constant		3.79	9.20 (2.74)	14.60	= .001
Sibling Support	.22	.59	1.91 (.67)	3.23	= .005
Romantic Support	-.25	-3.00	-1.85 (.59)	-.69	= .002
Stress					
Constant		9.36	14.03 (2.37)	18.71	< .001
Romantic Support	-.20	-2.56	-1.44 (.57)	-.32	= .012
Extra Support	.18	.13	1.12 (.50)	2.11	= .027

The final model for both Males  $F(2, 151) = 7.92, p = .001$  predicting 9.5% of the variance of depression, and females  $F(1, 415) = 6.74, p = .01$  predicting 1.6% of the variance of depression, were better than the null hypothesis. When looking at the predictors for depression, support from siblings was found to be a predictor for both males and females. In

the case of males, support from siblings was found to positively predict depression and for females, sibling support was found to negatively predict depression. Support from romantic providers was also found to negatively predict depression in males.

Table 9

*Predictor Coefficient Details of the Final Regression Model for Predicting Levels of Anxiety, Depression and Stress in Females*

Predictors	<i>b</i>	95% CI			<i>p</i>
		Lower	B	Upper	
Anxiety					
Constant		6.48	8.58 (1.07)	10.67	< .001
Romantic Support	-.08	-1.06	-.49 (.29)	.08	= .089
Depression					
Constant		8.46	10.97 (1.28)	13.48	< .001
Sibling Support	-.13	-1.78	-1.06 (.39)	-.25	= .010
Stress					
Constant		12.61	15.27(1.35)	17.93	< .001
Sibling Support	-.10	-1.62	-.81 (-.42)	.01	= .053

The final model for males  $F(2, 151) = 5.45, p = .005$  predicting 6.7% of the variance of stress was found to be better than the null hypothesis. For females however, the result was not significant  $F(1, 415) = 3.78, p = .053$ . Support from romantic providers was found to negatively predict stress in males. Support from extra providers however was found to positively predict stress in male participants. No support providers were found to be significant predictors of stress levels in female participants.

**Instrumental Support.** Further backwards stepwise regressions were then conducted to investigate the association between instrumental support and psychological distress. Results are displayed in Tables 10 and 11. For males the final model was found to be better than the null hypothesis  $F(4, 146) = 5.08, p = .001$ , predicting 12.2% of the variance, but not

for females,  $F(1, 414) = 1.91, p = .17$ . As can be seen from Table 9 and Table 10, both sibling and extra support person predicted higher levels of anxiety symptoms in males, however, instrumental support from romantic partner predicted lower levels of these symptoms. Despite the same sex friend being part of the significant final model, this provider itself did not predict levels of symptoms. Similar analyses with females were found to be non-significant, indicating none of the instrumental support providers predicted symptoms of anxiety.

Table 10

*Predictor Coefficient Details of the Final Regression Model for Predicting Levels of Anxiety, Depression and Stress in Males from Instrumental Support*

Predictors	<i>b</i>	95% CI			<i>p</i>
		Lower	B	Upper	
Anxiety					
Constant		1.91	5.94 (2.04)	9.97	= .004
Sibling Support	.27	.65	1.63 (.49)	2.62	= .001
Romantic Support	-.16	-1.65	-.83 (.41)	-.01	= .047
Same Sex Friend Support	-.15	-2.39	-1.15 (.63)	.10	= .071
Extra Person Support	.22	.30	1.10 (.41)	1.90	= .008
Depression					
Constant		5.92	11.54 (2.84)	17.15	< .001
Sibling Support	.36	1.67	3.05 (.70)	4.43	< .001
Romantic Support	-.19	-2.56	-1.42 (.58)	-.27	= .015
Same Sex Friend	-.20	-3.79	-2.10 (.85)	-.42	= .015
Stress					
Constant		9.87	15.35 (2.72)	20.83	< .001
Sibling Support	.22	.43	1.77 (.68)	3.11	= .010
Romantic Support	-.21	-2.56	-1.47 (.56)	-.32	= .010
Same Sex Friend Support	-.22	-3.91	-2.21 (.86)	-.11	= .011
Extra Support	.21	.35	1.44 (.55)	2.53	= .010

In the case of depression, the final model for both males  $F(3, 147) = 7.90, p < .001$ , predicting 13.9% of the variance, and females  $F(1, 414) = 5.57, p = .017$ , predicting 1.4% of the variance, were better than the null hypotheses. As can be seen from Tables 9 and 10, instrumental support from siblings was a significant predictor of depressive symptoms in males and females, with it predicting higher levels in males but lower levels in females. Instrumental support from romantic partners and same sex friend was also found to predict lower levels of depressive symptomatology in males.

