THE EFFECT OF SOCIAL SUPPORT TYPE ON RESILIENCE

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ABSTRACT

Despite the importance of resilience, the ability to recover from negative events and adapt to difficult conditions, as well as the role that communication may play in people's ability to do so, limited relevant research exists on this topic in the communication field. Most previous research has focused primarily on emotional support, a single type of social support. Therefore, the present study explored the relationship among five types of social support (i.e., emotional, esteem support, network, tangible, informational) and resilience. To this end, the researchers obtained survey data from undergraduate students attending the University of Alabama. The present study conducted a multiple regression analysis and a moderated regression analysis to test the two research questions using SPSS, ultimately offering meaningful results indicating that social support influences resilience as well as how this relationship is affected by sex roles of the support receivers.

Keywords: emotional support, esteem support, network support, tangible support, informational support, resilience, sex roles

DEDICATION

To my adored father, Dai Hoon Jang; my dearly loved mother, Jeong Nam Lee; my valuable younger brother, Jihwan Jang; my love, Hanksu Moon - their faith and devotion has made me the person I am today.

LIST OF ABBREVIATIONS AND SYMBOLS

Alpha   level of acceptable significance; in statistical hypothesis testing, the probability of making a Type I error; Cronbach's index of internal consistency (a form of reliability)

β Beta, Standardized coefficient; in statistical hypothesis testing, the probability of making a Type II error

F F distribution, Fisher's F ratio

M Sample mean, arithmetic average

N Sample size; number of cases

p Probability associated with the occurrence under the null hypothesis of a value as extreme as or more extreme than the observed value

[R]   Reverse-coding

r r statistic or r value; estimate of the Pearson product-moment correlation coefficient

R^2 R^2 statistic or R^2 value : coefficient of determination; measure of strength of relationship; estimate of the Pearson product-moment correlation squared

SD Standard deviation

VIF   A value of variance-inflating factors

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CONTENTS

LIST OF TABLES

CHAPTER 1

INTRODUCTION

People who experience crises, disappointments, or loss derive comfort from the support of family and friends (Procidano & Heller, 1983; Ptacek, Pierce, Dodge, & Ptacek, 1997). Such social support aids individuals in the maintenance of positive mental health and successful adaptation during stressful situations. Resilience is basically thought of as positive adaptations or ability to sustain psychological health despite adversities (Herrman et al., 2011). Within the fields of counseling and psychology, extant research indicates a link between social support and resilience (Rutter, 1987; Smith, 1999; Werner, 1995).

To date, few studies in the field of communication have examined the link between social support and resilience. This dearth of research is notable considering the importance of individuals' ability to recover from negative events and adapt to difficult conditions as well as the significant role communication may play in influencing this ability. The present study addresses these questions. Specifically, the majority of previous research has treated emotional support as constituting the entirety of social support. However, the present study explores the influence of five types of social support on resilience. This study also examines how the sex roles of support receivers impact the relationship between social support and resilience.

Social support helps individuals cope with life changes or difficulties by providing them with situational needs (Xu & Burleson, 2001). According to Goldsmith (2004), a variety of factors causing stressful situations impact the influence of social support. For instance, individuals prefer certain types of social support depending on their needs in different situations.

Consequently, the effects of social support vary as well. Thus, whereas previous research has focused primarily on emotional support as a single type of social support, the present study explores the relationships between five types of social support (i.e., emotional, esteem, network, tangible, and informational) and resilience.

Emotional support provides individuals with the feeling that they are cared for by others, allowing them to feel more comfortable in the face of adversity. Esteem support refers to the contributions of others in developing an individual's sense of competence or self-esteem, whereas network support represents an individual's sense of belonging in a group. Furthermore, tangible support refers to the instrumental assistance involved in aiding an individual through crisis problem solving (Cutrona, & Russell, 1990). Finally, informational support involves "advice, " "appraisal support," and "cognitive guidance" (Cohen & Wills, 1985).

Social support is associated with resilience through offerings of love, friendship, trust, and reassurance (Newman, 2003; Wilks & Spivey, 2010). Resilience has been referred to as the capacity, process, or outcome of positive adaptation despite negative situations (Masten, Best, & Garmezy, 1990). Among individuals coping with an ordeal, one third demonstrates resilience and effectively deal with their problems (Grotberg, 2000). Resilience can be built and developed with the support of others, who can offer assistance and encouragement.

Meanwhile, Vaux (1988) pointed out that individuals vary in their acceptance of support and react in ways that have implications for social support according to their masculine or feminine characteristics. Although feminine sex role characteristics facilitate social support through seeking, offering, and receiving social support from supportive relationships, masculine characteristics inhibit social support processes through a tendency to avoid seeking assistance from others or showing vulnerability (Burda & Vaux, 1987). This study therefore considers sex

roles as opposed to sex differences based on the premise that not all men have primarily masculinity nor all women show femininity. This distinction must be kept in mind, as this study anticipates that sex roles influence the relationship between social support and resilience.

Ultimately, this study presents meaningful results, indicating that five types of social support influence resilience. In other words, the significant role of communication in helping individuals overcome problems and facilitating successful adaptation is explained when people face crisis and are placed in stressful situations. This study also demonstrates how the social support-resilience relationship is influenced by the sex roles of those providing and receiving support.

CHAPTER 2

REVIEW OF LITERATURE

Social Support

Supporting others is a basic and representative form of human interaction and is expressed through diverse actions and behaviors, such as persuading, informing, or entertaining others. Supportive interactions are ubiquitous in human life (Burleson & MacGeorge, 2002). Moreover, social support is based upon the premise that people must depend on one another to satisfy certain basic needs (Cutrona, 1996), and social support allows individuals to feel that they are loved, cared for, and belong to a network of communication and mutual obligation (Cobb, 1976).

Although general agreement among the scholarship has emerged regarding the previously mentioned characteristics, dozens of definitions of social support exist. Xu and Burleson (2001) explained, "social support is the assistance that people provide to others when helping them cope with life changes and situational demands" (p.535). When faced with adversity, it is difficult for individuals to cope with these challenges by themselves. They need assistance, and such help can be considered social support. Caplan (1974) suggested that social support is comprised of "continuing social aggregates that provide individuals with opportunities for feedback about themselves and for validations of their expectations of others" (p. 4). Social support is not always based on the premise that people help one another only during difficult or stressful situations, but rather that individuals are able to help one another by interacting at all times.

In another definition, Rittenour and Martin (2008) explained, "social support, as it is

labeled in the field of communication, involves empathy, sympathy, concern, compassion, validation of feelings, and encouragement towards another" (p. 235). Social support can manifest as a variety of emotions that inspire individuals to help others. Kaplan, Cassel and Gore (1977) defined social support as "the gratification of a person's basic needs (approval, esteem, succor, etc.) by significant others" (p. 50). Social support has also been associated with the gratification that individuals feel in relationship to the receivers of the support provided.

As indicated, Xu and Burleson (2001) defined social support as assistance for people dealing with problems in changing situations, but other scholars' definitions have focused on social support as one type of positive social interaction that occurs in continuous situations. Social support can be explained in terms of temporary or continuous situations. Cutrona (1996) explained two types of social support: continuous interpersonal facilitation of an individual's well-being (e.g., a sense of security and self-efficacy) or the immediate provision of help when people are faced with stressful or adverse life events (e.g., deciding how to deal with a difficult instructor). Thus, scholars have offered varied definitions of social support, with some attempting to explain social support in the context of typical situations, while others focus on social support at times of crisis.

Social support can also be conceptualized as either provided or received support (Wethington & Kessler, 1986). Although perceived support involves an individual's sense of being loved and esteemed by others, such as family and friends, given support describes the actual advice or aid provided by others. Because social support is one of the most widely studied social processes (Goldsmith, 2004), scholars therefore vary in their perspectives, definitions, and conceptualizations of this topic. However, these varied definitions do share common components. Social support is provided through interactions with others and is closely related to individuals'

emotional or material factors.

The vast array of definitions and conceptualizations of social support also stems from the significance of its effects and the fact that so much research has been conducted on social support. In particular, social support has been studied in relation to health issues such as chronic illnesses (Kaplan, & Toshima, 1990; Ptacek, Pierce, Dodge, & Ptacek, 1997) and mental health issues, such as stress (Cobb, 1976; Cohen, & McKay, 1984; Crnic, Greenberg, Ragozin, Robinson, & Bssham,1983; Hobfoll & Stephens, 1990; MacGeorge, Samter, & Gillihan, 2005). These studies have indicated that social support helps individuals recover from illnesses and reduces stress levels.

Furthermore, a significant amount of research has identified connections between social support and social relationships (Goldsmith, McDermott, & Alexander, 2000; Gurung, Sarason, & Sarason, 1997; Sarason, Pierce, & Sarason, 1990) and between social support and personal traits, such as interpersonal competence (Buhrmeister, Furman, Wittenberg, & Reis, 1988; Cauce, 1986) and satisfaction with others (Cutrona, Hessling, & Shur, 1997). Social support allows individuals to build and broaden social networks, yielding higher levels of interpersonal competence and satisfaction with others. Such studies further demonstrate that supportive behavior and communication are closely linked with individuals' psychological and physical well-being by helping them maintain beneficial social relationships while also relieving illness and stress.

Considerations of Social Support

A multitude of studies have addressed the relationships between social support and a variety of issues by examining the following questions: (a) What is the type of problem? (b) Who is the source of the support? (c) What are the characteristics of the recipient? and (d) What kind of

6

support is given? (Wilcox & Vernberg, 1985). Social support is inextricably associated with these questions and it has been explained in different aspects. These considerations lead to better understanding of social support.

First, what is the type of problem? The effectiveness of social support differs according to the problems or stressors involved. Stressors can be caused by real life situations (Robbins & Delamater, 1985; Solomon, Mikulincer, & Hobfoll, 1986) or can be intentionally created by scholars for the purpose of research (Kamarck, Manuck, & Jennings, 1990; Sarason & Sarason, 1986). These factors influence stressor-support relationships. Many social support studies have been carried out in both natural and research-designed situations. These efforts have led scholars to actively study the taxonomies of social stressors (Magnusson, 1982).

If stressors are powerful and intense, the effects of social support may be reduced. For example, in a family, marital breakdown or the birth of a disabled child significantly reduces the received and actual availability of social support (as cited in Wilcox & Vernberg, 1985). These issues cannot be resolved all at once. Marital breakdown or the birth of a disabled child can produce consistent stress for family members over a long period of time. Because of such continuous stressors, family members often feel uncomfortable with one another and thus incapable of providing useful aid in these situations. Accordingly, dozens of studies have shown that social support does not demonstrate the same efficacy across problems or stressors; in fact, social support may sometimes yield no effect as a result of the stressors involved.

Second, who is the source of the support? Sources of social support may be spouses, lovers, parents, and friends, each of whom gives rise to different effects. As one type of social support, informational support provided by experts has been found to be more influential than similar support offered by non-experts, including family members and friends (Dakof & Taylor,

1990). When individuals experience health problems, social support from a spouse has been found to be significantly more important than social support provided by others (Kerns, & Turk, 1984; Manne, & Zautra, 1989; Ptacek, Pierce, Dodge, & Ptacek, 1997). Patients spend most of their time with their spouses and feel that a spouse provides the closest relationship. On the other hand, for younger individuals, social support from friends is more beneficial to one's well-being than social support from family members (Gillies & Lucey, 2006; Korkiamaki, 2011), because youth derive a sense of belonging and develop social skills by getting along with peers.

Although social support from family members is effective in times of crisis, social support from friends is more helpful when the problematic issues involved are related to the individual's well-being (Antonucci, 1985). People believe that friends and family have different standards as support providers. For instance, individuals tend to take for granted the support they receive from family members, assuming that this support is an obligation based on family bonds. However, because friends are not obligated in the same way to provide support, individuals tend to value support provided by friends more highly, which in turn bolsters the individual's well-being. The source of social support therefore impacts the effectiveness of the support provided.

Third, what are the characteristics of the recipient? The influence and effectiveness of social support can be discussed in terms of the recipients' characteristics. Different recipients necessitate different types of social support. Factors to be considered include an individuals' sex, age, race, background, psychological constructs, and interpersonal characteristics (Samter, 2002). Even if similar types of social support are offered, effects tend to vary based on recipients' characteristics. Furthermore, recipient characteristics influence reactions to the support provided (Burleson, & MacGeorge, 2002; MacGeorge, Graves, Feng, Gillihan, & Burleson, 2004; Xu & Burleson 2001). For example, an individual demonstrating feminine characteristics is more likely

to seek and receive social support within supportive relationships, whereas a person possessing masculine characteristics tends to avoid receiving help from others due to the perception that doing so is a sign of weakness (Burda & Vaux, 1987).

Finally, what kind of support is given? In addition to all the aforementioned factors (i.e., stressors, source of social support, receivers' characteristics), the kind of social support provided also influences its effectiveness. Various scholars have discussed, debated, and identified a variety of social support types, including emotional support, esteem support (or "self-esteem support"), tangible support (also called "instrument support" or "material support"), network support (also called "social integration" or "belonging support"), and informational support (or "appraisal support"). Although these categorizations vary slightly from scholar to scholar, it is noteworthy that each type of social support corresponds with a different level of efficacy.

