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# Predictors of Frequency and Type of Social Support Seeking in Response to Stress

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## ABSTRACT

This research focuses on predictors of social support seeking in response to stress, and the link between well-being and different modes of support seeking. The main research questions focused on the type of venue preferred for provision of support (online or face to face), how different person-level variables influence support seeking behaviors, how different types of stressors influence the choice of venue for support seeking, and how different types of support seeking relate to happiness. Survey data was collected through social media and university classes via Qualtrics. A paired-samples t-test was conducted to compare means of overall online social support seeking and face to face social support seeking. There was a significant difference in the scores for overall online support seeking ( $M=1.65, SD=.74$ ) and overall face to face support seeking ( $M=3.38, SD=1.22$ ) conditions;  $t(123)=-14.99, p < 0.005$ , revealing that face to face support seeking was more popular. Next, a three-stage hierarchical regression demonstrated that age was negatively associated with support seeking in general,  $F(1,124) = -26.14, p < .001$ . On the other hand, extraversion,  $F(6,119) = 7.07, p < .001$ , and social network size,  $F(7,118) = 7.98, p < .001$ , predicted more frequent face to face support seeking. A four-stage hierarchical regression demonstrated that face to face support seeking promoted greater happiness,  $F(8,108) = 9.42, p < .001$ , while online support seeking did not. Finally, a one-way repeated measure ANOVA was conducted to determine if stress type predicted the preferred mode of support seeking (online or face-to-face). These tests revealed that there was a significant effect of stressor type on venue chosen,  $F(8,108) = 9.42, p = .001$ . Individuals were more likely to discuss work and school stress in face to face support seeking ( $M= 3.72$ ) and less likely to discuss friend/roommate stress in online support seeking ( $M=1.5$ ). Our findings contribute to the limited literature exploring social support seeking behaviors and the factors that influence these behaviors. Future plans for this research include exploring reasons people may prefer different support venues, such as the perceived costs or benefits of seeking help face to face or online, as well as the perceived effectiveness of different modes of support.

## Personality Predictors of Social Support Seeking Behavior and Attitudes

### LITERATURE REVIEW

Social support is a fundamental aspect of human relationships and can be defined as the exchange of resources between two individuals, intended to enhance the well-being of the recipient (Cleary, 2017). There are several subtypes of social support which have been labeled instrumental support, emotional support, and informational support. Instrumental support focuses on tangible help, which involves assistance such as loaning someone money or babysitting someone's child. Emotional support

involves providing acceptance, reassurance, or encouragement to a person in distress. Lastly, informational support involves the provision of guidance, such as when a person who has relevant experience provides advice to help an individual cope with a stressor, and so on (Cleary, 2017; Meng et. al., 2017).

All of these types of social support are important to coping and health, as demonstrated by a substantial body of research focusing on the beneficial effects of social support with regard to physical and mental health. Social support is widely seen as a positive coping mechanism for different life stressors, as it is considered to be a mechanism that buffers against stress and promotes health overall (Leung, Pachana, &

McLaughlin, 2014; Pow et. al., 2017; Shavitt et. al., 2016). Indeed, social support has been linked to more favorable outcomes for persons coping with various challenges including arthritis, alcoholism, depression, and so on (Leung, Pachana, & McLaughlin, 2014). Thoits, a noted researcher in this field, outlines that social support does this by acting as “coping assistance.” His theory states that stressful situations can be modified by the provision of help or support from another person. For example, a stressful event can be modified when other people help the individual in the event change the situation, whether that be temporarily loaning a friend money or simply telling a joke to lighten the mood. Another avenue for modifying the situation could be helping the individual reinterpret the situation to be less threatening. In turn, their modifying behavior changes how the stressed individual copes by changing their emotional reaction. This is accomplished by facilitating and strengthening the affected individual’s coping attempts (Thoits, 1986). There is also some evidence to support the idea that social support provides direct benefits, whether or not stress or disruption in an individual’s life is present. A positive relationship was seen with social support and health in individuals that were under large amounts of stress, as well as in individuals who generally had low stress levels. This leads researchers to believe that while social support can be important in helping those who are under large amounts of stress, it may be equally important in those who are not dealing with large amounts of stress as well (Pow et. al., 2017).