Table 11

*Predictor Coefficient Details of the Final Regression Model for Predicting Levels of Anxiety, Depression and Stress in Females from Instrumental Support*

Predictors	<i>b</i>	95% CI			<i>p</i>
		Lower	B	Upper	
Anxiety					
Constant		-.14	8.14 (.96)	7.88	< .001
Romantic Support	-.07	-.96	-.40 (.29)	.17	= .168
Depression					
Constant		8.07	10.05 (1.01)	12.04	< .001
Sibling Support	-.12	-1.69	-.93 (.39)	-.17	= .017
Stress					
Constant		12.97	15.07 (1.07)	17.17	< .001
Sibling Support	-.11	-1.77	-.96 (.41)	-.16	= .019

Finally, again for stress, both of the final models for females  $F(1, 414) = 5.50, p = .019$ , predicting 1.3% of the variance, and males  $F(4, 146) = 5.03, p = .001$ , predicting 12.1% of the variance, were better than the null hypotheses in predicting levels of stress in participants. Again, as seen in Tables 10 and 11, the support from siblings was protective for females, predicting lower levels of stress, and not so for males, predicting higher levels of stress. For males, extra person instrumental support was also found to predict higher levels of

stress. Much the same as for depression, males' instrumental support from same sex friends and romantic partners were found to predict lower levels of depressive symptoms.

### **Discussion**

The present study was conducted with the aims of investigating: preferred support provider; sex differences in support type and support provider; age differences in support type and support provider; and support providers who were predictors of psychological wellbeing and distress. The current study was conducted to address issues identified in previous studies and to also follow up findings indicating a possible link between social support and psychological distress. Based on previous findings and limitations it was hypothesised that: romantic partners would be the preferred support provider selected by participants overall; females would report higher levels of perceived social support for all forms of support, and from all aides: family providers, friend providers, and extra providers. Males and females would however perceive a similar level of support from romantic partners; younger participants would report higher levels of perceived support for all forms of support, from all aides: family providers, friend providers, and extra providers. Older adults would however perceive a similar level of support from romantic partners; and overall support, from most aides, would predict lower levels of psychological distress. However, instrumental support from some aides, particularly family members, may predict higher levels of psychological distress.

### **Age and Sex Differences in Social Support**

**Sex Differences.** As predicted, romantic partners were the preferred support aide within this sample. This was closely followed by support from mothers. These findings were consistent with developmental social models showing that as adults begin to form romantic relationships, they move away from primary family support, to support from their spouse (Antonucci & Akiyama, 1987; Colarossi, 2001; Furman & Buhrmester, 1992). It also

provided further support to Chapman (2010), who found that both sexes generally turned to their romantic partners for support over other aides. The findings regarding a highly ranked preference for mothers' support likely indicated that despite this shift, the evolving relationship between parent and child is still an important one for both sexes (Furman & Buhrmester, 1992). Unlike most of these cited studies, the current study used a sample of a varying age range rather than a specific time in the developmental trajectory. Therefore, the current study both supported and extended previous research by suggesting that a population of varying ages would endorse their romantic partner as the preferred provider of support, but would also place high importance on family support.

Partial support for hypothesis 2 was found. The current study showed that females reported higher levels of perceived social support than did males. This finding was consistent with the results from researchers including Furman and Burhmester (1992), Helsen, Vollebergh and Meeus (2000), Kendler, Myers and Prescott (2005) and Shumaker and Hill (1991). When support from individual support providers was considered, females reported receiving greater levels of support from mothers, siblings, relatives, same sex friends and the additional aide. However, males and females reported receiving similar levels of support from their romantic partners, fathers and other sex friends. Despite the similar levels expected for romantic partners, non-significant differences for fathers and other sex friends were not predicted, therefore not supporting the predictions of hypothesis 2. Therefore, despite a trend indicated by results of previous works, the current study instead suggested that when this was broken down, females only reported higher levels of support from particular providers.

Chapman (2010), Caldwell and Peplau (1982) and Kunkel and Burleson (1999) all suggested that males tended to prefer female support providers. The current study revealed that both males and females reported their romantic partner as their preferred aide, closely followed by their mother, supporting this research. These findings also provided further

support for Coventry, Gillespie, Heath, and Martin (2004) who maintained that as people gain further independence with age and begin to form their own families, the role of the family, particularly spouses, become more pertinent. The results of the current study also provided some support for the increasing importance of friendships (Colarossi, 2001; Furman & Buhrmester, 1992). Although the romantic partner was the preferred support provider in this sample, friends were still ranked highly in post hoc results. Previous research had indicated a shift from family to friends, however the current study's results indicated that while friends were important for participants, they were often ranked below or equal to that of mothers and romantic partners. This indicated that despite the changing support system, particular family providers may still remained pertinent, often more so or equally as much as friends. Therefore, again by using a sample of multiple age groups the current study was able to extend works and show that despite a changing support system throughout the ages, family of origin and family acquired by marriage were still important.

Further investigations in relation to age and sex differences, uncovered other interesting significant main effects and interactions. As is shown by Figure 1 females reported to be more highly supported by a greater number of people than did males. This supported previous research showing that females tended to have greater support networks than males (Furman & Burhmester, 1992; Helsen, Vollebergh, & Meeus, 2000; Kendler, Myers, & Prescott 2005; Shumaker & Hill, 1991). Kunkel and Burleson (1999) suggested that this difference may be associated with females' need to express themselves emotionally, therefore extending their networks to fulfil this desire. It is also possible that this was reflective of the different quality of providers, or that they may have differing types of relationships with the different providers.