Studies dealing with social support should therefore consider the type of problem, the source of the support, the characteristics of the recipient, and the types of support provided. The current study considers all types of stressors in mundane situations, as opposed to temporary situations, as well as social support from all types of sources, including family, friends, and others. With regard to recipient characteristics, femininity and masculinity are considered in conjunction with the five types of social support examined. This chapter more specifically describes the types of social support addressed.

Social support is not a unitary construct (Wilcox & Vernberg, 1985). Previous researchers have focused on defining and explaining the various types and characteristics of social support. As mentioned earlier, Xu and Burleson (2001) defined the following five types of social support: emotional, esteem, network, tangible, and informational. Emotional support involves substantial support and expressions of love, empathy, and concern; esteem support

involves expressions of respect, validation, and confidence that work to improve others' self-perceptions; network support involves the generation of feelings of social connection through expressions that bolster one's sense of belonging; tangible support refers to the provision of material assistance (e.g., goods, services, or similar resources); and finally, informational support refers to expressions that provide facts, advice, and appraisals pertaining to situations of concern.

Meanwhile, Wills and Shinar (2000) described four different dimensions of social support: emotional, informational, instrumental, and companionship. Compared to Xu and Burleson's (2001) five types of social support, instrumental support and companionship support represent different types of social support. Instrumental support refers to practical and immediate assistance that is provided when it is needed, including helping with chores, providing childcare, offering transportation, and lending money. Companionship support specifically allows individuals to participate in leisure and social activities, including recreational activities, trips, and cultural activities.

Cohen, Mermelstein, Kamarck, and Hoberman (1985) proposed four categories of social support: belonging, self-esteem, tangible, and appraisal support. According to these researchers, "Belonging support refers to the availability of people one can do things with and appraisal support to the availability of someone to talk to about one's problem" (Cohen, Mermelstein, Kamarck, & Hoberman, 1985, p. 75). Descriptions of the other types of social support included in that research basically mirror the explanations provided by other scholars.

Also, Cobb (1979) considered various types of social support, including emotional, network, esteem, instrumental, active, and material support. According to Cobb (1979), active support involves mothers caring for their infants or nurses caring for patients, whereas material support involves providing foods or services. Although material support characteristics overlap

with those of active support, distinctions between these support types do exist, as evidenced in the example of an overworked executive. A boss who offers assistance with a portion of the job would be providing active support, whereas a boss who allows the executive to buy equipment in order to expedite the work process would be providing material support.

Many other scholars have categorized social support types similarly to the existing types of social support. House suggested emotional concern (e.g., liking, love, empathy), instrumental aid (e.g., goods or services), information, and appraisal (e.g., information relevant to self-evaluation) (as cited in Cutrona & Russell, 1990). Cobb (1979) described three forms of social support: instrumental (e.g., counseling), active (e.g., mothering), and material support (e.g., goods and services). In addition, Weiss classified social support as attachment, social integration, reassurance of worth, guidance, and opportunity for nurturance, whereas Kahn categorized social support as affect, affirmation, and aid (as cited in Cutrona & Russell, 1990). Scholars have distinguished among types of social support, providing different names for the types of social support and to define their varied effects.

Most importantly, Cutrona and Russell (1990) noted that although all types of social support play a role in an individual's well-being and interpersonal relationships, each type is closely associated with specific dimensions. Therefore, this study deals with specific types of social support that can be easily explained in relation to resilience. Among the various components of social support, this study focuses on five types, which although they may have different names, possess a similar meaning. Tangible support refers to instrumental support (Cohen et al., 1985; Jacobson, 1987). Cohen and Wills (1985) described esteem support as self-esteem support. Moreover, despite the existence of many categories of social support, researchers in this field have generally agreed on five major components (Cutrona & Shur, 1994).

11

Each of these five types of social support is discussed below.

Emotional Support

Emotional support emphasizes feelings and is the most widely researched type of social support (Cutrona, 1996; Samter, 2002). Emotional support is also frequently reported to be the most effective type of social support (Dunkel-Schetter, 1984). Burleson (2003) explained that emotional support is associated with communicative behavior, which involves helping others cope with emotional distress. Emotional support is necessary for individuals seeking comfort and security in stressful circumstances, allowing them to feel as if they are cared for by others (Cutrona & Russell, 1990). According to Cutrona and Shur (1994), "Emotional support includes expressions of caring (e.g., 'I love you'), concern (e.g., 'Are you feeling better?'), empathy (e.g., 'You must have been really hurt by his coldness'), and sympathy (e.g., 'I am so sorry you are ill')" (p.116).

Although emotional support is just one of several types of social support, the majority of literature addressing this topic deals specifically with emotional support. A number of studies have demonstrated the relationships between emotional support and psychological, physical, and relational results. Bolton and Oatley (1987) found that emotional support reduced individuals' depressive symptoms. Similarly, in Kessler and Essex's (1982) and Krause's (1987) studies, emotional support was linked with better mental health outcomes. Cramer also indicated that emotional support helped recipients improve psychological adjustment, and Strogatz and James explained that emotional and tangible support aids in relieving symptoms of hypertension (as cited in Cutrona & Russell, 1990).

Simple studies investigating the connections between emotional relationships and psychological issues have identified relationships between emotional support and ameliorated

psychological symptoms in many specific kinds of stressful situations. According to Henry and Stephens, emotional support reduces the reactivity of the neuroendocrine apparatus, lessening an individual's level of psychological stress (as cited in Wilcox & Vernberg, 1985).

In nursing literature, it is widely accepted that emotional and esteem support are more influential than other social support types in addressing burnout and symptoms such as chronic stress, depression, and exhaustion (Metts, Geist, & Gray, 1994). Emotional and esteem support help to relieve burnout among various other symptoms. Norbeck (1985) studied emotional support in the context of employment situations and found that it was related to reductions in job stress and relief of psychological symptoms. In addition, in their study of college students, MacGeorge, Samter, and Gillihan (2005) found that emotional support and instrumental support were associated with decreased depression symptoms among the students.

Although debate exists over the effects of emotional support on physical conditions, many studies' findings support the claim that emotional support plays a significant role in maintaining or recovering physical health. A study by MacGeorge, Samter, and Gillihan (2005) failed to find that emotional support was related to symptoms of physical illness; however, Auerbach and Kilmann (1977) explained that the health of sick patients is improved when they receive emotional support. According to Seeman, emotional support relieves various diseases and injuries and lengthens individuals' life spans. According to previous research, emotional support also helps to alleviate heart disease and breast cancer (as cited in Burleson, 2003).

Recently, scholars have widely accepted that emotional support helps to improve individuals' well-being and health and increase levels of motivation (Swann & Brown, 1990) and life satisfaction (Wan, Jaccard, & Ramey, 1996). In particular, emotional support in the context of close relationships such as family members and friends fosters further positive social

relationships and the development interpersonal characteristics. According to Burleson, Kunkel, and Birch (1994), perceived emotional support between friends or romantic partners is of great significance to the maintenance of these relationships. Emotional support plays an integral role in developing and maintaining friendships and romantic relationships. Wethington and Kessler (1986) also indicated that emotional support that individuals receive from their spouses improves their emotional adjustment. Emotional support also influences individuals' interpersonal characteristics.

Scholars have also examined the usefulness of emotional support in different situations or environments. Coppotelli and Orleans (1985) found that emotional and instrumental support facilitated individuals' cessation of smoking. Mermelstein et al.'s study (1986) confirmed this finding. In addition, Robbins and Delamater (1985) found that both emotional and instrumental support were significant for women who had undergone abortions. Solomon, Mikulincer and Hobfoll (1986) found that social support helped Israeli combatants who had experienced severe stress, and they examined which types of social support were most effective. Emotional support helped to maintain group morale and ameliorated feelings of neglect. Furthermore, Tetzloff and Barrera found that emotional support moderated the detrimental effects of social changes (as cited in Cutrona & Russell, 1990).

Informational Support

Informational support involves any behavior or communication that offers advice, information, or training to help an individual solve problems (Cutrona & Russell, 1990). Informational support allows individuals to accept and understand stressful circumstances and helps them cope with problematic events. Informational support has also been referred to as "advice," "appraisal support," and "cognitive guidance" (Cohen &Wills, 1985). According to

Cutrona and Shur (1994), "Informational support includes advice (e.g., 'I think you should tell your supervisor'), factual input (e.g., 'If you do not treat the infection quickly, it will get worse') and feedback on actions (e.g., 'You should not have told her so bluntly')" (p.116).

Many studies have focused on informational support in terms of social behavior and communication. MacGeorge, Samter, and Gillihan (2005) studied the effects of emotional and informational support on college students' academic stress levels and health. This study described informational support as consisting of advice, information, and training aimed toward reducing the symptoms of physical illness. In addition, Ullah, Banks, and Warr's study indicated that informational support was useful in reducing psychological distress among unemployed 17-year-olds (as cited in Cutrona & Russell, 1990). Informational support aids in cognitive and behavioral coping, which reduces stress levels (as cited in Wilcox & Vernberg, 1985).

In another case, Norbeck and Tilden (1983) claimed that both informational and emotional support help ameliorate individuals' levels of emotional disequilibrium (e.g., anxiety, depression, poor self-esteem). Therefore, as a form of advice or guidance, informational support has widely explored in the scholarship. Much research demonstrates the influence of informational support as applied to several issues and in varied contexts.

Esteem Support

Esteem helps to increase one's feelings of self-efficacy and recognition of the importance of protecting oneself. Esteem support provided through compliments or positive social comparisons with peers increases an individual's levels of self-esteem (Cobb, 1976). Specifically, in difficult or stressful situations, providing esteem support or self-esteem support involves encouraging and reassuring others or helping to bolster their levels of confidence, courage, or morale.

According to Cutrona and Russell (1990), "esteem support represents the bolstering of a person's sense of competence or self-esteem by other people. Giving an individual positive feedback on his or her skills and abilities or expressing a belief that the person is capable of coping with a stressful event are examples of this type of support" (p. 322). Cohen and Wills (1985) also addressed esteem support, explaining that if individuals are esteemed and increase self-esteem through communication with others, they will be more likely to accept, adapt and cope with their problematic issues despite difficulties or personal faults. In this way, esteem support encourages individuals to more fully realize their own worth.

As indicated by the aforementioned studies, encouragement and esteem support reduce negative emotions, such as failure and blame, associated with stressful circumstances. Analyzing examples of esteem support, Cutrona and Shur (1994) asserted, "esteem support refers to expressions of regard for one's skills and abilities (e.g., 'I know you will do a good job') and/or for one's value as a person (e.g., 'Losing your job doesn't mean you are worthless')" (p. 116).

There is a limited amount of research dealing solely with esteem support, but much of the research addressing types of social support has explored the effects of esteem support on various issues, particularly those related to health. Cohen and Hoberman (1983) found that esteem support is beneficial for reducing stress and symptomatology. Frankel and Turner (1983) determined that emotional support and esteem support were significantly related with low levels of anxiety, depressive symptoms and paranoia in patients.

Cohen and Wills (1985) also contended that esteem support and informational support help individuals relieve stress in difficult situations. It is significant for individuals to receive useful information and reassurance in stressful circumstances as esteem support and informational support help relieve stress. Additionally, when considering social support in relation to

16

unemployment issues, Mallinckrodt and Fertz found that reassuring and encouraging others fosters improved adjustment among individuals receiving support (as cited in Cutrona & Russell, 1990).

Tangible Support

Among the variety of terms used by scholars to identify types of social support, tangible support is sometimes referred to as "instrument support" or "material support. " Although different terms exist, they tend to convey similar concepts and meanings. According to Cutrona and Russell (1990), "tangible support" represents instrumental assistance, which involves the provision of resources necessary for solving problems when an individual faces difficult circumstances.

Cohen and Wills (1985) also explained tangible support by using the term "instrumental support" which is "the provision of financial aid, material resources, and needed services. Instrumental aid may help reduce stress by direct resolution of instrumental problems or by providing the recipient within increased time for activities such as relaxation or entertainment. Instrumental support is also called aid, material support, and tangible support" (p.116). In addition, Tardy (1992) indicated that instrumental support helped individuals cope with difficult situations and was more significant than emotional support for dealing with stressful circumstances.

Examples of tangible support, include the provision of needed goods (e.g., money, food, books) and offering of services (e.g., babysitting, transportation, typing) (Cutrona & Shur, 1994). Individuals who received tangible support believed money, care, or other forms of assistance evidenced the love or esteem of the providers of such support. Tangible support is likely most effective when recipients agree that the type of tangible aid is suitable for them and the situation

(Cohen & McKay, 1984).

Previous research has provided evidence of the effects of tangible support on physical or psychological illness. In particular, scholars have found tangible support to be significantly beneficial to people's health in a wide range of situations. Tangible support reduces stressors or alters the nature of the stressor itself (Wilcox &Vernberg, 1985). As such, tangible or instrumental support has been determined to be helpful for patients with mental illnesses (Wethington & Kessler, 1986). Among elderly patients, instrumental support was found to influence a few psychosomatic symptoms but did not impact emotional symptoms (Arling, 1987). Likewise, in a study of elderly community residents, those who received tangible support experienced relief of their somatic depressive symptoms (Krause, 1986). Furthermore, in a study of unemployed individuals, tangible support was also found to decrease job stress and psychological symptoms (Norbeck, 1985), and Popiel and Susskind's study of rape victims indicated that tangible support also helped to reduce psychological distress (as cited in Cutrona & Russell,1990).