Social support has also been linked to overall well-being and positive affective states. In one study of elderly residents in an assisted living community, social network size predicted perceived social support as well as subjective well-being. Older individuals with a large number of social contacts who felt supported by their network of family and friends had higher levels of happiness and life satisfaction (Wang, 2016). This study does not stand alone, as other empirical studies have found very similar connections between social support, social network size, and subjective well-being and happiness. It is a generally accepted idea that

individuals who have larger social networks and receive more social support are happier (Chan, 2006; McLaughlin et. al., 2010; Wang, 2016).

While a great deal of research to date has focused on the general topic of social support and its link to mental and physical well-being, comparatively little attention has been devoted to the processes involved in seeking social support. The most prominent support seeking literature focuses around the mobilization of social support, or support mobilization. This concept is the process of one assembling their social-support resources due to a threat or potential threat (Eckenrode & Wethington, 1990). To break it down, this basically looks at how one seeks available social support in order to best cope with whatever stressor they are facing. This process is often studied in attempts of finding what factors influence one’s seeking of support. There is data that suggests locus of control, self-efficacy, and sociodemographic variables may play a role in determining how one mobilizes their social support (Eckenrode, 1983).

However, the way people seek support is changing due to the impact of the internet and social networking. And while seeking support behavior is changing, there is little research to account for how social media plays a role in this. It is no surprise that over the last decade social networking sites have made their way into the popularity of the internet. In turn, this popularity has changed the way that people relate to one another. Social networking sites were first found as anonymous online support groups that individuals could visit to interact with strangers to receive support about a variety of stressors, most notably health challenges. Stakes were low due to the anonymity of the process, and overall, the support that was given proved to help those receiving it (Boyd & Ellison, 2007). These anonymous support groups eventually evolved into not-so-anonymous support groups that individuals could connect with online, such as common day social media sites like Facebook and Twitter. With the creation of Facebook in 2004, online social networking changed altogether. The anonymity was taken away, and individuals were given a chance to interact with people in their social networks via this online platform. Other social networking sites such as

Twitter had the same effect, and both provided a new process to seek support while using these platforms. For example, seeking support became as easy as sending out a tweet, updating your “status,” or using messaging services on these sites to contact a friend for advice (Charnigo & Barnett-Ellis, 2007).

Similarly to how social media has changed over time, the research surrounding it has changed as well. This can be found specifically when looking at social adjustment. In the beginning stages of internet popularity, high usage of the internet and communication with anonymous social groups found on it were mainly suggested to be detrimental to one’s social adjustment. This was due to the fact that people were going online to socialize instead of interacting with those around them; therefore they were not building meaningful friendships and relationships with the society and their local social network (Engelberg & Sjoberg, 2004). However, as social networking sites such as Facebook and Twitter arose, researchers started to change their mind on how social media may affect social adjustment (Gray et al., 2013; Seo et al., 2016; Lin et al., 2011). For example, Lin et al. (2011) noted that social networking now may facilitate adjustment instead of harming it, by providing a new avenue for international students to connect with friends as well as the culture found around them.

To understand what determines the type of support being sought, the amount of support seeking, and the satisfaction with social support outcomes, one must account for situation and person variables. While little literature has explored situation variables, person variables such as locus of control, self-efficacy, and level of education have been related to support seeking behaviors (Eckenrode, 1983; Eckenrode & Wethington, 1990). While these person variables and other similar ones have been studied in regard to social support seeking behaviors, personality overall has not been widely studied. The current study attempts to focus on the use of personality as a predictor of these behaviors and intends to use the Big Five Personality Model in doing so. This model is one of the best accepted and most commonly used measures in assessing personality (Goldberg,

1992). The Big Five Personality Model focuses on five major dimensions of personality: Openness, Conscientiousness, Agreeableness, Extraversion, and Neuroticism. All of these dimensions are on a continuum, and therefore an individual can be scored as high or low on a dimension.