When examining different support types using ANOVA analyses, the current study provided further support for the results of previous t-tests. These analyses revealed that

females reported significantly higher levels of all forms of support from their mothers, same sex friends and extra support providers than did males. They were also found to significantly differ for two forms of support, intimacy and overall, from their siblings, as well as affection and overall supports from their relatives. Females were also found to report higher levels of affection from their fathers. The result that females reported higher levels of affection from their fathers was consistent with some previous research. For example, Gerslma and Emmelkamp (1994) as well as Kagan and Lemkin (1960) found that daughters reported higher levels of affection from their fathers compared to sons. It may be that affection from fathers was in response to the greater needs for this emotional responsiveness that their daughters require. The study therefore furthered the findings of previous studies by providing results regarding the differences in not only amount of support, but also the specific support types and providers rated by males and females.

In sum, Hypothesis 2 was partially supported. Results indicated that as expected females did report both higher levels of support overall, higher levels of all types of support, as well as equal levels of support from their romantic partners. However, they too had equal levels of support from their other sex friends, and most forms of support from their fathers, as males. It appears that while males and females were both able to utilise particular aides, such as romantic partners, females reported higher levels of support from a greater variety of people. This supported previous research by Kendler, Myers and Prescott (2005) indicating females are better at getting their needs met from various providers and Antonucci and Akiyama's (1987) who indicate that this is likely to be consistent throughout the lifespan. By using a population with varying ages, the current study was able to both support previous findings, and extend these by contributing to literature on both type of support and aide provider reported by males and females throughout most of the adult lifespan.

**Age Differences.** Significant age differences were also found by the present study. As predicted, younger participants (18-21 year olds) reported higher levels of all forms of support compared with the older age groups in the study, supporting Hypothesis 3. Further support for Hypothesis 3 was then found when looking at the follow up ANOVA results. From these findings it was seen that younger participants reported higher levels of perceived support from most aides. This may be reflective of the particular stage of life that these individuals were in as this is a time when independence is being formed (Colarossi, 2001; Furman & Buhrmester, 1985; Furman and Buhrmester, 1992; Furman & Shaffer, 1999). For this age group, the new role of romantic partners, the increasing importance of friendships and changes in the parent-child relationship all occur around this stage of development. It is also a time when role transitions from school to university or the workforce occurs. This, therefore, could explain the greater need to access support at this period of within the lifespan.

Despite reporting lower levels of support overall, the older age group were seen to utilise a particular member of their support system more so than did younger participants. As predicted, the older age groups reported receiving greater instrumental and overall support from romantic support providers than did the other age groups. This was consistent with Antonucci and Akiyama (1987) who found that as people age there is a greater reliance placed upon romantic partners. However, pairwise comparisons indicated that other providers such as mothers and friends still played a particularly important role in providing instrumental, intimacy and overall supports to this age group. These findings suggested that for some participants, these were still important relationships to hold on to as they age.

The results discussed were an indicator of the changing support system throughout adult development (Colarossi, 2001; Coventry, Gillespie, Heath, & Martin, 2004; Furman, & Buhrmester, 1992; Kendler, Myers, Prescott, 2005; Levitt, Weber, & Guacci, 1993). The

present study asked participants to rank support provided from their own mother, father, sibling, relative, romantic partner, same sex friend, other sex friend and one additional person. Therefore, in these age ranges as people begin to make their own families, relationships change with those from the family of origin, with priorities may shifting slightly (Coventry, Gillespie, Heath, & Martin, 2004; Furman and Buhrmester, 1992). This is also a time when parents may pass away, or children may take on the new role of carer to their parents. People may move apart from siblings or begin to feel that they do not share similar interests. In this stage of life social interaction also often becomes less coincidental. Despite this, mothers were still seen to be important, as well as other providers such as friends. This suggested that although romantic partners were incredibly important to people of all ages, other particular providers were also still essential within support networks. Therefore the current study replicated previous works by indicating older participants did highly utilise support from their romantic partner. Despite this the study also furthered findings by indicating that they too utilised support from their friends and family, just not to the same extent. By measuring age the study enabled a comparison of these groups indicating that despite higher levels of support reported at a younger age, similar supports were utilised by the age groups. The study also provided a level of insight in to the types of support received from these particular aides.

### **Social Support and Psychological Distress**

**Overall Support.** Partial support was also found for hypothesis 4. Despite the apparent changes throughout the lifespan outlined above, there appeared to be particular patterns of relationships which predicted psychological distress in males. For males, overall support from siblings was a predictor of higher levels of anxiety and depression. In females, however, overall support from siblings was found to predict lower levels of depression. This indicated that this form of support from siblings may not act as a protective factor in men's

psychological wellbeing. However, it may act as a protective factor against depressive symptoms in females. Searcy and Eisenberg (1992) and Avioli (1989) reviewed the positive and negative impacts of sibling relationships on psychological well-being. They suggested that sibling support could be helpful as the relationship facilitates the sharing of family experiences, but on the reverse side, such relationships could also be filled with competition, and the perception of meddling. It may be the case that females in the current study saw their siblings as a helpful confidant whereas males may have found their sibling relationships stressful to maintain. This finding extended previous works regarding sibling relationships as much of these had focused on constructs such as self esteem and self worth instead of measures such as depression and anxiety. Therefore, the current study found what previous studies and reviews had suggested, that in some cases sibling relationships could have negative impacts, in the current study impacts were specifically measured as psychological functioning.

