

The Effects of Peer Mentoring

Shayla Betts¹

Abstract

Many studies have shown that mentoring in the workplace can benefit both the mentor and mentee professionally and personally. Research also suggests that peer mentor relationships are becoming more necessary for effective career development especially with younger adults. Consequently, current research has focused on peer mentoring as it relates to adolescent and undergraduate students. However, more information is needed on how peer mentoring may affect graduate students as well. Therefore, it is of interest to study the effects that having a peer mentor in a Master of Social Work (MSW) program has on first year students. It is hypothesized that interacting with a peer mentor in a MSW program at a mid-Atlantic urban university will help to increase social integration and confidence while decreasing stress.

Keywords: peer mentoring, stress, confidence, social integration, mentor, mentee

It has been reported that 57 percent of all students who drop out of four-year college institutions do so within their first academic year. Dropout rates are mainly due to academic struggles, isolation, and adjustment difficulties (Gattis & Hill, 2007). Additionally, half of the total number of first-year student dropouts is not a result of academic pressures (Gattis & Hill, 2007). Schlemper (2011) reflects on common challenges faced by graduate students including but not limited to time management, increased workload, challenging courses, responsibilities related to teaching and taking classes, dissertation progress, and working while in the program. Therefore, because several factors affect a student's experience in collegiate coursework, retention programs should focus on the holistic student experience (Gattis & Hill, 2007).

1.1 Stress and the Graduate Education

Rocha-Singh (1994) conducted a study on perceived stress related to graduate students. The author states that stress results when a situation is determined to be challenging or demanding and there are insufficient resources available to cope. Stress, as defined by Rocha-Singh (1994), is therefore an emotional response to an event. The resulting behavior is the function of interaction between the person and the environment. According to the author, major areas of stress in regard to graduate students are related to professionalism and academics, environment, family, finances, and personal situations. Commonplace stressors affecting college and graduate students encompass changes in the environment, loss and diminished social support networks, new and increased academic demands, the need to create new peer relationships, and increased personal responsibility in housing and budgeting. These increased responsibilities then lead to increased opportunities for success or failure (Galatzer-Levy & Bonanno, 2012).

1.2 Self-Efficacy and Confidence

It is important to note the difference between self-efficacy and confidence. Hirose, Wada, and Watanabe (1999) define self-efficacy as a person's beliefs about one's capabilities to perform given actions. Confidence, on the other hand, is one's positive or negative attitudes towards himself or herself. Additionally, Van Der Roest, Kleiner, and Kleiner (2011) assert that self-efficacy is a measure of confidence which is affected by motivation.

¹Longwood University, 201 High Street, Farmville, VA 23909, USA, Email: bettsse@longwood.edu, Office Phone: (434) 395-4898, Work Cell: (804) 234-3025

Therefore, for the purpose of this paper, both confidence and self-efficacy will be taken into consideration because of their innate relationship. Studies related to career self-efficacy have found three main domains in which people may struggle. Career choice content refers to careers individuals are confident with as their vocational choice while career choice process relates to the actual process of choosing a career. Although both of these domains are important, for the purposes of this study, emphasis will be placed on the career adjustment self-efficacy domain in which the main premise involves an individual implementing the chosen career and finding satisfaction and success in the path. College, especially graduate studies, can be seen as the first part of beginning one's career and, therefore, good adjustment to college is crucial in initiating one's self-efficacy within the field (Hirose, Wada, & Watanabe, 1999).

1.3 Social Integration

Fickey and Pullen (2011) assert that informal networks including relationships with peers, colleagues, and professors, are essential to efficient graduate studies and maintaining one's composure and mental stability. The authors state that informal networks can provide individuals with opportunities to learn from others who share similar interests and career goals. It also allows for the establishment of meaningful connections of mutual disclosure, support, and encouragement with other graduate students. Additionally, making a commitment to set aside time for such activities is a healthier choice compared to isolating oneself working relentlessly on assignments. Outcomes related to maintaining such networks include but are not limited to learning successful and unsuccessful strategies for coping with graduate demands, participating in healthy venting sessions, network sharing to provide guidance and resources, building rapport, and enhancing individual work while providing opportunities to collaborate.

2 Literature Review

2.1 Peer Mentoring

According to Colvin and Ashman (2010), since the 1700s, students on university and college campuses have been assisting their peers academically. Consequently, social support networks, especially peer mentoring programs, are now growing in popularity among many college campuses in the United States of America. Currently, many universities are implementing new approaches to enhance traditional classroom learning. Methods such as learning communities, enhancing online classrooms with peers, and peer mentoring programs are being used to supplement a student's curriculum (Colvin & Ashman, 2010). Therefore, the purpose of this research is to examine the effects that peer mentoring has on confidence, social integration, and stress for incoming Master of Social Work students at a mid-Atlantic urban university.