### **Current Study**

The goal of our current study is to focus on the use of personality as a predictor of social support seeking behaviors and attitudes. More specifically, we are investigating whether the Big Five Personality Model traits predict support seeking for different types of stressors (school/work stress, family stress, friend/roommate stress, romantic relationship/dating stress, and daily hassle stress) and whether these personality factors influence the type of support sought (online or face to face). We will assess perceptions of the quality of the social support received for different stressors and different types of support. We will also examine links between social support seeking behavior and well-being. We look to address the following research questions:

- (1) Which venue is preferred (overall) when seeking social support (e.g., online, in-person)?
- (2) Which online venues are most popular for seeking support?
- (3) How do person-level variables (e.g., personality, age, social network size) influence support seeking behaviors (frequency and type)?
- (4) How do different types and frequency of support seeking relate to well-being?
- (5) Does the type of stressor influence the choice of venue for support seeking?

## **METHODS**

### **Participants**

We had 126 participants (103 women, 23 men). Participants were recruited through social media and summer undergraduate courses at a midsized, southeastern university. Participants included Caucasians (75%), African Americans (14%), those who are Multiracial (4%),

Hispanics/Latinos (3%), and other (4%). There was an age range of 18 to 62.

### **Procedure**

The 115-item survey was administered online via Qualtrics and was self-paced, with most respondents finishing within 20 minutes. The survey was prefaced with an informed consent document. Although no participants were directly compensated, some may have been given extra credit in their college course. Following the survey, the participants were provided a debriefing form. All work was carried out with the approval of the University Institutional Review Board, and we followed all federal and local guidelines for the protection of human participants.

### **Measures**

**Big Five Inventory.** The construct of personality was measured with the use of the Big Five Inventory (Goldberg, 1992). Respondents completed the 44-item scale which assesses the traits that fall under the Big Five categories (Openness, Conscientiousness, Extraversion, Neuroticism, and Agreeableness). Participants answered the items on a 5-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

**Life Satisfaction Scale.** To assess overall satisfaction with one's current life, the Life Satisfaction Scale (Diener, Emmons, Larsen & Griffin, 1985) was administered. Participants answered 5 questions concerning how they feel about their life thus far on a 7-point Likert Scale ranging from 1 (Strongly Disagree) to 7 (Strongly Agree).

**Fordyce Emotion Questionnaire.** Respondents' feelings of happiness and well-being were measured via the Fordyce Emotion Questionnaire (Fordyce, 1988). This questionnaire consisted of 2 questions, with the first asking respondents to rate how happy or unhappy they usually feel and the second asking them to identify the percent of the time (out of 100) that they feel happy, unhappy, and neutral. The first question utilized an 11-point Likert scale ranging from 1 (Extremely happy) to 11 (Extremely unhappy), and the second question incorporated three self-reported number values adding up to 100.

**Lubben Social Network Scale.** To characterize respondents' social support network, the Lubben Social Network Scale (Lubben, 1988) was utilized. The brief, 6 item version was chosen due to its high level of reliability reported in past research ( $\alpha=.83$ ). Respondents answered questions about the number of people they interact with, confide in and seek help from, in relation to both friends and family. All responses were made on a 5-point Likert scale that ranged from 0 (none) to 5 (nine or more).

**Self-Constructed Scale.** To analyze the social support seeking behaviors of our participants, we constructed our own measure that was loosely based upon the types of social support outlined in the COPE inventory (Carver, Scheier & Weintraub, 1989). Our scale began by asking participants how frequently they use online platforms (Facebook, twitter, and anonymous online support groups) to seek support from others. Responses were given on a 6-point Likert scale ranging from Very Rarely to Very Often. The next sections were organized by five different types of stressors (School/Work Stress, Family Problems, Friend/Roommate Problems, Romantic/Dating Problems, and Daily Hassles). Each section contained 8 questions, with four focused on online support seeking behaviors (one question each for emotional, instrumental, and informational support; one question for the helpfulness of support received), and the other four focused on face-to-face support seeking behaviors (one question each for emotional, instrumental, and informational support; one question for the helpfulness of support received). Responses were given on a 6-point Likert scale ranging from 1 (Very Rarely) to 6 (Very Often), with the exception of the question assessing helpfulness which utilized a 5-point Likert scale ranging from 1 (Strongly agree) to 5 (Strongly Disagree). Following these sections, respondents were asked overall how much support they receive from family, close, friends, acquaintances/Facebook friends, and romantic partners. Lastly, individuals were asked how frequently they offer support to others online and face-to-face. Responses for these two