Consistent with Hypothesis 4, overall support from romantic partners was associated with lower levels of psychological distress in males. This finding supported previous studies showing that support can be a positive and protective for psychological wellbeing (Elliott, Marmarosh, & Pickelman, 1994; Lara, Leader, & Klein, 1997; White, Bruce, Farrell & Kliever, 1998). However, coupled with the above findings, results indicated that the commonly held belief that providing support to individuals will assist their psychological wellbeing may not be true in all cases, particularly for males.

**Instrumental Support.** In the case of instrumental support, again support from siblings may play a role in predicting both psychological distress and wellbeing depending on sex. Contrary to the hypothesis, instrumental support was associated with lower levels of depressive and stress symptoms in females. However, instrumental support from siblings, as well as extra providers, predicted higher levels of psychological distress in men. These

particular findings were consistent with suggestions by Chen and Feeley (2012) and as well as Merz, Consedine- Shulze and Schuengel (2010) who indicated a link between receipt of instrumental aid, particularly from family members, and lower levels of psychological wellbeing. The current study however found this was only the case for males receiving instrumental support from siblings, providing limited support for this aspect of hypothesis 4. This finding also differed from the findings of Chapman (2010) who found that instrumental support from fathers was predictive of higher levels of anxiety. This current finding may instead be better explained by Fisher, Nadler, and Witcher-Alagna (1982) who indicated that a negative reaction to instrumental support may be due to the characteristics of the donor, the amount of aid provided and the extent to which it meets the recipient's need. It may be that support from siblings was perceived by men inappropriate, unwarranted or contrary to their needs. Sex roles may also have had an impact, with females more open to support from providers, and males more protective of whom they allow in. Males may also perceive that they are expected to provide financially thus making their response to financial aid more detrimental to their mental health.

Instrumental support from both romantic partners and same sex friends was found to be predictors of lower levels of depression, anxiety and stress in males. Chapman (2010) too found that instrumental support from romantic partners was predictive of lower levels of anxiety. As discussed previously, the role of romantic partners has been found to be very important, particularly to males who tend to have smaller support networks than females. This is a likely explanation for the links between this form of support and psychological wellbeing.

A large proportion of the research investigating links between support and psychological distress have used participants who have been identified as being within problematic relationships and or difficult life circumstances (Durden, Hill, & Angel, 2007;

Holahan & Moss, 1981; Horwitz, McLaughlin, & White, 1998; Turner, 1981; Schuster, Kessler, & Aseltine, 1990). These studies have provided vital information regarding the links between negative interactions within relationships and psychological distress. As the current study did not include a measure of relationship quality, the study provided important findings with regard to the general population in a range of relationships, by indicating that support from across a broad spectrum of relationships can predict psychological distress in men.

Results from all of the regression analyses conducted, indicate a gender-specific pattern of prediction. For females, both overall and instrumental support from their siblings was predictive of lower levels of depression and stress. For males, these forms of support were detrimental to their anxiety, depression and stress. In the case of protective functions of support to males, overall and instrumental support from romantic partners was linked to lower levels of anxiety, depression and stress. Same sex friends too predicted lower levels of these measures of psychological distress, based solely on the level of their perceived instrumental support. Therefore, this indicated that the support system of females as a whole, may not predict levels of psychological distress. Instead siblings may be an important provider of support that protects females' psychological wellbeing. For males, however, there were various people who impacted their wellbeing and distress levels including their additional providers, siblings, same sex friends and romantic partners. These results may indicate that because of the smaller support network observed in males, those who are in it may more easily be able to influence the level of functioning, either positively or negatively, rather than females who receive support from a greater number of providers who all assist functioning. Findings also furthered results regarding the support systems impact on psychological wellbeing and distress. Siblings have been noted to possibly negatively impact the self worth and esteem of individuals, however the current study indicated that this may only be an issue for males and that the impact may include depressive and anxiety symptoms.

## **Practical and Theoretical Implications**

The study's findings have provided practical implications for therapeutic practice. When working with clients, clinicians often promote the importance of reengaging with community and social networks (Klein, Cnaan, & Whitecraft, 1998; Siegel, Tracy, & Corvo, 1994). The current study indicates that while this can be useful for some people within the community, the particular relationships may need to be examined before clients are encouraged to increase engagement for psychological benefit. For example, sibling relationships appear to be problematic for men, but not for females. The size of the support network should also be considered and whether a large social support network will indeed protect or further impede psychological well-being.

There are some noteworthy theoretical implications of the current study. Research has shown that females do generally report higher levels of support than do males. However, there are certain providers which both males and females may be able to utilise equally such as romantic partners, fathers and other sex friends. In terms of age, younger individuals reported higher support from all individuals within the support system, apart from partners, indicating the increased reliance on romantic support providers as people age. This is most likely a reflection of the changing needs and availability of support providers that occurs throughout the lifespan.