Additional studies have addressed the relationships between tangible support provided others and individuals' personal characteristics and well-being. Ullah, Banks, and Warr (1985) found that tangible support benefits the well-being of individuals. Specifically, tangible support is easily received from family members. For instance, support provided by mothers has been found to improve adolescents' self-esteem (Giblin, Poland, & Sachs, 1987), and tangible support that patients with serious illnesses received from their spouses improved their emotional adjustment (Wethington & Kessler,1990).

Also analyzing the impacts of tangible support, Solomon, Mikulincer and Hobfoll's (1986) study of Israeli combatants found that tangible or instrumental support fostered feelings

18

of safety and an intense power of organization. In the contexts of combat and natural disasters, tangible support had a buffering effect (as cited in Cobb, 1976). In addition, Tetzloff and Barrera determined that tangible support ameliorated the effects of tangible stressors (as cited in Cutrona & Russell, 1990).

Network Support

The last type of social support to be covered in this study is network support. Relatively few previous studies have addressed network support; however, this form of support is as important as the other aforementioned types of social support and plays a crucial role in helping individuals cope with stressful or difficult events. According to Cutrona and Russell (1990), "network support or social integration refers to a person's feeling part of a group whose members have common interests and concerns. Such relationships reflect more casual friendships, which enable a person to engage in various forms of social and recreational activities" (p. 322).

Also called "social companionship, " "diffuse support, " and "belongingness, " network support moderates stress by providing recipients with a sense of belonging and contact with others. It alleviates the concerns and worries brought on by stressful events and positively influences mood (Cohen &Wills, 1985). Furthermore, network support fosters a sense of belonging among people with similar interests and concerns (e.g., "We would like you to join our support group") (Cutrona & Shur, 1994).

Previous studies have analyzed the influence of network support, also known as "social integration. " This type of support aids individuals in coping with physical or psychological illnesses. For instance, network support has been found to protect recipients against the loss of morale due to medical problems (as cited in Cutrona & Russell, 1990; Frankel & Turner, 1983). Feelings of solidarity inspired by network support help individuals minimize their levels of

negative emotions, such as depression (as cited in Cohen & McKay, 1984). In Mitchell and Hodson's study of battered women, network support and emotional support were found to benefit participants' psychological health (as cited in Cutrona & Russell, 1990). In their study of Vietnam veterans, Keane et al. (1985) determined that positive social contact and network support (as one type of social support) relieved symptoms of post-traumatic stress disorder. Thus, stressful events or situations can be moderated by increased feelings of belonging inspired though network support.

As demonstrated above, scholars have identified many different categories of social support; however, these categories tend to overlap in meaning and merely utilize different names. Moreover, some researchers refer to one type of social support as representing the entirety of possible social supports (e.g., emotional support), while others deal in greater detail with specific types of social support. Therefore, this study chose five types of social support and addresses the effects of each type on a variety of issues.

Previous studies have attempted to discover connections between types of social support and certain issues, specifically addressing how effects vary depending on the type of social support provided. Thoits (1986) explained that while emotional support and network support are useful for dealing with emotion-focused coping, tangible and informational support are more helpful for facilitating problem-focused coping, and esteem support assists equally well in both these areas. In addition, Krause (1987) studied the effects of four types of social support (i.e., emotional, tangible, informational, and support for others) on chronic financial strain and depressive symptoms and found that emotional support and informational support demonstrated a buffering effect, which in turn led to lower levels of depression. In addition, a main effect was shown for tangible support. Kessler and Essex (1982) also found that for respondents

experiencing financial problems, emotional support had a buffering effect, whereas network support showed no effect.

Bolton and Oatley (1987) studied the relationship between three components of social support (i.e., emotional support, material support, and quantity of social interactions) and depression related to unemployment. Material support was considered tangible support, and social interactions were treated as network support. The study determined that only a large quantity of social interactions significantly relieved the effects depression brought on by unemployment. Furthermore, Krause's (1986) study reported that only emotional support had a buffering effect in relation to criminal and legal problems; neither tangible nor informational support demonstrated a buffering effect. Unlike Krause's (1986) study, Cohen and McKay (1984) explained that tangible support, appraisal support, and emotional support all effectively moderate negative effects brought on by stressors. As these studies have indicated, even when people are placed in similar situations, some types of social support might be helpful while other types may not. Many scholars agree that the efficacy of the various types of social support differs depending on the recipients' needs brought on by different stressors or by the characteristics of those providing support (Goldsmith, 2004).

Ultimately all types of social support should be considered, as impacts on resilience differ. Therefore, this study focuses on five types of social support that demonstrate most of the characteristics of social support previously discussed by scholars. Moreover, previous research has indicated the capacity of social support for building and developing resilience despite adversity and crisis. By providing love, trust, and encouragement, supportive relationships aid in the development of individuals' resilience (Newman, 2003). For these reasons, this study considers the relationships among these five types of social support and resilience in order to

develop a more complete understanding of the various impacts of social support on resilience.

Resilience

Individuals, including children and adults, encounter hardships and face adversities both within and outside of the family unit. When faced with these types of situations, people may recall previous difficulties they have encountered in order to determine a resolution or devise a plan for dealing with the problems. In such situations, one third of people in various fields of the world will consistently display resilience, which will help them to overcome the stressful situation (Grotberg, 2000).

According to Neenan (2009), "resilience is intriguing because it provides some kind of answer to why one person crumbles in the face of tough times while another gains strength from them, but elusive in that the concept resists a definitive definition." (p. 3). Resilience allows certain individuals to successfully adapt to tough situations while others fail to transcend their despair. These end results of stressful situations therefore often depend on the levels of resilience demonstrated by the individuals involved.

Most scholars share the common perception that resilience represents a successful and positive outcome for individuals despite the negative experiences involved. Fonagy, Steele, Steele, Higgitt, and Target (1994) noted that resilience refers to "normal development under difficult conditions" (p. 233). Rutter (1999) also described resilience as a phenomenon of overcoming stress or adversity. Moreover, some scholars have addressed resilience in terms of psychological health, indicating that resilience allows individuals to maintain sound mental health in the face of an ordeal. According to Herrman et al. (2011), resilience is basically accepted as a positive adaptation or capacity to maintain psychological health despite adversities. Resilience helps individuals cope with adversity, and it is the bedrock of positive mental health

(as cited in Neenan, 2009). Thus, resilience is a core factor for individuals effectively overcoming or adapting to difficult situations.

In addition, resilience can be explained in dynamic contexts. In other words, resilience can manifest for one individual in a variety of ways, at different times, and in response to various stressors. Even when a person responds to a certain situation, new vulnerabilities can arise depending on specific life circumstances. In this way, resilience is not a fixed state; instead, it is relative to the context (Luther & Cicchetti, 2000). Recognition of and reaction to all kinds of ordeals differs according to the individual involved. While some people succumb to the stress of very minor events, others successfully overcome extremely adverse events by demonstrating great resilience (Rutter, 2003). In light of the diversity of resilience characteristics demonstrated from person to person, scholars have adopted different perspectives and approaches to the topic in their research, making it difficult to clearly define or explain resilience.

Many studies addressing resilience have employed the term to refer to a variety of concepts while failing to clearly distinguish their definition of resilience from those of other studies on the topic. For example, resilience is sometimes described, particularly upon early studies on the topic, as a personal trait (Block & Kremen, 1996) developed after a single, short-lived trauma. These studies addressed resilience in terms of selective strengths or assets, including intellectual functioning that allows people to overcome adversities (Herrman et al., 2011). However, Newman (2003) argued that resilience is not actually a personal trait, as it was often treated in early studies, because it is not a quality that some people possess and others do not. Rather, individuals demonstrate different levels of resilience, and it is also possible to learn and develop resilience through diverse experiences, thoughts, and behaviors.

Mastena, Best, and Garmezy (1990) concluded that resilience is a capacity, process, or

23

outcome of successful adaptation expressed despite and in reaction to stressful or difficult

situations. Indeed, many studies have dealt with adversities that are not temporary, but rather last

over a period of time, including homelessness, natural disasters, and chronic physical illness

(Bonanno, 2004; as cited in Herrman et al., 2011). The definition of resilience based on Mastena,

Best, and Garmezy's (1990) explanation demonstrates that resilience exists in a variety of

situations, both temporary and continuous. This explanation contains a diversity of scholars'

viewpoints. Resilience is further discussed below as a capacity, process, or outcome.

Resilience as a Capacity, Process, and Outcome

First, we will examine resilience as a capacity. Although no definitive definition exists

among scholars, resilience has been explained as an individual's ability to successfully adapt to

unfamiliar and/or difficult environments and involves characteristics of emotional strength and

invulnerability (Olsson, Bond, Burns, Vella-Brodrick, & Sawyer, 2003; Waller, 2001). In

particular, resilience can be explained in terms of the following three dimensions: resistance,

recovery, and reconfiguration. These three dimensions are helpful for understanding resilience as

a capacity. In cases of resistance, the capacity is not influenced by difficult situations; recovery

refers to one's capacity to overcome ordeals and successfully adapt to complicated situations.

Finally, reconfiguration represents one's ability to effectively and resourcefully accept or adapt to

stressful situations and cope with other adversity in the future (as cited in Berger, 2008).

Resilience is generally referred to as a human's ability to recover and be strengthened and even

transformed by adversities or difficulties (Garmezy, 1991; Grotberg, 2000; Paphazy, 2003).

Second, resilience is a process. Resilience can also be explained as a process—namely, the

process of effective adaptation in the face of adversity, including family and relationship

problems, serious health problems, and/or workplace and financial stressors. Studies dealing with resilience as a process have sought to define protective mechanisms and risk mechanisms as follows.

Protective mechanisms involve developmental processes through which people successfully adapt to new environments (making them more resilient). Protective factors may affect, modify, mitigate, or change how individuals respond to severely stressful situations and also contribute to and facilitate resilience (as cited in Afifi & MacMaillan, 2011). In particular, significant research has sought to identify protective mechanisms among individuals, their families, and the societies in which they live (Garmezy, 1991). Individual-level (e.g., personal characteristics, self-efficacy, coping, and life satisfaction), family-level (e.g., family coherence, stable care-giving, and parental relationships), and community-level protective factors are all related to resilience (e.g., peer relationships and religion) (Afifi & MacMillan, 2011). Thus, resilience can be defined as protective mechanisms that individuals positively develop in stressful situations.

On the other hand, risk mechanisms intensify individuals' reactions to stressful situations, thus leaving them more vulnerable to the stressors. (Rutter, 1999). Risk factors can include a poor neighborhood environment, family dysfunction, and dropping out of school (Beauvais, & Oetting, 1999). Rutter indicated that risk factors of children's background can cause psychiatric disorders (as cited in Sameroff, Gutman, & Peck, 2003). Other studies focused on children and adolescents have also demonstrated that risk factors lead to behavioral disorders and mental health problems (Fergusson, Horwood, & Lynsky, 1994; Williams, Anderson, McGee, & Silva, 1990). Such risk factors are similar to learning difficulties (Theron, 2008), which prohibit a student from achieving optimal learning and development. Thus, as a process, resilience has been defined as mitigating negative effects of risk factors and removing them through the effects of

protective factors (Fraser & Pakenham, 2009).

Third, resilience is an outcome. Scholars have explained resilience as the outcome of protective factor effects on individuals' stressful lives, guiding them in the right direction (Dumont & Provost, 1999; Luther, Cicchetti, & Becker, 2000). In this sense, resilience is defined in terms of the positive outcomes of good mental health, functional capacity, and social competence. Focusing on the outcome of individuals' adaptation to stressful events is beneficial for operationalizing the construct of resilience (Olsson et al., 2003).

Individuals are thought to be vulnerable to negative outcomes or the absence of positive outcomes when faced with adversities. For example, children raised in threatening conditions tend to develop emotional problems. On the other hand, children who possess positive personal characteristics, healthy relationships with friends and others, and good mental health are often referred to as "invulnerable" or "resilient" (Radke-Yarrow & Sherman, 1990, as cited in Kaplan, 1999). Therefore, these foci—namely, resilience as a capacity, process, and outcome—provide useful perspectives on the ways in which resilience functions.

According to Windle (1999), research on resiliency has made crucial contributions to diverse issues and areas by analyzing resilience in relation to a variety of background conditions (e.g., poverty, family history of psychopathology), personal characteristics (e.g., temperament, cognitive functioning), social relations (e.g., with family members, peers), and community resources (e.g., teachers, clergymen). Furthermore, studies dealing with resilience have focused on the facilitation and development of individuals' skills and competencies (e.g., social skills, problem solving, peer refusal skills). Through resilience, these factors contribute to desirable adaptations in stressful conditions.