sections were made on a 5-point Likert scale ranging from 1 (A great deal) to 5 (None at all).

**Demographics.** Participants reported their age, gender, race, education level, and romantic relationship status.

## RESULTS

A paired-samples t-test was conducted to compare means of overall online social support

seeking and face to face social support seeking. There was a significant difference in the scores for overall online support seeking ( $M=1.65$ ,  $SD=.74$ ) and overall face to face support seeking ( $M=3.38$ ,  $SD=1.22$ ) conditions;  $t(123)=-14.99$ ,  $p < 0.005$ . The 95% confidence interval for the mean difference between the two rating was -1.95 to -1.49.

Table 1  
Multiple Regression Analyses for Venue Type of Social Support Seeking

	Face to Face Support Seeking			Online Support Seeking		
	B	Total $R^2$	$\Delta R^2$	$\beta$	Total $R^2$	$\Delta R^2$
Step 1		.17***	.17***		.02	.02
Age	-.42***			-.15		
Step 2		.26***	.09*		.08	.06
Age	-.46***			-.10		
Extraversion	.21*			.06		
Agreeableness	.13			.08		
Conscientiousness	.15			-.19		
Neuroticism	.17			.14		
Openness	.08			.02		
Step 3		.32***	.06**		.08	.00
Age	-.47***			-.10		
Extraversion	.17*			.05		
Agreeableness	.12			.08		
Conscientiousness	.11			-.19		
Neuroticism	.21			.14		
Openness	.07			.02		
Social Network Size	.26**			.02		

N=120. \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

Two different three stage hierarchical multiple regressions were conducted with Face to Face Support Seeking and Online Support Seeking as the two different dependent variables. These regressions are presented in Table 1.

**Face to Face Support Seeking.** Step 1 of a hierarchical regression analysis controlled for the demographic variable age. Personality variables (Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness) were entered at step two. Finally, at stage three, social network size was entered. This analysis revealed that at stage one, age contributed significantly to the regression model,  $F(1,124) = 26.14$ ,  $p < .001$ , and accounted for 17% of the variation in face to face support seeking with a negative correlation between the two. Introducing the personality variables explained an additional 9% of variation and this change in  $R^2$  was significant,  $F(6,119) = 7.07$ ,  $p < .001$ .

More specifically, Extraversion came out as having a positive correlation with support seeking and Neuroticism was a marginal predictor of face to face support seeking. Lastly, adding social network size to the regression model explained an additional 6% of the variation in face to face support seeking and this change in  $R^2$  was significant,  $F(7,118) = 7.98$ ,  $p < .001$ . When all three independent variables were included in stage three of the regression model, the most important predictors of face to face support seeking were age, with a negative correlation, and social network size, with a positive correlation. Together the three independent variables accounted for 32% of the variance in face to face support seeking.

**Online Support Seeking.** Step 1 of a hierarchical regression analysis controlled for the demographic variable age. At step 2, personality variables (Extraversion, Agreeableness,

Conscientiousness, Neuroticism, and Openness) were entered. Finally, at stage three, social network size was entered. This analysis revealed

that at all stages, there was no significant contributors to the regression model and no significant changes in  $R^2$ .