The association between support and psychological distress found in the present study also has important theoretical implications. A significant amount of the research about these links has been with regard to problematic, dysfunctional relationships. The current study used a general sample. It therefore provides information regarding how a variety of individuals were impacted by those in their support system. Rather than holding the belief that social support is important in psychological wellbeing, the research instead indicated that there may

be caveats to that, that instead some providers and some forms of support may be linked to higher levels of distress rather than wellbeing.

### **Limitations and Future Directions for Research**

The current study included a sample primarily of university students. Although effort was made to recruit outside of a university population, a large proportion of participants were from this source due to lack of interest from participants in the general community.

Therefore, this creates problems with the generalisability of results to the general population.

Similarly, of those participants who indicated their sex on the survey, 155 were male and 422 were females. Although this was enough of a gender split to enable comparison of the two groups, a more even split would be desirable for future research. The mean age of participants was also  $M = 26.33$  ( $SD = 11.50$ ), indicating that the study had a lot of younger participants, although an attempt was made to attract older participants. The standard deviation indicates variability in participants' age, but a wider age range would have been preferred for comparisons. A number of participants also did not report their age. Many of those participants who did not report their age reported that they had been in a romantic relationships and friendships for long periods of time. Therefore, it appears that many older participants did not report their age. This suggested that the mean age of participants may have been higher but because of missing data from presumed older participants it was not.

Findings in relation to predictability of overall and instrumental support providers, and levels of either psychological wellbeing or distress, also require further investigation. The method used within the study was exploratory, and therefore in future a confirmatory approach would assist to provide further information regarding these results. The current study could also only hypothesise regarding the possible reasoning behind these findings based on previous theories, but cannot imply causality in results. Therefore, there could be

extraneous variables, or important aspects of particular relationships not explored in this study, which better explain these findings.

One such aspect of relationships not explored by the study was relationship quality. Without this, the impact of the quality of individual relationships could not be used as a factor in analyses to determine if this impacted such things as psychological distress.

The measure selected for the study also required participants to rank particular support providers including their mother, father, sibling, relative, romantic partner, same sex friend, other sex friend and one additional person. Although the measure has been found to be a reliable and valid way of assessing the perceived level of social support from these particular people, it may have missed some vital support providers. Despite these people being important providers in a vast majority of people's lives, it may be useful in future research to allow participants to rank other known important providers such as their own children. Although participants were able to rank one additional person, which in some cases was a child of a participant, it was difficult to collate and compare this data as most people ranked different providers. It also made it difficult for participants who did not have a sibling, or had a parent who was deceased.

In the case of deceased support providers, participants response to rating this person lacked consistency. Some people ranked these aides as though they were still alive, some on the level of support they provided when they were still alive and others based on the current level of support which was nothing due to their passing. Due to this inconsistency, this may have impacted results and is therefore a limitation. In the case of romantic partners, people ranked either a current partner or a previous relationship therefore also placing a limitation on the interpretation of these results.

Finally, it must also be mentioned that the study, along with the majority of the previous studies mentioned throughout, required participants to use a self report measure as a

part of a cross sectional design. This particular type of design and the type of measure used may have impacted results, with participants reported levels of support impacted by their current psychological state. Therefore, further longitudinal research, with measures of support which are independently assessed, are required.

## **Conclusion**

The current study aimed to contribute to previous research in the area of social support. The findings provided important information with regard to differences in support networks between males and females, throughout the lifespan and possible links between psychological distress. Overall, the study found that females reported higher levels of support than did males. However, males and females reported receiving similar levels of support from fathers, other sex friends and romantic partners. The current study also showed that romantic partners were the preferred support provider for participants, closely followed by mothers. This finding was reflective of changing support networks as people age, with greater reliance on family of creation rather than family of origin. Although many of the findings require further exploration, the study provided further support for sex and age differences in social support networks. It also added to the growing body of research that is beginning to question the previous assumption that all support is helpful. Instead it indicates that perhaps people, particularly men, need to be more considerate regarding their relationships. It may be important for men to reflect on the possible implications these relationships may have on their psychological functioning. These findings also provide important implications for therapeutic work and possible considerations to be made before suggesting social engagement to improve psychological functioning.

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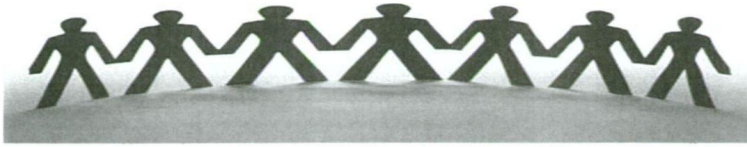
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## Appendix A

### Advertisement Used to Recruit University Participants



## Social Support and Psychological Wellbeing in Adults

Researchers from the University of Tasmania are conducting research into adults social support networks and their association with psychological wellbeing.

This is an important study because social support has been shown to play a protective role in peoples psychological well being

**The researchers need adults aged 18 years and over to answer some questions about their social support networks and general levels of psychological distress.**

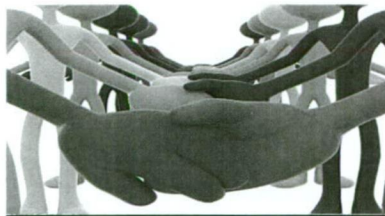
**Participants do not need to be showing signs of distress to take part in this study.**

**All adults in this age group are welcome to participate in the study.**

Participation involves completion of a survey package containing questions about social support networks and general levels of depression, anxiety and stress. Questionnaires will take approximately half an hour to complete.