Resilience yields positive personal development. McMillan and Reed (1994) found that

resilient individuals demonstrate positive personal traits such as self-efficacy, goal orientation, personal responsibility, and internal expectation. In other studies, individuals possessing a high level of resiliency were found to be socially competent, autonomous, and optimistic (Wyman, Cowen, Work, & Kerley, 1993) and also demonstrated a sense of civic responsibility (Moely, Mercer, Ilustre, Miron, & McFarland, 2002). In addition to affection personal traits, resilience also influences health problems. According to Byrd, resilience enables individuals to develop healthy and stable personalities despite adversity, such as childhood sexual abuse (as cited in Anderson, 2008). Oshio, Kaneko, Nagamine, and Nakaya (2003) indicated that adolescents demonstrating high levels of resilience also tended to display strong mental health.

Most importantly, resilience helps individuals overcome stressful ordeals. Kaplan (1986) explained that children demonstrating characteristics such as self-derogation tend to have deviant friends and take drugs. However, if children demonstrate resiliency when faced with a crisis, they can more effectively overcome the crisis because their personal and social resources help them cope with the crisis by decreasing negative emotional and behavioral results. Paphazy (2003) determined that resilience plays a crucial role in helping children or adolescents deal with stressful situations such as teasing, bullying, academic problems, and parents' illnesses. Resilience provides adolescents with the skills and strengths necessary to develop the confidence and optimism to overcome these situations.

On the other hand, previous research has shown that multiple factors also influence resilience. Biological, psychological, and dispositional attributes and social support as well as other attributes of social systems (family, school, friends, and community) are associated with resilience (Dumont & Provost, 1999; Friborg et al., 2003; Keltner & Walker, 2003; Luthar & Cicchetti, 2000; Masten, 2001; Neil, 2003; Paphazy, 2003). Helping individuals develop

resilience, these factors include personality traits (openness, extraversion, and agreeableness), self-efficacy, self-esteem, cognitive appraisal (positive interpretation of events and cohesive integration of adversity into self-narrative), and optimism (Herrman et al., 2011). High levels of these factors contribute to building and developing resilience. Although much of the research did not utilize the same methods or definitions of resilience, these results demonstrate that a variety of sources are connected with resilience.

Resilience-promoting factors have commonly been discussed in relation to three groups—individuals, their families, and the societies in which they live—and have focused on how these factors help people develop resiliency in risky circumstances. Howard and Johnson (2000) noted that the family, school, and community figure prominently into building and developing resiliency in individuals. Diverse factors, including individual and contextual factors, contribute to resiliency building (Ungar, 2001), while combined individual and context factors also influence resilience development (as cited in Berger, 2008). These relationships between types of factors and resilience are specifically explained below.

Individual factors affect the building and development of resilience. According to Fergusson and Horwood, (2003), individual factors include intelligence and problem-solving abilities, sex, early temperament and behavior, external interests, and affiliations. Specifically, more resilient young people tend to demonstrate higher intelligence or problem-solving skills than less resilient young people, and females tend to be more resilient than males. Grotberg (2001) further pointed out that in terms of resilience promotion, girls tend to react most positively to interpersonal skills development, whereas boys' resiliency is more effectively developed through pragmatic problem-solving skills. Temperament and behavioral factors also influence resilience to adversity; if children have strong interests and attachments with others

outside the family, they are more likely to demonstrate resilience (Fergusson & Horwood, 2003).

Meanwhile, intrapersonal factors such as self-esteem, internal locus of control, self-regulation, and temperament, are of great significance in developing resilience (Slee, 1995). In particular, self-esteem is closely associated with resilience: Low self-esteem increases vulnerability, while high self-esteem increases resilience (Fergusson & Horwood, 2003). In addition, Beauvais and Oetting (1999), who focused on demonstrating the relationship between resilience and drug use, determined that self-esteem, self-confidence, lack of depression, cultural identification, and internal locus of control all increase resilience, but they also noted that resilience is only effective in the face of adversity.

Galligan, Barnett, Brennan, and Israel (2010) examined the effects of gender role conflict on adolescents' resilience while involved in difficult situations. The study specified that as gender role conflict related to success, power, and competition increased, adolescents demonstrated greater resilience. Thus, individual factors such as intrapersonal factors affect the building and development of resilience.

In addition to individual factors, contextual factors, such as friends, family, and communities, also affect resilience. Fergusson and Horwood (2003) highlighted bonding as one factor of positive relationships with friends connected to resilience development. In addition, parental attachment and a warm and supportive relationship are familial factors that ameliorate the effects of family adversity. Masten and Powell (2003) found that parenting quality and family socio-economic resources influence children's resilience. Both higher socioeconomic status and positive parental attitude facilitate children's adaptation to new environments and thus positively influence resilience.

Also, Mcleod, Heriot, and Hunt (2008) explained that good schooling enables children

to learn and develop resilience. Moving is a stressful situation for children as they must adapt to unfamiliar environments, including new neighbors, friends, teachers, and schools. Thus, good schooling is a significant factor for the development not only of positive intellectual functioning, but also resiliency among children. In addition, family, schools, and peers are also significant factors that influence children's levels of resiliency. Therefore, friends, family, and communities contribute to the development of prosocial values and resilience (Beauvais & Oetting, 1999).

As the aforementioned studies indicate, both individual and contextual factors contribute to resilience development. Individual factors influencing resilience include aspects of temperament, personality traits, self-efficacy, problem-solving skills, social skills, and gender. Contextual factors include relational, social, and cultural environments that provide individuals with social support from others (as cited in Berger, 2008). Thus, individuals' interpersonal qualities, aspects of their family, and characteristics of their broader social environment influence resilience.

Scholars have yet to reach a consensus on the concept of resilience, and as such, studies of resilience have appeared across various academic fields. Despite the diversity of definitions that exist for resilience, most highlight the common idea that resilience plays a crucial role in determining how people experience and deal with stressful events (Carle & Chassin, 2004; Juffer, Stams, & van Ijzendoorn, 2004). Thus, resilience involves achievement, development, and adaptation in the midst of threatening and severe conditions.

According to Cicchetti and Garmezy (1993), "depending on how broad or conservative the definition of resilience, vastly different conclusions can be drawn" (p.499). Therefore, identifying a specific definition of resilience is of great significance. As many studies have indicated, resilience can be explained as capacity, process, and outcome (Masten, Best, &

30

Garmezy, 1990). Because it is difficult to assess resilience as a process, the current study defines resilience narrowly by focusing specifically on capacity and outcome, performing measurements using a quantitative method based on questionnaires.

Paphazy (2003) pointed out that "exposure to stress or psychic challenge is fundamental to the definition of resilience" (p. 146). Although some scholars think that resilience occurs at times of crisis, other scholars believe that regular stress-inducing experiences contributed to the development of resilience and that some individuals naturally possess a greater proclivity for resilience. In other words, resilience occurs in various situations, both temporary and continuous. As such, it is possible to study resilience in either of these two types of situations. The current study, however, is designed to analyze resilience in a general rather than a specific situation. Therefore, the current study defines resilience as capacity and outcome in a general situation.

Relationship between Social Support and Resilience

Although previous studies have defined social support and resilience in a variety of ways, several studies have directly examined the relationship between support and resilience, focusing specifically on how parental warmth, encouragement, and assistance help adolescents develop resilience (Smith, 1999) as well as how school experience—including friends' and teachers' support—enhances young adults' resilience (Werner, 1995). Specifically, Wilks and Spivey (2010) studied the relationship between academic stress and resilience in undergraduate social work students to determine the effects of social support on the relationship. The results indicated that support provided by friends positively influences resilience by mitigating students' academic stress. Zaleski, Levey-Thors, and Schiaffino (1998) also indicated that social support received from others enables students to effectively adapt to college life, and such adjustment can be

considered a result of resilience.

Previous research has dealt with capacity of social support to help individuals build and develop resilience despite facing adversities and crisis. As a protective factor, social support plays a critical role for children in stressful situations and adults experiencing familial problems (as cited in Wilks & Spivey, 2010). In addition, Rutter (1987) explained that marital support is associated with a high level of resilience; Afifi and MacMillan (2011) also indicated that spousal support as both family member support and non-family member support affects resilience. Many studies have determined that the key factor influencing resilience is involvement in caring and supportive relationships within and outside of the family unit. Such relationships lead to the development of individuals' resilience by providing love, trust, and encouragement (Newman, 2003).

Nonetheless, few studies have addressed the relationship between social support and resilience in the communication field and the studies have referred to one type of social support as representing the entirety of possible social supports (e.g., emotional support). Much of the previous research has simply categorized the types of social support, explaining their significance and functions. Therefore, this study chose five types of social support and addresses the effects of each type on resilience. This study leads to develop a more complete understanding of the various impacts of social support on resilience.

The current study therefore aims to expand resilience-related research in the communication field through an examination of the relationship between social support and resilience. By considering the five types of social support selected, this study aims to answer the first research question:

RQ1: How are each of the five types of social support (i.e., emotional, esteem, network, tangible,

network) associated with resilience?

Sex Roles: A Factor Influencing the Relationship between Social Support and Resilience

According to Samter (2002), an individual's demographic characteristics influence their supportive interactions. In particular, sex is a fundamental demographic characteristic as well as an important variable for determining individuals' tendencies to provide or receive support. Although men are generally task-oriented in controlling their emotions, women tend to be relationship-oriented and focus on emotional closeness and the disclosure of feelings (Maccoby, 1990). Based on this sex difference, one can assume that men and women will differ in terms of the types and frequency of social support they desire.

Previous studies have explained the different characteristics between men and women when they when providing and accepting support from others (MacGeorge, Graves, Feng, Gillihan, & Burleson, 2004; Xu & Burleson, 2001). In efforts to cope with stress, individuals attempt to engage in emotionally supportive interactions (e.g., talking about their feelings). However, differences exist between male-male friendships and female-male friendships in terms of giving and receiving supportive communication. A pair of female friends tends to foster emotional support such as intimate behavior (Hays & Oxley, 1986).

In particular, men and women demonstrate differences according to the kinds of social support in which they engage. In Vanfossen's (1981) study, tangible support was more crucial for employed women than for men, while emotional support was more significant for men than for women. In addition, men received more self-esteem support from their wives than wives received from their husbands. In another study focused on women working outside the home, tangible support provided by husbands decreased participants' depressive symptoms by reducing

their responsibilities related to household chores (Cutrona, 1996). Furthermore, men have a

tendency to prefer tangible and informational support (Barbee, Gulley, & Cunningham, 1990)

However, studies addressing sex differences and social support have indicated

contradictory results as well. In Vaux's (1985) study of college students, no difference was found

between men and women regarding their numbers of friends, although women tended to receive

more emotional support from their friends as compared to men. Cutrona and Suhr analyzed

social support in the context of marriage. For both men and women, emotional and informational

support from their partner was significantly related to lower levels of depressive symptoms, and

only the number of emotional and tangible supports significantly influenced interaction

satisfaction (as cited in Cutrona, 1996)

Among wives diagnosed with breast cancer, both wives and husbands gave and reacted to

all types of social support, including emotional, appraisal, information, and instrumental support

(Vinokur & Vinokur-Kaplan, 1990). Moreover, Ganster, Fusilier and Mayes (1986) tried to

identify sex differences in levels of social support and their effects. However, with the exception

of the finding that specified that women received more support from their supervisors, there was

no correlation found between sex and support provided by spouses, friends and relatives,

immediate supervisors, and other people at work. Cutrona (1996) also failed to find sex

differences in the effect of the components of spousal support on adjustment to interaction

satisfaction.

Several studies have indicated sex differences in relation to types of social support,

although results have been inconsistent, because sex differences in giving and receiving social

support rely on several situational factors. The factors include "the type of problem, the

controllability of the outcome, the state of the target, and type of behavior used by the target to

signal the need for support" (as cited in Xu & Burleson, 2001, p. 538). In addition, the differing results depend on the number of friends, supportive behaviors of providers, and characteristics of supportive resources (Vaux, 1988). Thus, these situational factors affect research results dealing with sex differences and social support. However, despite inconsistent results, certain types of social support may be more easily accepted and utilized by each sex (Cutrona, 1996).

As a number of studies have explored the connection between sex differences and social support, the current study deals with sex roles instead of sex differences based on the premise that not all men are fully masculinity and not all women are completely feminine. In other words, men can demonstrate femininity, while women may display masculinity. Previous research on sex roles in the late 1960s and 1970s explained that males reported greater masculinity than females, and females showed higher levels of femininity than males (Galambos, Almeida, & Peterson 1990; Morgan, 1992). Today, however, the traditional sex roles have changed in response to several issues such as environmental and economic (Zosuls, Miller, Ruble, Martin, & Fabes 2011). In addition, physical or biological sex clearly cannot explain individual characteristics, instead, sex roles are more appropriate (Lin, Huang, & Chiang, 2008; Qualls,1982).Therefore, we should not simply deal with sex as a biological characteristic. This study considers sex roles as a factor influencing relationships between resilience and the five types of social support examined.

Definitions and depictions of sex roles are varied and have changed over time, and some scholars insist that it remains difficult to clearly define or explain sex differences (as cited in Lenney, 1991). Despite these noted ambiguities, the masculine role is commonly delineated as instrumental, emphasizing independence, competence, and rationality, whereas the feminine role is often associated with expressions of warmth, compassion, and support (Bem, 1974).