Table 2  
*Hierarchical Regression Analysis for Happiness*

	Happiness		
	B	Total $R^2$	$\Delta R^2$
Step 1		.01	.01
Age	.01		
Step 2		.38***	.37***
Age	-.03*		
Extraversion	.60**		
Agreeableness	.39		
Conscientiousness	.38		
Neuroticism	-1.17***		
Openness	-.23		
Step 3		.39***	.01
Age	-.03*		
Extraversion	.62**		
Agreeableness	.41		
Conscientiousness	.32		
Neuroticism	-1.13***		
Openness	-.22		
Overall Online	-.26		
Step 4		.41***	.02*
Age	-.02		
Extraversion	.52**		
Agreeableness	.37		
Conscientiousness	.21		
Neuroticism	-1.21***		
Openness	-.28		
Overall Online	-.35		
Overall Face to Face	.30*		

N=117. \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

A four-stage hierarchical multiple regression was conducted with Happiness as the dependent variable. The results are presented in Table 2. Step 1 controlled for the demographic variable age. Following this step, personality variables (Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness) were entered. At stage three, overall online support seeking was entered. Finally, at stage 4, overall face to face support seeking was entered. The hierarchical multiple regression revealed that at stage one, age did not contribute significantly to the regression model,  $F(1,115) = .62, p > .05$ , and accounted for just 17% of the variation in Happiness. Introducing the personality variables explained an additional 37% of variation and this change in  $R^2$  was significant,  $F(6,110) = 11.27, p < .001$ . More specifically, Neuroticism was highly negatively correlated with Happiness and Extraversion was positively correlated to Happiness. Adding Overall Online Support

Seeking to the regression model explained an additional 1% of the variation in Happiness, and this change in  $R^2$  was not significant. Lastly, adding Overall Face to Face Support Seeking explained an additional 2%, and this change in  $R^2$  was significant,  $F(4,120) = 10.593, p < .001$ . When all the independent variables were included in stage four of the regression model, the most important predictors of Happiness were Neuroticism, Extraversion, and Overall Face to Face Support Seeking. Together the independent variables accounted for 41% of the variance in Happiness.

A one-way repeated measure ANOVA was conducted to compare stressor type on venue type chosen in School/Work, Family, Friend/Roommate, Romantic/Dating, and Daily Hassles stress conditions. There was a significant effect of stressor type on venue chosen,  $F(8,108) = 9.42, p = .001$ . Two paired samples t-tests were conducted to make post hoc comparisons

between conditions. A first paired samples t-test indicated that there was a significant difference in face to face support seeking in School/Work stress ( $M=3.72$ ) compared to Family stress ( $M=3.39$ ), Friend/Roommate stress ( $M=3.25$ ), Romantic/Dating stress ( $M=3.16$ ), and Daily Hassles stress ( $M=3.27$ );  $t(123) = 6.62, p = .000$ . A second paired samples t-test indicated that there was a significant difference in online support seeking in Friend/Roommate stress ( $M=1.49$ ) compared to School/Work stress ( $M=1.75$ ), Family stress ( $M=1.61$ ), Romantic/Dating stress ( $M=1.62$ ), and Daily Hassles stress ( $M=1.74$ );  $t(123) = 7.91, p = .001$ .

## DISCUSSION

### Overview of Purpose

The majority of research examining social support has focused on the importance of perceived support to health and well-being. This is illustrated in Thoits's (1986) "coping assistance" hypothesis, the buffering hypothesis (Thoits, 1986), and a large body of research that has documented numerous beneficial effects of social support (Leung, Pachana, & McLaughlin, 2014; Pow et. al., 2017; Shavitt et. al., 2016). While it is important to understand this connection between social support and an individual's health, it is also equally important to understand the circumstances surrounding attempts to obtain social support. However, relatively little research attention has been devoted to exploring the process of seeking social support. Thus, we have limited knowledge of factors that predict who seeks support and under what circumstances. This study explored the influence of personality variables as well as the type of stressor experienced on support seeking behavior. We also examined preferences for online venues for support seeking, compared to more traditional, face to face interactions.