This package can be obtained from room Leanne Low's office (110 of the humanities building) within the school of psychology, or through contacting either the chief investigator or student researcher through e-mail.

Participants who wish to enter will also go in to the draw to win a \$50 gift voucher!!



Dr. Mandy Matthewson, associate lecturer  
[Mandy.Matthewson@utas.edu.au](mailto:Mandy.Matthewson@utas.edu.au)

Catherine Lacey, Masters in Psychology (clinical) student,  
[cmlacey@utas.edu.au](mailto:cmlacey@utas.edu.au)

## **Appendix B**

### **Advertisement for Participants Outside of University**



## Social Support

Researchers from the University of Tasmania are conducting research into adults social support networks and their association with psychological wellbeing.

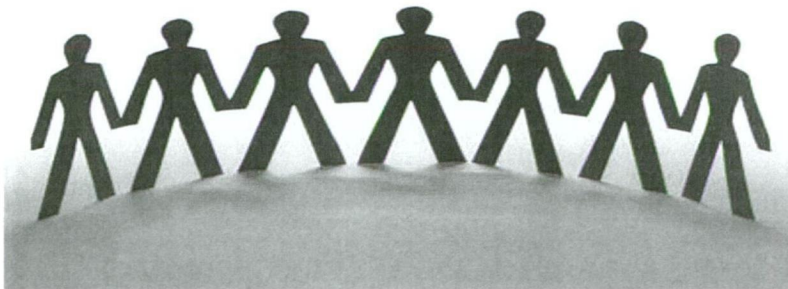
This is an important study because social support has been shown to play a protective role in peoples psychological well being

**The researchers need adults aged 18 years and over to answer some questions about their social support networks and general levels of psychological distress . Participants do not need to be showing signs of distress to take part in this study. All adults in this age group are welcome to participate in the study.**

Participation involves completion of a survey package containing questions about social support networks and general levels of anxiety. Questionnaires will take approximately half an hour to complete.

This package can be obtained from either the chief investigator or student researcher through e-mail.

Participants who wish to enter will also go in to the draw for a chance to win a \$50 gift voucher from Mitre 10.



Dr. Mandy Matthewson, associate lecturer  
[Mandy.Matthewson@utas.edu.au](mailto:Mandy.Matthewson@utas.edu.au)

Catherine Lacey, Masters in Psychology (clinical) student, [cmlacey@utas.edu.au](mailto:cmlacey@utas.edu.au)

## Appendix C

### Information Sheet for University Students



UNIVERSITY  
OF TASMANIA

## Information Sheet

Sex differences in adults social support networks  
and associations with levels of psychological wellbeing

Dear Participant,

You are invited to participate in a research study investigating adults social support networks. Social support networks can be understood as the group of relationships an individual has that provide physical and emotional support. Due to this social support networks have been found to be associated with psychological well-being. For example having a strong social support network has been shown to have a relationship with lower levels of undesirable emotion, such as depression and low self-esteem.

The current research study aims to address a gap in previous research regarding adults social support networks and other aspects of psychological wellbeing. This study is being conducted by Catherine Lacey, as part of her Masters in Clinical Psychology, supervised by Dr. Mandy Matthewson from the School of Psychology. This study will be investigating the factors that influence peoples social support networks and levels of psychological wellbeing and distress. Previous research has demonstrated that biological sex is an influencing factor on children and adolescents social support networks but it is not clear whether this trend extends into adulthood. It has also been demonstrated previously that there is an association between perceived social support and negative emotional factors and the current study will investigate this further.

With your help this study will identify the factors that influence and share a relationship with peoples' social support networks. Specifically it hopes to identify:

- The effects sex and age has on adults social support networks; and
- The association between adults social support networks and psychological wellbeing

Participation in this study involves completing the survey package attached to this information sheet. The survey package includes the Network of Relationships Inventory and the Depression, Anxiety and Stress Scales. The Network of Relationships Inventory contains eight items identifying people within your social support network and 31 items on a five point scale identifying the levels of support you gain from each of these individuals. The Depression, Anxiety and Stress Scale contains 42 items on a 0 to 3 point scale, identifying the levels of depression, anxiety or stress you have felt over the past week. Completion of the survey package will take approximately half an hour and is entirely voluntary; if at any stage you feel uncomfortable you can withdraw from completing the survey package. Completion and submission of this survey package signifies consent to participate in the study.

Participation in this study is confidential. Participants are invited to enter the draw to win a \$50 Mitre 10 voucher. Students within the university can either use participation in the study as credit or enter the draw to win the voucher. There is a raffle ticket attached to all surveys and participants can complete the name and phone number section of this ticket to enter the draw. Those within the university wishing to enter the draw can remove the raffle ticket and place it in the box next to where completed surveys are placed. Participants from outside the university can

simply leave their completed ticket attached to the completed survey and send it back to the researcher using the provided envelope. Completed raffle tickets will be removed from surveys as soon as they are received to ensure anonymity.