Vaux (1988) stated that, based on these masculine and feminine roles, individuals differ in the ways that they accept and react to offerings of social support. Compared to men, women are at an advantage in terms of support processes due to their sex roles. Characteristics of feminine sex roles facilitate social support through the processes of seeking, offering, and receiving social support in the context of supportive relationships, whereas masculine characteristics inhibit social support processes by causing individuals to avoid accepting help from others or demonstrating weakness (Burda & Vaux, 1987). Thus, sex role differences figure significantly in explaining the connection between social support and resilience.

As aforementioned, this study considers masculinity and femininity as sex roles instead of simply addressing sex in order to examine the links between types of social support and resilience. Although definitions and depictions of sex roles are varied and have changed over time (Biller, 1968; Constantinople, 1973; Cramer & Carter, 1978; Gilbert, 1985; Spence, 1985, as cited in Lenney, 1991), sex roles is a more proper variable to explain individual characteristics compared to physical or biological sex (Lin, Huang, & Chiang, 2008; Qualls,1982). It is also based on the premise that not all men are fully masculinity and not all women are completely feminine. As traditional sex roles are changing and developing, men can demonstrate femininity, while women may display masculinity. We should not simply deal with sex as a biological characteristic. This study considers sex roles as a factor influencing relationships between resilience and the five types of social support examined. Therefore, The current study anticipates that sex roles will influence the relationship between social support and resilience, thereby addressing the second research question.

RQ2: Do sex roles influence relationships between support types and resilience?

36

CHAPTER 3

METHOD

Overview

The current study examines relationships between types of social support leading resilience. The study poses answer two research questions. First, how are each of the five types of social support (i.e., emotional, esteem, network, tangible, network) associated with resilience? As the second research question, do sex roles influence relationships between support types and resilience?

The study used a survey method that offers several advantages. Surveys can be conducted in realistic settings rather than experimental setting that people can manipulate. As such, surveys can gather accurate information reflecting reality. In addition, surveys are cost-effective sources. Compared to other methods, a large number of data can be easily gathered from various people. Furthermore, surveys are not limited to geographic boundaries and can be administered with relative ease almost anywhere (Wimmer & Dominick, 2006).

Surveys also have some disadvantages. The most important thing is that variables cannot be controlled, so researchers cannot explain whether relationships between independent variables and dependent variables are causal. In addition, poorly worded or ambiguous expressions on a questionnaire can bias results. Finally, inappropriate respondents can participate in survey research (Wimmer & Dominick, 2006). Despite these disadvantages, many researchers use surveys to obtain reliable and useful information. In particular, when researchers want to measure attitudes, beliefs, and behaviors, the survey method is a appropriate way (Weisberg,

Krosnick, and Bowen, 1996). Given both the advantages and disadvantages, the current study used the survey method.

Participants

The primary method of data collection employed in this study was a questionnaire administered to 334 university students with approval from the University of Alabama's Institutional Review Board for Protection of Human Subjects. Students were identified as acceptable participants for this research because like all people, they demonstrate a range of problems and social support needs. Also, previous research dealing with social support has included undergraduate participants (e.g., Niall & David, 2007; Phillips, Gallagher, & Carroll, 2009; Taylor, Welch, Kim, & Sherman, 2007). Rutter explained improving young people's resilience through support from others (as cited in Rutter,1999). Therefore, this study recruited students as respondents for the survey.

Prior to administering the primary questionnaire, the researcher conducted a pilot-test with a sample of 10 undergraduates and graduates in order to check the readability and comprehensibility of the survey instruments. The researcher revised several survey questions based on feedback from this pilot-test and then administered the questionnaire at a large southern university.

On average, respondents took approximately 20 minutes to complete either a paper-based survey (52 participants) or online survey (284 participants). Initially, a total of 334 responses were obtained. However, 24 participants were excluded due to inappropriate responses or lack of responses. As indicated in Table 1, among the 310 student respondents used for data analyses, the majority, 238 students, female (76.8%), while 72 (23.2%) of the participants were male. As

the respondents were college students, the average respondent age was 20.91, with the majority of students falling in the 19- 22 age range. With reference to race, the majority of respondents, 257 students (82.9%), was White/Caucasian, followed by 25 African American/Black participants (8.1%), 12 Hispanics (3.9%), 9 Asians (2.9%), and 7 Others (2.3%).

Table 1. Sample demographic description

Variables	Category	Frequencies	Percentage
Sex	Male	72	23.2
	Female	238	76.8
	Total	310	100
Age	19	72	23.2
	20	62	20
	21	90	29
	22	53	17.1
	23	15	4.8
	24	5	1.6
	25	7	2.3
	26 and older	6	1.8
	Total	310	100
Race	Hispanic	12	3.9
	Asians	9	2.9
	African American/Blacks	25	8.1
	Whites	257	82.9
	Others	7	2.3
	Total	310	100

Measure

　　Social Support. To measure social support, this study used a revised version of Xu and Burleson's (2001) Five Types of Social Support Scale, which is comprised of 35 items—namely, 7 items for each of the 5 types of support (i.e., emotional, esteem, network, tangible, and informational support). The respondents were asked to rate each of the items along a 5-point Likert scale in which 1 corresponds with "strongly disagree" and 5 with "strongly agree." Higher

scores for this measure indicate greater levels of social support experienced by respondents. Examples of the items used to measure social support included "people (e.g., family or friends) tell you that you are still a good person even when you have a problem," "people (e.g., family or friends) tell you that they love you and feel close to you," "people (e.g., family or friends) offer to provide you with access to new companions," "people (e.g., family or friends) give you advice about what to do," and "people (e.g., family or friends) offer to lend you something (including money)."[1] The Cronbach's alpha for these items was. 80, and all 35 of the items were used.

Resilience. This study used Oshio, Kaneko, Nagamine, and Nakaya's (2003) Adolescent Resilience Scale, which includes 21 items consisting of 3 subscales—novelty seeking, emotional regulation, and positive future orientation. The respondents were asked to rate each of the items along a 5-point Likert scale in which 1 corresponds with "strongly disagree" and 5 with "strongly agree." Higher scores on this measure correspond with greater levels of respondent resilience. Examples of the items used to measure resilience include "I think difficulties form a part of life's valuable experiences," " I think I have a high level of interest and curiosity," "I think I can control my emotions," "I find it difficult not to dwell on a negative experience," and "I think I have a bright future." The Cronbach`s alpha for this measure was calculated at .85.

Sex roles. This study employed a revised short form of the Bem Sex Role Inventory (BSRI), which includes 20 items consisting of two subscales, femininity and masculinity (Choi, Fuqua & Newman, 2009). The respondents rated each of the items along a 5-point Likert scale in which 1 corresponds with "strongly disagree" and 5 with "strongly agree." Higher respondent scores on this measure correspond with higher levels of femininity. Items used to measure sex roles contained terms and phrases such as "Affectionate," "Warm," "Compassionate," "Sensitive to

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[1] All of the questions are available in Appendix B

needs of others," "Willing to take risks," "Assertive," and "Dominant." Coefficient alphas for this measure were .84 for BSRI-masculinity scores and .92 for BSRI-femininity scores (as cited in Choi, Fuqua & Newman, 2009).

Data Reduction and Data Analysis

Prior to the data analysis procedure, the researcher reversed the scores for negatively worded items in the resilience measure in order to derive a scores reflecting a positive direction. Items subject to this reversal were 2-3, 2-5, 2-11, 2-16, 2-18, 2-19, 2-21 (e.g., my behavior varies with my daily moods, I have difficulty controlling my anger, I cannot endure adversity, I find it difficult not to dwell on a negative experience, I don't like to do unfamiliar things, I find it bothersome to start new activities, and I lose interest quickly). In addition, the researcher also reversed items related to masculinity in order to derive a femininity score. Reversed masculinity items included 3-3, 3-4, 3-11,3-12, 3- 14, 3-15, 3-17, 3-18, 3- 19, 3-20 (e.g., independent, forceful, willing to take a stand, defend one's own beliefs, have leadership abilities, strong personality, dominant, aggressive, assertive, and willing to take risks). Finally, items to which participants did not respond were excluded from the data analysis.

The researcher conducted a multiple regression analysis to test the first research question and a moderated regression analysis to test the second research question using the SPSS 17.0 program. Specifically, the independent variables consisted of the five types of social support measured by Xu and Burleson's (2001) social support scale, including emotional, esteem, network, tangible, and informational support, while the dependent variable was the level of resilience, which was measured according to Oshio, Kaneko, Nagamine, and Nakaya's (2003) adolescent resilience scale. Moreover, sex roles represented a moderating variable and were measured using a revised short form of the Bem Sex Role Inventory (BSRI) (Choi, Fuqua,&

Newman, 2009). The two research questions for this study are as follows:

RQ1: How are each of the five types of social support (i.e., emotional, esteem, network,

informational, tangible) associated with resilience?

RQ2: Do sex roles influence relationships between support types and resilience?

CHAPTER 4

RESULTS

Descriptive Statistics

For the descriptive statistics, this study checked mean and standard deviation of all measurement variables. Tables 2-1, 2-2, and 2-3 indicate the mean and standard deviations for the research variables, including independent (five types of social support), dependent (resilience), and moderating (sex roles) variables, respectively. As previously mentioned, a 5-point Likert scale in which 1 corresponds with "Strongly Disagree" and 5 with "Strongly Agree" was used for all measurement items.

Social Support. The mean score for emotional support was 4.15 (SD = .773), the mean score for esteem support was 3.97 (SD = .794), the mean score for network support was 3.77 (SD = .825), the mean score for informational support was 3.97 (SD = .724), and the mean score for tangible support was 4.00 (SD = .709), respectively. Of the five types of social support, the respondents rated emotional support the highest (M =4.15, SD =.773). In particular, most participants agreed that they felt loved by and close to their friends and family members (M = 4.32), and this item demonstrated the highest mean score.

On the other hand, the respondents rated network support the lowest (M = 3.77, SD = .825). Specifically, as compared to other items such as "offering to spend time with you to get your mind off something" (M=4.20), and "offering to do things with you and have a good time together" (M =4.05), items related to connecting or recommending someone, including "connecting you with people whom you can confide in" (M= 3.62), "offering to provide you with access to new companions" (M =3.44), and "connecting you with people whom you may turn to

for help" (*M* =3.64), had a relatively low mean score.

Respondents ranked tangible support as the second highest type of social support (*M* = 4.00 ,

SD = .709), followed by esteem support (*M* =3.97, *SD* = .794) and informational support (*M* =

3.97, *SD* = .724). With regard to tangible support, a majority of participants indicated that others

expressed willingness to help them when they were in need of help (*M*= 4.31). In terms of

informational support, a majority of participants responded that their friends and family members

gave them advice regarding what they should do (*M*= 4.30). With respect to esteem support, all

items demonstrate an analogous mean score.

Table 2-1. Descriptive statistics for five types of social support

Variables	Mean	SD
Five types of social support (N=310)		
Emotional Support	4.15	.773
1-1. Telling you that they love you and feel close to you	4.32	.947
1-3. Expressing understanding of a situation that is bothering you or disclosing a similar situation that they experienced before	4.23	.912
1-11. Comforting you when you are upset by showing physical affection (including hugs, hand-holding, shoulder patting, etc.)	4.07	1.035
1-12. Promising to keep problems you discuss in confidence	4.11	.914
1-17. Providing you with hope or confidence	4.27	.858
1-18. Expressing sorrow or regret for your situation or distress	4.03	9.22
1-20. Offering attentive comments when you speak	4.05	.876
Esteem Support	3.97	.794
1-9. Telling you that you are a good person even when you have a problem.	4.05	.979
1-19. Assuring you that you are a worthwhile person.	4.13	9.29
1-21. Expressing esteem or respect for a competency or personal quality	4.10	.870
1-22. Trying to reduce your feelings of guilt about a problematic situation	3.88	1.008
1-25. Asserting that you will have a better future than most people will	3.84	1.104
1-26. Expressing agreement with your perspective on various situations	3.92	9.07
1-27. Telling you that a lot of people enjoy being with you	3.89	9.87
Network Support	3.77	8.25
1-13. Offering to spend time with you to get your mind off	4.20	.924

something troubling (chatting, having dinner together, going to a concert, etc.)		
1-14. Helping you find the people who can assist you with issues	3.67	1.068
1-24. Connecting you with people in whom you can confide	3.62	1.075
1-28. Offering to provide you with access to new companions	3.44	1.068
1-29. Reminding you of the availability of companions who share similar interests or experiences with you	3.77	1.006
1-31. Offering to do things with you and having a good time together	4.05	.896
1-33. Connecting you with people to whom you may turn for help	3.64	1.039
Informational Support	3.97	7.24
1-4. Helping you understand why you did not do something well	3.97	.943
1-7. Telling you who to talk to for help	3.59	1.016
1-8. Giving you advice about what to do	4.30	.915
1-15. Analyzing a situation with you and telling you about available choices and options	4.17	9.38
1-16. Giving you reasons why you should or should not do something	4.02	.863
1-23. Providing detailed information about the situation or about skills needed to deal with the situation	3.85	.905
1-32. Teaching you how to do something that you don't already know how to do	3.90	.926
Tangible Support	4.00	.709
1-2. Taking care of your domestic chores when you are feeling ill due to a cold	3.68	1.134
1-5. Joining you in an activity in order to alleviate your stress	4.02	.908
1-6. Expressing willingness to help you when you are in need of help	4.31	.747
1-10. Doing laundry or cooking for you while you are preparing for an important task.	3.86	1.058
1-31. Offering to lend you something (including money)	3.92	.982
1-34. Taking you to see a doctor when you don't feel well	4.05	.947
1-35. Offering to help you do something that needs to be done	4.16	.760

Resilience. The mean score for resilience was 3.82 (SD = .455), and the mean scores for

novelty seeking, emotional regulation, and positive future orientation were 3.97 (SD = .544),

3.49 (SD = .575), and 4.21 (SD = .689), respectively. This data for resilience is displayed in

Table 2-2. Items that respondents ranked the highest included "I like to find out about things" (M

=4.32), "I feel positive about my future" (M =4.32), and "I think I have a bright future" (M

=4.32). The majority of respondents indicated that they like to find out things and they look

forward to a positive and bright future. These items were associated with novelty seeking and

positive future orientation as subscales of resilience. One of the items related to emotional

regulation, "I find it difficult not to dwell on a negative experience," received the lowest mean

score (M =2.71). Although the subscales of resilience, including novelty seeking, emotional

regulation, and positive future orientation are addressed distinctly in this section, this study

focused on overall resilience through an incorporation of these three subscales.