### Findings

To begin, we found that despite high levels of social media use in contemporary society, face to face interactions are still a much more popular mode of support seeking compared to online exchanges. This finding may be due to normative influence pressures regarding appropriate avenues for seeking support. In other words, it may be less socially

acceptable to ask for support to a large community of "online friends" compared to making one-on-one requests for help. Furthermore, online bids for support may project an unfavorable impression, interfering with the common goal of using social media to showcase the "good" sides of one's life. Alongside this, seeking out social support face to face gives the opportunity to see the facial affect and body language, as well as the tone of voice of the individual offering help. This can be more personal and constructive than just reading words typed out on social media. We also examined which online venues would be most popular for seeking support. While we had little reports of using online venues to seek out social support, the most popular venue among our participants was Facebook. This may be due to it being a more popular venue overall, or other unknown factors.

We also tested the impact of personal variables on support seeking behaviors and found that age was negatively linked to seeking support, while extraversion and larger social network promoted greater support seeking. Our observed age effects may be explained by the notion that as people mature, they may have less need for seeking out help from others. Older participants may also rely on their earlier experiences in life as support in comparison to social support. For extraverts, they may seek help more frequently because they are more comfortable in social situations as opposed to introverts. Extraverts draw their energy from interactions with others (Goldberg, 1992) so they may find social support more helpful than other types of support. Those with larger social networks have more friends and family who are available to provide support, and this may explain why they engage in support seeking more frequently.

Furthermore, we examined the impact of type of stressor and venue on the frequency of support seeking and found that there was less support seeking for friend problems, compared to other types of problems, on social media. This finding may be due to it being less socially acceptable to disclose personal problems about friends in a public forum, or possibly due to the fact that individuals may be "friends" with or



follow the friends they would be talking about online. For face-to-face support, there was more support seeking for school or work stress over all the other types of stressors. This may be because individuals most frequent in-person interactions are with fellow coworkers/students, therefore they seek their support about common interests/concerns that they may share. It may also be more socially acceptable for someone to disclose work stress over more personal stressors, such as family or relationship stress. Lastly, we found that in relation to well-being, face to face support seeking promoted greater happiness, while online support seeking did not. This may explain why face to face support seeking is distinctly more popular than online support seeking.

### Limitations

Our study contained a few notable limitations. The largest limitation would be the lack of diversity in our sample, as it was comprised of mostly female and white participants. The small number of male participants made us unable to test for expected gender differences in help seeking that have been found in previous literature (McLaughlin et. al., 2010; Eckenrode & Wethington, 1990; Thoits, 1995). Overall, the sample was not representative of the total population as a whole in race nor gender, therefore limiting the generalizability of our results to the population.

### Future Directions

One area for future investigation would be to examine reasons that individuals prefer to seek support using one venue over another. Specifically, individuals could be interviewed to determine their perceptions of the costs and benefits to seeking support via different venues (in-person and online). Alongside this, it would be useful to explore the actual effectiveness/benefits of different modes of support as a function of person variables and type of stressor.

### REFERENCES

Boyd, D. M., & Ellison, B. N. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*, 13(1), 210-230. doi:10.1111/j.1083-6101.2007.00393.x