The data for this study will be retained in a locked cabinet and secure server in the University of Tasmania, Sandy Bay Campus School of Psychology for a total of five years, after this period the data will be destroyed. A summary of the findings of this study will be posted on the University of Tasmania website (<http://fcms.its.utas.edu.au/scieng/psychol/Research.asp>) or can be e-mailed to you upon request.

There are no risks anticipated from participation in this research.

This study has been approved by the Tasmanian Social Science Human Research Ethics Committee. If you have concerns or complaints about the conduct of this study should contact the Executive Officer of the HREC (Tasmania) Network on (03) 6226 7479 or email [human.ethics@utas.edu.au](mailto:human.ethics@utas.edu.au). The Executive Officer is the person nominated to receive complaints from research participants. You will need to quote the HREC project number: H0011173.

If you have any further questions about this study or the concepts it is investigating feel free to contact Catherine Lacey through e-mail on [cmlacey@utas.edu.au](mailto:cmlacey@utas.edu.au), or Mandy Mathewson through e-mail on [Mandy.Matthewson@utas.edu.au](mailto:Mandy.Matthewson@utas.edu.au).

If you wish to participate in this study please complete the survey package and place it in the appropriate box within the School of Psychology (outside room 110 of the Humanities Building in Hobart). This information sheet is yours to keep.

Thank you for taking the time to consider this research study.

**Dr. Mandy Matthewson**  
**Associate Lecturer**  
**School of Psychology**

**Catherine Lacey**  
**Master of Clinical Psychology Student**  
**School of Psychology**

**Appendix D**  
**Information Sheet for Businesses**



UNIVERSITY  
OF TASMANIA

## Information Sheet

Sex differences in adults social support networks  
and associations with levels of anxiety

Dear [business name/manager name],

Your business is invited to participate in a research study investigating adults social support networks. Social support networks can be understood as the group of relationships an individual has that provide physical and emotional support. Due to this social support networks have been found to be associated with psychological well-being. For example having a strong social support network has been shown to have a relationship with lower levels of undesirable emotion, such as depression and low self-esteem. However, there is little research into the factors that influence adults social support networks and whether an association with levels of anxiety exists.

The current research study aims to address this gap in previous research regarding adults social support networks. This study is being conducted by Catherine Lacey, as part of her Masters in Clinical Psychology, supervised by Dr. Mandy Matthewson from the School of Psychology. This study will be investigating the factors that influence peoples social support networks and levels of anxiety. Previous research has demonstrated that biological sex is an influencing factor on children and adolescents social support networks but it is not clear whether this trend extends into adulthood. It has also been demonstrated previously that there is an association between perceived social support and negative emotional factors, but whether there is an association with levels of anxiety has not been investigated.

With your help this study will identify the factors that influence and share a relationship with peoples' social support networks. Specifically it hopes to identify:

- The effects sex and age has on adults social support networks; and
- The association between adults social support networks and psychological wellbeing

If your business can help, we ask that you simply display the provided advertisement in your business where your employees can see it. Employees who are interested in participating in the survey can contact us directly.

Participation in this study involves completing the survey package attached to this information sheet. The survey package includes the Network of Relationships Inventory. The Network of Relationships Inventory contains eight items identifying people within your social support network and 27 items on a five point scale identifying the levels of support you gain from each of these individuals. The survey package also includes a 42-item measure of depression, anxiety and stress levels. Completion of the survey package will take approximately 30 minutes and is entirely voluntary; if at any stage participants feel uncomfortable they can withdraw from completing the survey package. Completion and submission of this survey package signifies consent to participate in the study. Further, if participants complete the survey, they can go in to the draw for a chance to win a \$50 gift voucher from Mitre 10.

Participation in this study is confidential and your business will not be identified as participating in this study. The data for this study will be retained in a locked cabinet and secure server in the University of Tasmania, Sandy Bay Campus School of Psychology for a total of five years, after this period the data will be destroyed. A summary of the findings of this study will be posted on the University of Tasmania website (<http://fcms.its.utas.edu.au/scieng/psychol/Research.asp>) or can be e-mailed to you upon request.

There are no risks anticipated from participation in this research.

This study has been approved by the Tasmanian Social Science Human Research Ethics Committee. If you have concerns or complaints about the conduct of this study should contact the Executive Officer of the HREC (Tasmania) Network on (03) 6226 7479 or email [human.ethics@utas.edu.au](mailto:human.ethics@utas.edu.au). The Executive Officer is the person nominated to receive complaints from research participants. You will need to quote the HREC project number: H11173.

If you have any further questions about this study or the concepts it is investigating feel free to contact Catherine Lacey through e-mail on [cmlacey@postoffice.utas.edu.au](mailto:cmlacey@postoffice.utas.edu.au), or Mandy Mathewson through e-mail on [Mandy.Matthewson@utas.edu.au](mailto:Mandy.Matthewson@utas.edu.au).

If you wish to participate in this study please complete the attached consent form. We are also happy to meet with you and your staff to discuss the research further. This information sheet is yours to keep.

Thankyou for taking the time to consider this research study.