Table 2-2. Descriptive statistics for resilience

Variables	Mean	SD
Resilience (N=310)	3.82	.455
Novelty seeking	3.97	5.44
2-1. I seek new challenges.	3.93	.816
2-2. I like new or intriguing things.	4.19	.734
2-6. I think I have a high level of interest and curiosity.	4.31	.741
2-10. I like to find out about things.	4.32	.737
2-12. I think difficulties form a part of life's valuable experiences.	4.28	.780
2-18. I don't like to do unfamiliar things. [R]	3.20	1.019
2-19. I find it bothersome to start new activities. [R]	3.55	1.032
Emotional regulation	3.49	5.75
2-3. My behavior varies with my daily moods. [R]	2.86	1.170
2-5. I have difficulty controlling my anger. [R]	3.70	1.116
2-7. I can stay calm in tough circumstances.	3.68	.913
2-9. I make an effort to always stay calm.	3.81	.867
2-11. I cannot endure adversity. [R]	3.64	1.026
2-14. I think I show perseverance.	4.10	.724
2-16. I find it difficult not to dwell on a negative experience. [R]	2.71	1.109
2-20. I think I can control my emotions.	3.67	.942
2-21. I lose interest quickly. [R]	3.23	1.0783
Positive future orientation	4.21	6.89
2-4. I am sure that good things will happen in the future.	4.20	.843
2-8. I am striving towards my future goal.	4.23	.777
2-13. I feel positive about my future.	4.32	.749
2-15. I have a clear goal for the future.	3.97	.941
2-17. I think I have a bright future.	4.32	.766

Note: [R]= reverse-coding.

Sex roles. The mean score for sex roles was 3.16 (*SD* = .398), as shown in Table 2-3.

Among the items used to measure sex roles, the descriptors "Understanding" (*M* =4.24),

"Compassionate" (*M*=4.21), "Affectionate" (*M* =4.08), and "Sensitive to needs of others" (*M* =4.09), received higher mean scores, while the items " Defend own beliefs" (*M* =1.81), "Independent" (*M* =1.84), and "have leadership abilities" (*M* =1.84) showed lower mean scores.

Since the first set of aforementioned items were connected with femininity and the latter items were associated with masculinity, it seemed that the survey respondents had a tendency to be feminine. With reference to this point, this study checked the mean score of sex roles through a histogram. However, the sample was not skewed although the majority of respondents were female (*N* =238, 76.8%), compared to male (*N* =72, 23.2%).

Table 2-3. Descriptive statistics for sex roles

Variables	Mean	SD
Sex roles (N=310)	3.16	.398
1. Affectionate	4.08	.868
2. Warm	4.00	.840
3. Independent [R]	1.84	.810
4. Forceful[R]	3.01	1.079
5. Tender	3.70	.911
6. Sympathetic	4.05	.839
7. Sensitive to the needs of others	4.09	.802
8. Soothe hurt feelings	3.94	.885
9. Understanding	4.24	.706
10. Love children	3.89	1.021
11. Willing to take a stand [R]	1.98	.851
12. Defend own beliefs [R]	1.81	.778
13. Gentle	3.82	.895
14. Have leadership abilities [R]	1.84	827
15. Strong personality [R]	1.91	.871
16. Compassionate	4.21	.762
17. Dominant[R]	2.86	1.064
18. Aggressive [R]	3.29	1.085
19. Assertive [R]	2.56	1.005
20. Willing to take risks [R]	2.17	.891

Note: [R]= reverse-coding.

Correlation Analysis

The five types of social support, including emotional support, esteem support, network support, informational support and tangible support, along with resilience and sex roles were employed for correlation analysis. A correlation analysis was conducted prior to performing a multiple regression statistical analysis in order to test the relationships between independent and dependent variables and check for multicollinearity. In this study, emotional support, esteem support, network support, informational support and tangible support are independent variables, and resilience is a dependent variable. In addition, sex roles represent a moderating variable.

Table 3 shows the results of correlation analysis of the relationship among the five types of social support, resilience, and sex roles. With the exception of the relationship between informational support and sex roles, all variables of relationship among the five types of social support, resilience, and sex roles are significantly correlated with each other. In particular, there is a high connection among the five types of social support – emotional support, esteem support, network support, informational support, and tangible support. Emotional support is highly connected with esteem support ($r = .853$), network support ($r = .692$), informational support ($r = .716$) and tangible support ($r = .609$). Esteem support also shows a strong relationship with network support ($r = .795$), informational support ($r = .737$) and tangible support ($r = .638$). In addition, network support has a significantly high association with informational support ($r = .775$) and tangible support ($r = .668$), and informational support is significantly related to tangible support ($r = .707$).

In addition, resilience shows a significant correlation with emotional support ($r = .419$), esteem support ($r = .386$), network support ($r = .334$), informational support ($r = .413$) and tangible support ($r = .383$), respectively. Although sex roles are not significantly related to

informational support, this moderating variable displayed significant associations with other

independent variables, such as emotional support (r =.171), esteem support (r = .118), network

support (r = .172), tangible support (r = .126), as well as the dependent variable, resilience (r

= .128). Overall strong relationships exist between emotional support, esteem support, network

support, informational support, and tangible support, and resilience is also significantly

correlated to five types of social support. Sex roles, however, display relatively low connections

with other variables.

Table 3. Correlation matrix among the five types of social support, resilience and sex roles

	1	2	3	4	5	6	7
1. Emotional	----						
2. Esteem	.853**	----					
3. Network	.692**	.795**	----				
4. Informational	.716**	.737**	.775**	----			
5. Tangible	.609**	.638**	.668**	.707**	----		
6. Resilience	.419**	.386**	.334**	.413**	.383**	----	
7. Sex roles	.171**	.118*	.172**	.072	.126*	.128*	----

*$p<.05$; **$p<.01$

Multiple Regression Analysis

According to Field (2009), social scientists have focused on generalizing results gained from

a certain sample for a population. To effectively generalize the results, a regression model should

meet the following underlying assumptions, including no perfect multicollinearity, independent

errors, normally distributed errors, and linearity:

a) There should be no perfect linear relationship between two or more of the

predictors, b) For any two observations, the residual terms should be

uncorrelated, c) It is assumed that the residuals in the model are random, normally

distributed variables with a mean of 0, and d) The mean values of the outcome

variable for each increment of the predictors must lie along a straight line (as cited in

Field, 2009, p.220).

The researcher employed correlation analysis to test multicollinearity among the

independent variables. There were no independent variables for which a value of variance-

inflating factors (VIF) exceeds 10 (Gujarati, 2003). In addition, this study utilized the Durbin-

Waston test to check independent errors. Normally distributed errors were tested with histograms,

and linearity was checked using normal p-p plots. Through testing, the researcher determined

that none of the assumptions were violated.

As this study met necessary assumptions, the researcher conducted a multiple regression

analysis and enter regression analysis taking into account the correlation among variables in

order to test the first research question as follows:

RQ1: How are each of the five types of social support (i.e., emotional, esteem, network,

informational, tangible) associated with resilience?

With reference to the first research question, this study examined which types of social

support – emotional, esteem, network, informational or tangible support – are significantly

related to resilience. The five types of social support represent independent variables, and

resilience is a dependent variable. The researcher therefore employed the following regression

equation for this study:

$Resilience =$

$$\alpha + \beta_1\,Emotioanl\ support\ +\ \beta_2\,Esteem\ support + \beta_3 Network\ support$$
$$+\ \beta_4\,Informational\ support + \beta_5\,Tangible\ support$$

Upon investigation, the regression model was significant (F = 14.173, p <.01) and

explained about 20.4 percent of the total variance as indicated in Table 4. Among the five types of social support, only emotional support and informational support were found to be significant, while esteem support, network support and tangible support were not. Resilience is thus only influenced by emotional support and informational support, and the other variables display no effect on resilience.

Of the two significant variables identified, emotional support demonstrates a higher standardized coefficient (β =.222) than informational support (β =.221). This result indicates that that emotional support is the predictor that best explains resilience, though there is a slight difference between the standardized coefficients of emotional support and informational support. Meanwhile, other variables, including esteem support, network support and tangible support, were not the predictors that influence resilience.

Table 4. Enter regression analysis of the impact of the five types of social support on resilience

Independent Variables (Five Types of Social Support)	Dependent Variables Resilience (Standardized β)
Emotional Support	.222*
Esteem Support	.023
Network Support	-.120
Informational Support	.221*
Tangible Support	.147
F	14.173**
R^2	.219
Adjusted R^2	.204

*p<.05; **p<.01

Moderated Regression Analysis

With reference to the second research question, RQ2: "Do sex roles influence relationships between support types and resilience?," this study also analyzed the moderating variable of sex roles on the connections between support types and resilience. Specifically, the researcher performed a moderated regression analysis to examine the moderating effect of sex roles on the relationships between five types of social support.

Prior to conducting a moderated regression analysis, this study conducted the mean centering of all variables by subtracting the sample mean from each observed value in order to avoid potential multicollinearity in moderated multiple regression analysis (Cronbach, 1987; Yi, 1989).The researcher therefore employed the following regression equation for this study:

$Resilience =$

$$\alpha + \beta_1 \, Emotioanl \, support \, + \, \beta_2 \, Esteem \, support + \, \beta_3 Network \, support$$
$$+ \, \beta_4 \, Informational \, support + \, \beta_5 \, Tangible \, support + \, \beta_6 \, Sex \, roles$$
$$+ \, \beta_7 \, Emotional \, support * Sex \, roles + \, \beta_8 \, Esteem \, support * Sex \, roles$$
$$+ \, \beta_9 \, Network \, support * Sex \, roles + \, \beta_{10} \, Informational \, support$$
$$* Sex \, roles + \beta_{11} \, Tangible \, support * Sex \, roles$$

As indicated in Table 5, the model was significant (F = 8.857, p <.01). Most importantly, the interaction effect of sex roles and informational support on resilience was significant and sex roles was found to have a pure moderating effect. According to Sharma (2003), there are two types of moderators-pure and quasi. "A pure moderator variable is a variable that enters into interaction with an independent variable while having a negligible correlation with the dependent variable. A quasi-moderator variable interacts with the independent variable, but it also is an independent variable itself" (p.256). Therefore, this result showed that sex roles did not have a

relation to resilience but sex roles moderated the relationship between informational support and

resilience. However, sex roles did not moderate the relationships between other types of social

support (i.e., emotional, esteem, network and tangible) and resilience.

Table 5. The moderating effects of sex roles

Independent Variables	Dependent Variables Resilience (Standardized β)
Sex roles	.061
Emotional Support	.248*
Esteem Support	.039
Network Support	-.099
Informational Support	.159
Tangible Support	.146
Sex roles ✕ Emotional Support	.050
Sex roles ✕ Esteem Support	.077
Sex roles ✕ Network Support	.104
Sex roles ✕ Informational Support	-.228*
Sex roles ✕ Tangible Support	-.102
F	8.857**
R^2	.246
Adjusted R^2	.219

*p<.05; **p<.01

CHAPTER 5

DISCUSSION AND CONCLUSION

For the first research question, the current study conducted a multiple regression analysis covering the independent variables represented by the five types of social support (i.e., emotional support, esteem support, network support, informational support tangible support) and the dependent variable, resilience. For the second research question, this study performed a moderated regression analysis dealing with sex roles as a moderating variable in conjunction with the five types of social support and resilience

Below is a discussion in response to the first research question, "How are the five types of social support, including emotional, esteem, network, informational, tangible supports, associated with resilience?" This study revealed that among the five types of social support, only two of the types, emotional support and informational support, are significantly associated with resilience. The other types of social support (i.e., esteem support, network support, and tangible support) were not found to have a significant connection with resilience. Of these two significant types of support identified, emotional support was found to be more closely linked to resilience than informational support was.