- Chan, Y. K., & Lee, R. P. L. (2006). Network size, social support and happiness in later life: A comparative study of Beijing and Hong Kong. *Journal of Happiness Studies*, 7(1), 87-112. doi:10.1007/s10902-005-1915-1
- Charnigo, L., & Barnett-Ellis, P. (2007). Checking out facebook.com: The impact of a digital trend on academic libraries. *Information Technology and Libraries*, 26(1), 23-34. doi:10.6017/ital.v26i1.3286
- Cleary, P. D. (2017). Social support: Conceptualization and measurement. In *Evaluating family programs* (pp. 195-216). Routledge.
- Diener, E., Emmons, R. A., Larsen R. J., & Griffin S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49, 71-75. doi:10.40-3590/93/83.00
- Eckenrode, J. (1983). The mobilization of social supports: Some individual constraints. *American Journal of Community Psychology*, 11(5), 509-528. doi:10.1007/BF00896802
- Eckenrode, J., & Wethington, E. (1990). The process and outcome of mobilizing social support. In S. W. Duck & R. C. Silver (Eds.), *Personal relationships and social support* (pp. 83-103). Thousand Oaks, CA: Sage.
- Engelberg, E., & Sjoberg, L., (2004) Internet use, social skills, and adjustment. *Cyberpsychology and Behavior*, 7(1), 41-47. doi:10.1089/109493104322820101
- Fordyce, M. W. (1988). A review of research on the happiness measures: A sixty second index of happiness and mental health. *Social Indicators Research*, 20, 63-89. doi:10.1007/BF00302333
- Goldberg, L. R. (1992). The development of markers for the big-five factor structure. *Psychological Assessment*, 4, 26-42. doi:10.1037/1040-3590.4.1.26
- Gray, G., Powell, P. W., Reese, M. K. (2013) Connecting with others: A qualitative study of online social networking site usage. *The Practitioner Scholar: Journal of Counseling and Professional Psychology*, 2, 52-67. doi: 10.11637/7985
- Kessler, R. C., & McLeod, J. D. (1984). Sex differences in vulnerability to undesirable life events. *American Sociological Review*, 49(5), 620-631. doi:10.2307/2095420
- Landers, R. N. & Lounsbury, J. W. (2006). An investigation of big five and narrow

- personality traits in relation to internet usage. *Computers in Human Behavior*, 22, 283-293. doi:10.1016/j.chb.2004.06.001
- Leung, J., Pachana, N. A., & McLaughlin, D. (2014). Social support and health-related quality of life in women with breast cancer: a longitudinal study. *Psycho-Oncology*, 23(9), 1014-1020.
- Lin, K. & Lu, H. (2011). Why people use social networking sites: An empirical study integrating network externalities and motivation theory. *Computers in Human Behavior*, 27 (3), 1152-1161. doi: 10.1016/j.chb.2010.12.009
- Lubben, J. (1988) Assessing social networks among elderly populations. *Family & Community Health: The Journal of Health Promotion & Maintenance*, 11, 42-52. doi:10.1016/j.chb.2004.06.001
- McLaughlin, D., Vagenas, D., Pachana, N. A., Begum, N., & Dobson, A. (2010). Gender difference in social network size and satisfaction in adults in their 70s. *Journal of Health Psychology*, 15(5), 671-679. doi:10.1177/1359105310368177
- Meng, J., Martinez, L., Holmstrom, A., Chung, M., & Cox, J. (2017). Research on social networking sites and social support from 2004 to 2015: a narrative review and directions for future research. *Cyberpsychology, Behavior, and Social Networking*, 20(1), 44-51.
- Seo, H., Harn, R., Ebrahim, H. & Alda, J. (2016). International students' social media use and social adjustment. *First Monday*, 21 (11), 76-89. doi: 10.5210/fm.v21i11.6880
- Shavitt, S., Cho, Y. I., Johnson, T. P., Jiang, D., Holbrook, A., & Stavrakantonaki, M. (2016). Culture moderates the relation between perceived stress, social support, and mental and physical health. *Journal of Cross-Cultural Psychology*, 47(7), 956-980.
- Shumaker, S. A., & Brownell, A. (1984). Toward a theory of social support: Closing conceptual gaps. *Journal of Social Issues*, 40, 11-36. doi:10.1111/.1540-4560.1984.tb01105.x
- Thoits, P. A. (1986). Social support as coping assistance. *Journal of Consulting and Clinical Psychology*, 54, 416-423. doi:10.1037/0022-006X.54.4.416
- Thoits, P. A. (1995). Stress, Coping, and Social Support Processes: Where Are We? What Next? *Journal of Health and Social Behavior*, 35, 53-79. doi:10.2307/2626957
- Wang, X. (2016). Subjective well-being associated with size of social network and social support of elderly. *Journal of Health Psychology*, 21(6), 1037-1042. doi:10.1177/1359105314544136
- Wethington, E., McLeod, J., & Kessler, R. C. (1987). The importance of life events for explaining sex differences in psychological distress. In R. C. Barnett, L. Biener, & G. K. Baruch (Eds.), *Gender and Stress* (pp.144-154). New York, NY, US: Free Press.