**Dr. Mandy Matthewson**  
**Associate Lecturer**  
**School of Psychology**

**Catherine Lacey**  
**Master of Clinical Psychology Student**  
**School of Psychology**

## Appendix E

### Consent Form for Businesses

## CONSENT FORM

### Sex differences in adults social support networks and associations with levels of anxiety

1. I have read and understood the 'Information Sheet' for this project.
2. The nature and possible effects of the study have been explained to me.
3. I understand that the study involves me distributing information about the research project to my employees on the researchers' behalf.
4. I understand that interested employees can contact the researchers directly.
5. I understand that all research data will be securely stored at the University of Tasmania premises for five years, and will then be destroyed.
6. Any questions that I have asked have been answered to my satisfaction.
7. I agree that research data gathered from my employees may be published, however all identifying information will be kept confidential including the name of the business.
8. I understand that the researchers will maintain confidentiality and that any information supplied to the researchers will be used only for the purposes of the research.
9. I also understand that I can withdraw my business from participating in the study at any time.
10. I agree to distribute information about the study on the researchers' behalf.

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Name of Business Manager:

Name of Business:

Telephone:

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Manager's Signature:

Date:

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#### Statement by Investigator

- ☐ I have explained the project and the implications of participation in it and I believe that the consent is informed and that he/she understands the implications of their participation
- ☐ The Business has received the Information Sheet where my details have been provided to gain more information if so required.

Name of Investigator:

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Signature of Investigator:

Date:

---

**Appendix F**  
**Ethics Approval**

Social Science Ethics Officer  
 Private Bag 01 Hobart  
 Tasmania 7000 Australia  
 Tel: (03) 6226 1332  
 Fax: (03) 6226 7146  
 marilyn.pugsley@utas.edu.au




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HUMAN RESEARCH ETHICS COMMITTEE (TASMANIA) NETWORK

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27 April 2011

Dr Mandy Mathewson  
 Psychology  
 Private Bag 30  
 Hobart Tasmania

Dear Dr Mathewson

Re: APPROVAL FOR AMENDMENT TO CURRENT PROJECT  
 Ethics Ref: H0011173 - Sex differences in adults social support networks and  
 associations with levels of anxiety.  
 Amendment: Dated 23 March 2011. Changes to personnel; source of recruitment; number of  
 participants; measures and inclusion of incentive to participants.

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We are pleased to advise that the Chair of the Tasmania Social Sciences Human Research Ethics  
 Committee approved the Amendment to the above project on 25/4/2011.

Yours sincerely

Marilyn Pugsley  
 Ethics Officer

**Appendix G**  
**Additional Analyses**

Table 1.

*Internal Consistency of the Affection Subscale on the NRI-SPV for Each Support Provider*

Affection Support Provider	$\alpha$
Mother	.93
Father	.93
Sibling	.91
Relative	.92
Romantic Partner	.94
Same Sex Friend	.89
Other Sex Friend	.87
Extra Provider	.89

Table 2.

*Internal Consistency of the Instrumental Subscale on the NRI-SPV for Each Support Provider*

Instrumental Support Provider	$\alpha$
Mother	.87
Father	.86
Sibling	.83
Relative	.83
Romantic Partner	.84
Same Sex Friend	.75
Other Sex Friend	.80
Extra Provider	.73

Table 3.

*Internal Consistency of the Intimacy Subscale on the NRI-SPV for Each Support Provider*

Intimacy Support Provider	$\alpha$
Mother	.92
Father	.90
Sibling	.91
Relative	.89
Romantic Partner	.93
Same Sex Friend	.90
Other Sex Friend	.91
Extra Provider	.90

Table 4

*Internal Consistency of the Overall Support Subscale on the NRI-SPV for Each Support Provider*

Overall Support Provider	$\alpha$
Mother	.95
Father	.95
Sibling	.95
Relative	.94
Romantic Partner	.97
Same Sex Friend	.95
Other Sex Friend	.95
Extra Provider	.95

Table 5

*Summary of Correlations between Support Providers of Instrumental and Overall support and Scales on the DASS*

Support Provider and Type	Scale of the DASS		
	Depression	Anxiety	Stress
Mother Instrumental	-.03	.07	.02
Father Instrumental	-.03	.05	-.01
Sibling Instrumental	-.00	.03	-.04
Relative Instrumental	-.02	.02	-.02
Romantic Partner Instrumental	-.07	-.07	-.03
Same Sex Friend Instrumental	-.03	.05	-.02
Other Sex Friend Instrumental	.04	.07	.02
Extra Provider Instrumental	-.01	.11**	.07
Mother Overall Support	-.05	.06	-.01
Father Overall Support	-.04	.06	-.01
Sibling Overall Support	-.04	.01	-.04
Relative Overall Support	-.01	.05	.00
Romantic Partner Overall Support	-.09*	-.10*	-.04
Same Sex Friend Instrumental	-.04	.04	-.04
Other Sex Friend Instrumental	-.01	.04	-.02
Extra Friend Instrumental	-.05	.07	.04

\*\*  $p < .001$ , \*  $p < .05$

Table 6

*Correlations between Subscales on the DASS*

Scale on the DASS	Scale on the DASS		
	Depression	Anxiety	Stress
Depression	-	.72**	.75**
Anxiety		-	.82**
Stress			-

\*\*  $p < .001$ , \*  $p < .05$