With regard to the second research question, "Do sex roles influence relationships between support types and resilience?," this study found the interaction effect of sex roles and informational support on resilience and sex roles was a pure moderator. Although sex roles did not have a relation to resilience, sex roles moderated the relationship between informational support and resilience. However, sex roles did not have moderating effects of the relationships between other types of social support (i.e., emotional, esteem, network and tangible) and

54

resilience. To account for these research questions in detail, this chapter presents general discussion and implications as well as limitations and directions for future research.

General Discussion and Implications

When faced with adversity, individuals often overcome and adapt to their difficult situations while receiving social support from family and friends (Samter, Whaley, Mortenson, & Burleson, 1997). Such social support plays a significant role in encouraging or reinforcing individuals' ability to encounter adversity in terms of resilience. With regard to these issues, many studies (e.g., Rutter, 1987; Smith, 1999; Werner, 1995) have researched the relationship between social support and resilience.

However, the majority of previous research, which dealt with the relationship between social support and resilience, has treated emotional support as constituting the entirety of social support. As such, the relationship between social support and resilience had not previously been explained thoroughly enough. This study therefore considered five types of social support (i.e., emotional support, esteem support, network support, informational support and tangible support) rather than focusing in on only one type of social support. The present study explored the relationships between the five types of social support (i.e., emotional, esteem, network, informational and tangible) and resilience.

Also, this study examined how the sex roles of support recipients influence the relationship between social support and resilience. This is because sex roles is a more proper variable to explain individual characteristics compared to physical or biological sex (Lin, Huang, & Chiang, 2008; Qualls,1982). It is also based on the premise that not all men are fully masculinity and not all women are completely feminine. According to Vaux's (1988) study,

individuals demonstrate varying reactions when they accept support contingent on their masculine or feminine characteristics. This study therefore focused on sex roles as opposed to sex differences, taking into account the fact that not all men display masculinity nor all women express femininity.

The first research question for this study explored the associations between the dependent variable, resilience, and each of the five types of social support, including emotional, esteem, network, informational, and tangible supports, which were the independent variables in this research. Most importantly, emotional support and informational support were significantly linked to resilience, while esteem support, network support, and tangible support were significantly unrelated to resilience. These results indicate that both emotional and informational supports influence individuals' resiliency. Specifically, individuals experiencing higher levels of emotional and/or informational support will more likely demonstrate resiliency, which will help them overcome adversity and successfully adapt to stressful situations. Of these two significant supports, emotional support demonstrated the strongest influence on resilience. In other words, when people strive to overcome hardships or successfully adapt to difficult situations, emotional support is the most effective social support that they can receive from friends and family members, more so than informational support.

It should be noted that among the five types of social support, emotional support displayed the strongest impact on resilience. Emotional support is of great use for individuals who want to be consoled in demanding conditions because they can alleviate feelings of stress through contact and receiving sympathy from others (Cutrona & Russell, 1990). That is to say, when people receive emotional support from others in stressful circumstances, they have a greater tendency to overcome stress or adversity and can positively adapt to difficult circumstances. In

addition, previous research has indicated that social support aids in the development of personal resilience by providing individuals with love, trust, and encouragement (Afifi & MacMillan, 2011; Newman, 2003; Rutter, 1987). Also, offering love, trust, and encouragement is closely related to emotional support. Therefore, this study's result corresponds with previous research.

Furthermore, this finding supports the reasoning behind the majority of social support studies that have focused particularly on emotional support as well as numerous studies that have addressed the relationships between emotional support and psychological, physical, and relational factors. In addition, this finding is consistent with Dunkel-Schetter's (1984) study that suggested that emotional support is the most effective type of social support. Also, the results of this study correspond with results of previous studies that explain the effects of social support on resilience based upon the fact that previous studies regarded emotional support as constituting the entirety of social support (Rutter, 1987; Smith, 1999; Werner, 1995).

In addition, informational support affects resilience. Informational support refers to any behavior or communication that offers advice, information, or training to help an individual cope with problems (Cutrona & Russell, 1990). Namely, when individuals struggling to overcome adversity or adapt to difficult situations perceive behaviors or communication related to advice or information from others, they are better able to persevere and cope with their problems. This result reveals that individuals faced with difficulties benefit significantly from concrete and direct support from family and friends. Moreover, a great deal of social support research to date has concentrated primarily on emotional support by studying the relationship between emotional support and resilience. This study has endeavored to go further by explicating the relationship between informational support and resilience in order to offer a more meaningful and complete interpretation of the relationships between social support and resilience.

With regard to the effects of emotional support and informational support on resilience, it is important to note the types of stressors. According to Goldsmith (2004), the influence of social support varies according to the types of needs based on different stressors. Wilcox and Vernberg (1985) also argued that research dealing with social support should consider the recipients of the support as well as the types of problems they face. In other words, the effect of social support type on resilience depends both on respondents and their situations. In the current study, the effects of emotional and informational support on resilience are also explained by respondents' characteristics.

Specifically, the respondents of this study were students. While like all people, students are confronted with difficulties and thus need social support, their problems are primarily limited to school life, including issues related to academic goal orientation and social goal pursuits. It is rare for students to experience a wide range of adult problems, such as bankruptcy, divorce, or diseases like cancer. This specific respondent sample therefore influences the effects of social support type. For example, MacGeorge, Samter, and Gilihan's (2005) study concluded that emotional support and informational support were substantive social support types that influenced how students dealt with academic stress and depression. Consequently, for students, emotional support and informational support are the most effective factors contributing to the their development of resilience, more so than esteem support, network support, or tangible support.

Unlike emotional support and informational support, the other types of social support (i.e., esteem support, network support, and tangible support) were not significantly linked to resilience. This finding indicates that not every type of social support has the same level of impact on resilience. The various types of social support need to be considered and the

impacts of each assessed. Also, some researchers have focused on distinctions between the
different types of social support and have explained their effects in a variety of contexts (e.g.,
MacGeorge, Samter, & Gilihan, 2005; Xu & Burleson, 2001). Therefore, it cannot simply be said
that resilience is influenced by social support.

The influence of "social support" on resilience cannot be explained by esteem support,
network support, and tangible support. First, esteem support showed no effect on resilience.
According to Thoits (1986), while emotional support and network support are useful for dealing
with emotion-focused coping, tangible and informational support are more helpful for facilitating
problem-focused coping, and esteem support assists equally well in both these areas. In other
words, esteem support does not have a predominant characteristic as compared to other types of
social support and therefore does not influence resilience.

Furthermore, there is no connection between tangible support and resilience. Previous
studies dealing with the effects of tangible support have focused on specific populations and
circumstances, such elderly people dealing with physical or psychological illnesses (e.g., Arling,
1987; Krause, 1986;Wethington & Kessler, 1986;Wilcox & Vernberg, 1985) or unemployed
individuals (e.g., Norbeck, 1985). Namely, tangible support can be explained more effectively in
the context of particular situations. In this study, however, resilience was considered in a general
situation rather than a specific situation. Therefore, it was difficult to explain the effect of
tangible support on resilience in this particular study.

Additionally, few studies have specifically dealt with the effect of network social support,
and this study also failed to explain the role of network support on resilience. This study revealed
that people experienced less network support than other social support types. This fact influences
the explaining impacts of network support. Also, it is more difficult for people to introduce or

recommend outside sources of help to others than to simply provide the necessary support or help to others themselves. Meanwhile, Kessler and Essex (1982) also found that for respondents experiencing financial problems, network support demonstrated no buffering effect. Therefore, in this study, the impact on resilience is not explained by esteem support, network support, or tangible support.

With regard to the second research question, "Do sex roles influence relationships between support types and resilience?," results of this study, as determined by the moderated regression analysis, indicated that sex roles had a significant impact on the relationship between informational support and resilience. In particular, sex roles had a pure moderating effect. Sex roles did not significantly influence resilience, and based on correlation analysis, there was no connection between informational support and sex roles. However, sex roles moderated the relationship between informational support and resilience. Consequently, if individuals who tend to be more masculine receive informational support from others, they are more likely to have a high level of resilience. However, for feminine individuals, informational support is not an effective support type on resilience. Although several studies have been inconsistent with regard to sex role differences, this study presents results analogous with Barbee, Gulley, and Cunningham's (1990) study that indicated men's preference for informational support.

However, unlike results of previous research, sex roles did not significantly influence the relationships between other four types support types (i.e., emotional, esteem, network and tangible support) and resilience. This study considered a possibility in order to explain this unexpected result. This study may have failed to explain the influence of sex roles on the relationship between social support and resilience due to the inherent ambiguities of sex roles.

60

Definitions and depictions of sex roles vary and have also changed over time, and some scholars insist that it remains difficult to clearly define or explain sex differences (as cited in Lenney, 1991). Although this study used a revised short form of the Bem Sex Role Inventory (BSRI) by Choi, Fuqua, and Newman (2009), it was difficult to clearly define or explain sex role differences.

In sum, this study offered a meaningful and more complete understanding of the relationships between the five types of social support (i.e., emotional support, esteem support, network support, informational support and tangible support) and resilience while also considering sex roles. First of all, as types of communication, emotional support and informational support play important roles in helping individuals to overcome adversity and successfully adapt to difficult or demanding situations. Social support, namely emotional or informational support, is beneficial in helping individuals strengthen their resilience in the face of adversity or difficult situations. Namely, people facing difficult situations seek expressions of caring, concern, empathy, and sympathy (emotional support) or useful advice and information from others (informational support) in order to overcome or adapt to stressful situations. Therefore, offers of emotional and informational support allow individuals to overcome or adapt to their difficult situations.

Furthermore, for individuals who tend to demonstrate more masculine qualities, informational support is the most beneficial support type. If masculine individuals receive informational support from others, they are more likely to demonstrate a high level of resilience. For feminine individuals, receiving informational support does not have an influence on their resilience. There is limited research dealing with sex roles and social support. Also, previous studies have demonstrated inconsistent results with the relationship between sex and social

61

support. However, the results of this research can be explained by Eagly and Crowley's (1986) study that found that males are more likely to care about task-oriented problems, whereas females tend to be concerned with relationship problems. When masculine individuals confront difficulties, they have a tendency to focus on objective aspects and methods of coping with the problems. For masculine types, informational support, such as concrete advice and useful information, represents an effective social type. That is to say, when people are placed in difficult situations, they both require and desire social support from others. If these individuals tend to be masculine, it is significant for them to receive informational support to overcome or adapt to their stressful situations.

Most importantly, many studies have dealt primarily with emotional support or the overly generalized idea that social support influences resilience. However, researchers must pay greater attention to the distinctions between the different types of social support and their impacts on resilience. In addition, the impacts of social support vary depending on the specific types of support provided, the characteristics of the recipient of the support, and the type of problem addressed (Wilcox & Vernberg, 1985). Previous studies have mainly covered each issue distinctly. However, this study explored the impacts of social support on resilience while considering all these factors together. The researchers examined not only the different types of social support, but also their impacts on resilience and the characteristics of the recipients, including sex roles. Additionally, the influence of type of problem is discussed. The current study thereby contributes to a better understanding of social support and resilience development.

Limitations and Directions for Future Research

This study is not without its limitations. First, the sample used to complete the study

62

survey was not representative of a wide range of demographics, such as age, race, and region, which therefore limits the generalizability of the results. The sample consisted primarily of young (late teens to early twenties) White participants living in Southern area, making it therefore difficult to judge whether these results could be generalized to a wider range of populations. In addition, of the 310 respondents who took part in this study, 238 were female, while only 72 were male. This imbalanced sex ratio might make it difficult to clearly examine the influence of sex roles. To address the aforementioned sample limitations, future studies should be conducted in other regions or countries while attempting to recruit a more diverse sample in terms of race and age and avoiding such distinct sex ratio imbalances.

Next, diverging from previous research, this study addressed sex roles as opposed to sex differences based on the premise that men can demonstrate feminine qualities and women can possess masculine characteristics. It is true, however, that men have a tendency to be masculine and women tend to be feminine (Priess, Lindberg, & Hyde, 2009). Therefore, future studies could be more complete by considering not only sex roles but also sex differences, and the results of such studies would also be more meaningful for the consideration of the interaction of sex and social supports.

Third, future studies should classify the providers of social support. This study grouped family members and friends together as providers of social support. However, participants might have difficulty responding to certain items given that they may experience social support differently depending on who is providing the support, be it friends or family members. People also demonstrate different levels of expectations when they receive social support. Furthermore, as providers of social support, romantic partners could also be considered as a distinct type of provider. As such, future studies should consider classifying social support providers as well as

addressing additional types of providers, such as romantic partners.

Fourth, because survey data was used, this research could not clearly identify or explain a causal relationship. This study focused only on individuals' experiences and resiliency based on their already-molded characteristics. Consequently, the results of this research call for future experimental study to examine the idea that social support can foster individuals' resiliency. Future studies need to explain how individuals' resiliency is fostered through experiences of the five types of social support. Through experimental study, future research should identify clearer relationships between resilience and the different types of social support.

Finally, resilience has three subscales – novelty seeking, emotional regulation, and positive future orientation. However, as this study deals with resilience in its entirety, it did not separately examine novelty seeking, emotional regulation, and positive future orientation and thus did not offer any results in connection with these subscales. To address this limitation, future studies should consider the three subscales of resilience as variables and account for relationships between these subscales and the five types of social support (i.e., emotional, esteem, network, tangible, and informational support).

Despite the aforementioned limitations, the results of this study possess a number of important implications. Just as the majority of previous research has shown that social support is helpful in developing individuals' resilience, this study indicates that social support is related to resilience. However, it is important to note that among the five types of social support, only two types, specifically emotional support and informational support, influence resilience. This study indicated not only the influence of emotional support on resilience but also the influence of informational support on resilience. Also, this study indicated that sex roles moderated the informational support - resilience relationship. In conclusion, as types of communication,

emotional support and informational support play important roles in helping individuals to

overcome adversity and successfully adapt to difficult or demanding situations. Specifically, the

role of informational support was influenced by sex roles.

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APPENDIX A

INSTITUTIONAL REVIEW BOARD CERTIFICATION

February 24, 2012

Office for Research

Institutional Review Board for the
Protection of Human Subjects

THE UNIVERSITY OF
ALABAMA
R E S E A R C H

Joo Young Jang
Department of Communication Studies
College of Communication & Information Sciences
Box 870172

Re: IRB # 12-OR-069: "The Effect of Social Support Type on Resilience"

Dear Ms. Jang,

The University of Alabama Institutional Review Board has granted approval for
your proposed research.

Your application has been given expedited approval according to 45 CFR
part 46. You have also been granted a waiver of written documentation of
informed consent. Approval has been given under expedited review category 7
as outlined below:

*(7) Research on individual or group characteristics or behavior (including, but
not limited to, research on perception, cognition, motivation, identity,
language, communication, cultural beliefs or practices, and social behavior) or
research employing survey, interview, oral history, focus group, program
evaluation, human factors evaluation, or quality assurance methodologies.*

Your application will expire on February 23, 2013. If the study continues
beyond that date, you must complete the IRB Renewal Application. If you
modify the application, please complete the Modification of an Approved
Protocol form. Changes in this study cannot be initiated without IRB approval,
except when necessary to eliminate apparent immediate hazards to participants.
When the study closes, please complete the Request for Study Closure
(Investigator) form.

Should you need to submit any further correspondence regarding this
application, please include the assigned IRB application number.

Good luck with your research.

Sincerely,

Stuart Usdan, Ph.D.
Chair, Non-Medical Institutional Review Board
The University of Alabama

The Effect of Social Support Type on Resilience.

You are being asked to take part in a research study. This study is called "Social support and Resilience". This study is conducted by JooYoung Jang, a graduate student in the Department of Communication Studies and Dr. Carol D. Mills, an associate professor in the Department of Communication Studies.

This study examines how social support influences resilience and how this relationship is affected by sex roles. This study is important because the findings may help people understand the ability to overcome adversities and successfully adapt to the stressful situations as well as the role of communication leading people's ability to do so. In addition, findings may explain how this relationship is affected by the sex role differences of the support providers and receivers.

About 250 undergraduate students enrolled in COM 101 and MC 101 courses within the College of Communication and Information Sciences at the University of Alabama are being invited to participate in this study. Participants must be at least 19 years old. All of the individual survey responses will be combined together, but will not be used for any purposes outside of this study. No individual information or identifying information that could trace your answers back to you, will ever be reported.

If you decide to participate in this study, you will be asked questions regarding social support, resilience, and sex roles. The questions will ask you the ways friends and family members respond to you when you need support. Moreover, these questions will require you to reflect on your own behaviors and about how you see yourself. There will also be questions in which you will be asked to provide some demographic information about yourself such as age, sex, and race. Completing this survey should take no more than 15-20 minutes.

There are no direct benefits to participants. However, extra credit may be awarded at the discretion of your course instructor.

As researchers, we do not foresee any risks, though some of the questions may make you uncomfortable. You have every right to stop taking the survey if you do not feel comfortable. You may skip any questions you prefer not to answer.

Your answers will be kept strictly confidential. Only the two researchers have access to the data collected from this research. The survey itself does not ask for your name or any clearly identifiable information. Data such as age, sex, and race are used only to provide general descriptions of the participant providing the data.

Taking part in this study is voluntary. You may choose not to take part at all. If you start the survey, you can stop at any time. Failure to complete or return the survey to us will not result in any penalty or loss of any benefits you would otherwise receive.

The University of Alabama Institutional Review Board (IRB) is the committee that protects the rights of people in research studies. The IRB may review study records from time to time to be sure that people in research studies are being treated fairly and that the study is being carried out as planned.

If you have questions about this study, you may contact the investigator, Ms. JooYoung Jang, at 205-331-7791 or email her at jjooyoung@crimson.ua.edu. You may also contact Dr. Carol D. Mills at 205-348-6165 or email her at cbmills@bama.ua.edu. If you have questions or complaints about your rights as a research participant, call Ms. Tanta Myles, the Research Compliance Officer of the University at

UNIVERSITY OF ALABAMA IRB
CONSENT FORM APPROVED: 2/24/2012
EXPIRATION DATE: 2/23/2013

205-348-8461 or toll free at 1-877-820-3066.

You may also ask questions, make suggestions, or file complaints and concerns through the IRB Outreach Website at http://osp.ua.edu/site/PRCO_Welcome.html.Y.

I am 19 and choose to continue.

I am under 19 or choose not to continue.

APPENDIX B

CONSENT INFORMATION

The Effect of Social Support Type on Resilience.

<u>You are being asked to take part in a research study</u>. This study is called "Social support and Resilience". This study is conducted by JooYoung Jang, a graduate student in the Department of Communication Studies and Dr. Carol D. Mills, an associate professor in the Department of Communication Studies.

This study examines how social support influences resilience and how this relationship is affected by sex roles. This study is important because the findings may help people understand the ability to overcome adversities and successfully adapt to the stressful situations as well as the role of communication leading people's ability to do so. In addition, findings may explain how this relationship is affected by the sex role differences of the support providers and receivers.

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If you decide to participate in this study, you will be asked questions regarding social support, resilience, and sex roles. The questions will ask you the ways friends and family members respond to you when you need support. Moreover, these questions will require you to reflect on your own behaviors and about how you see yourself. There will also be questions in which you will be asked to provide some demographic information about yourself such as age, sex, and race. Completing this survey should take no more than 15-20 minutes.

There are no direct benefits to participants. However, extra credit may be awarded at the discretion of your course instructor.

As researchers, we do not foresee any risks, though some of the questions may make you uncomfortable. You have every right to stop taking the survey if you do not feel comfortable. You may skip any questions you prefer not to answer.

Your answers will be kept strictly confidential. Only the two researchers have access to the data collected from this research. The survey itself does not ask for your name or any clearly identifiable information. Data such as age, sex, and race are used only to provide general descriptions of the participant providing the data.

Taking part in this study is voluntary. You may choose not to take part at all. If you start the survey, you can stop at any time. Failure to complete or return the survey to us will not result in any penalty or loss of any benefits you would otherwise receive.

The University of Alabama Institutional Review Board (IRB) is the committee that protects the rights of people in research studies. The IRB may review study records from time to time to be sure that people in research studies are being treated fairly and that the study is being carried out as planned.

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You may also ask questions, make suggestions, or file complaints and concerns through the IRB Outreach Website at http://osp.ua.edu/site/PRCO_Welcome.html.Y.

I am 19 and choose to continue.

I am under 19 or choose not to continue.

APPENDIX C

SURVEY QUESTIONNAIRE

A. The five types of social support

In your experience, your FRIENDS and FAMILY MEMBERS may do all kinds of different things for you when you need support. Please think about the ways friends and family members respond to you when you need support and use the following scale to respond to each item.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. Telling you that they love you and feel close to you.	①	②	③	④	⑤
2. Taking care of your domestic chores when you are feeling ill due to a cold.	①	②	③	④	⑤
3. Expressing understanding of a situation that is bothering you, or disclosing a similar situation that they experienced before	①	②	③	④	⑤
4. Helping you understand why you did not do something well.	①	②	③	④	⑤
5. Joining you in some activity in order to alleviate stress.	①	②	③	④	⑤
6. Expressing willingness to help you when you are in need of help.	①	②	③	④	⑤
7.Telling you whom to talk to for help.	①	②	③	④	⑤
8. Giving you advice about what to do.	①	②	③	④	⑤
9. Telling you that you are a good person even when you have a problem.	①	②	③	④	⑤
10. Doing laundry or cooking for you while you are preparing for an important task.	①	②	③	④	⑤
11. Comforting you when you are upset by showing some physical affection (including hugs, hand-holding, shoulder patting, etc.)	①	②	③	④	⑤
12. Promising to keep problems you discuss in confidence	①	②	③	④	⑤
13. Offering to spend time with you to get your mind off something (chatting, having dinner together, going to a concert, etc.).	①	②	③	④	⑤
14. Helping you find the people who can assist you with things.	①	②	③	④	⑤

15. Analyzing a situation with you and telling you about available choices and options.	①	②	③	④	⑤
16. Giving you reasons why you should or should not do something.	①	②	③	④	⑤
17. Providing you with hope or confidence	①	②	③	④	⑤
18. Expressing sorrow or regret for your situation or distress	①	②	③	④	⑤
19. Assuring you that you are a worthwhile person.	①	②	③	④	⑤
20. Offering attentive comments when you speak	①	②	③	④	⑤
21.Expressing esteem or respect for a competency or personal quality.	①	②	③	④	⑤
22.Trying to reduce your feelings of guilt about a problem situation.	①	②	③	④	⑤
23. Providing detailed information about the situation or about skills needed to deal with the situation	①	②	③	④	⑤
24. Connecting you with people whom you can confide in	①	②	③	④	⑤
25.Asserting that you will have a better future than most people will.	①	②	③	④	⑤
26. Expressing agreement with your perspective on various situations.	①	②	③	④	⑤
27.Telling you that a lot of people enjoy being with you.	①	②	③	④	⑤
28. Offering to provide you with access to new companions.	①	②	③	④	⑤
29. Reminding you of the availability of companions who share similar interests of experiences with you.	①	②	③	④	⑤
30. Offering to lend you something(including money).	①	②	③	④	⑤
31. Offering to do things with you and have a good time together.	①	②	③	④	⑤
32. Teaching you how to do something that you don't know how to do.	①	②	③	④	⑤
33. Connecting you with people whom you may turn to for help.	①	②	③	④	⑤
34. Taking you see a doctor when you don't feel well.	①	②	③	④	⑤
35. Offering to help you do something that needs to be done.	①	②	③	④	⑤

B. Resilience

Reflect for a moment on your own behaviors. Please think about how you see yourself, and use the following scale in responding to each item.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I seek new challenges.	①	②	③	④	⑤
2. I like new or intriguing things.	①	②	③	④	⑤
3. My behavior varies with my daily moods.	①	②	③	④	⑤
4. I am sure that good things will happen in the future	①	②	③	④	⑤
5. I have difficulty in controlling my anger	①	②	③	④	⑤
6. I think I have a high level of interest and curiosity	①	②	③	④	⑤
7. I can stay calm in tough circumstances	①	②	③	④	⑤
8. I am striving towards my future goal	①	②	③	④	⑤
9. I make an effort to always stay calm.	①	②	③	④	⑤
10. I like to find out about things.	①	②	③	④	⑤
11. I cannot endure adversity	①	②	③	④	⑤
12. I think difficulties form a part of life's valuable experiences.	①	②	③	④	⑤
13. I feel positive about my future	①	②	③	④	⑤
14. I think I have perseverance	①	②	③	④	⑤
15. I have a clear goal for the future.	①	②	③	④	⑤
16. I find it difficult not to dwell on a negative experience	①	②	③	④	⑤
17. I think I have a bright future	①	②	③	④	⑤
18. I don't like to do unfamiliar things.	①	②	③	④	⑤
19. I find it bothersome to start new activities.	①	②	③	④	⑤
20. I think I can control my emotions	①	②	③	④	⑤
21. I lose interest quickly.	①	②	③	④	⑤

C. Sex roles.

Please think about how you see yourself, and use the following scale in responding to each item.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. Affectionate	①	②	③	④	⑤
2. Warm	①	②	③	④	⑤
3. Independent	①	②	③	④	⑤
4. Forceful	①	②	③	④	⑤
5. Tender	①	②	③	④	⑤

6. Sympathetic	①	②	③	④	⑤
7. Sensitive to needs of others	①	②	③	④	⑤
8. Soothe hurt feelings	①	②	③	④	⑤
9. Understanding	①	②	③	④	⑤
10. Love children	①	②	③	④	⑤
11. Willing to take a stand	①	②	③	④	⑤
12. Defend own beliefs	①	②	③	④	⑤
13. Gentle	①	②	③	④	⑤
14. have leadership abilities	①	②	③	④	⑤
15. Strong personality	①	②	③	④	⑤
16. Compassionate	①	②	③	④	⑤
17. Dominant	①	②	③	④	⑤
18. Aggressive	①	②	③	④	⑤
19. Assertive	①	②	③	④	⑤
20. Willing to take risks	①	②	③	④	⑤

D. Basic information

*Age _____

*Sex   1. Male   2.Female

*Race

1. American Indian   2. Asian   3. Hispanic   4. African American/Black   5. White

6.Other