2.1.1 Definition.

Peer mentoring, as it relates to an educational setting, is defined as a helping relationship in which two people of similar age and experience collaborate in hopes of fulfilling some combination of functions that are career and educationally related (Terrion & Leonard, 2007). It involves a more experienced student (mentor) helping a less experienced student (mentee) improve overall academic performance by providing advice, social support, and knowledge while also encouraging personal growth (Colvin & Ashman, 2010). The difference between traditional mentoring and peer mentoring is that with traditional mentoring, the mentor is usually much older and more experienced in the field. He or she is generally responsible for sponsoring, coaching, protecting, exposing, and challenging the mentee with work assignments while also accepting, confirming, counseling, and role modeling the position. On the other hand, peer mentors show a greater focus on information sharing and strategizing while also confirming, providing emotional support and personal feedback, and being a friend (Terrion & Leonard, 2007). In addition, there are two main types of peer mentor relationships. Allen, McManus, and Russell (1999) describe in detail the difference between formal and informal mentoring relationships. While formal relationships are a result of a matching process through a third party, informal mentoring relationships evolve spontaneously through mutual attraction. Informal relationships usually last about three to six years which is much longer than formal relationships, as formal relationships tend to last for six months to a year.

2.1.2 Functions and roles of peer mentoring

Research clearly defines two functions of the mentoring relationship. These functions include task and career related functions and psychosocial functions. Receiving advice, support, information, professional development, and career success are examples of services related to the task and career functioning aspect of the mentor relationship.

Emotional and psychological support encompasses the psychosocial or intrinsic functions (Terrion & Leonard, 2007; Allen, McManus, & Russell, 1999). Colvin and Ashman (2010) describe five main roles that mentors fulfill in order to support mentees in these relationships. The mentor (a) is a connecting link helping mentees get involved in the campus as well as in the classroom. Mentors are (b) leaders who motivate and guide their mentees. They function as (c) learning coaches and (d) student advocates helping with academic and personal needs as well as identifying learning strengths and styles and teaching academic and life skills. Finally, mentees describe mentors as being (e) a trusted friend.

2.1.3 Essential characteristics.

Terrion and Leonard (2007) describe several characteristics that are essential in effective student peer mentors and mentees. For example, prerequisites that should be taken into consideration when developing a mentoring relationship are the ability and willingness of the mentor to commit time, gender and race of the participants, university experience, academic achievement or experience in the field, and prior mentoring experience. Important career related characteristics are the program of study and self-enhancement motivation. Psychosocial characteristics to be considered are communication skills, supportiveness, trustworthiness, interdependent attitude, empathy, personality match, enthusiasm, and flexibility.

2.2 Theoretical Support for Peer Mentoring

Social learning theory describes the modeling process that occurs when new people vicariously learn through a more experienced individual in the field. These experienced professionals serve as role models for the incoming persons (Allen, McManus, & Russell, 1999). The theory affirms that some behaviors are learned through social interaction. These behaviors may be broad or specific, good or bad. However, positive social reinforcement of behaviors is a great influence on the continuation of said behaviors (Pratt, et al., 2010). Therefore, Allen, McManus, and Russell (1999) argue that peer mentoring is a useful method for positively training individuals, gathering information, and performing tasks.

Social support theory also focuses on the role supportive relationships have on preventing, reducing, and coping with stress. According to Allen, McManus, and Russell (1999), social support occurs in many forms including emotional (esteem, trust, concern, listening), appraisal (affirmation, feedback, social comparison), informational (advice, directives, information, suggestions), and instrumental (money, labor, time, modified environment). Social support has been shown to alleviate the effects of stress in a variety of populations and mediate negative effects of exhaustion, two central components in the burnout process. Therefore, by relieving stress and negative effects of exhaustion, institutions may see decreased turnover intentions (Allen, McManus, & Russell, 1999).

Finally, ecological theory suggests that different levels of environment have different effects on development. In other words, development depends on the immediate environment as well as the interaction of a larger environment through different interrelated systems. Peer mentoring, therefore, by combining academics with social settings, can affect mentees on the micro, mezzo, and community levels (Frels, et al., 2013). This is supported by research conducted by Frels, et al. (2013). According to the study, 96 percent of the mentors participating in examining perspectives and experiences of mentors emphasized the need to engage in social activities as well as academic responsibilities (Frels et al., 2013). Thus, mentoring should be evaluated from multiple perspectives.

2.3 Effectiveness

Risks and benefits.

2.3.1 Risks. There may be a few challenges for participants in a peer mentoring relationship. For instance, some mentors reflected that they sometimes had difficulties balancing requirements and personal desires to do well as mentors with time for other academic and social commitments. They face vulnerability when risking rejection from student mentees. On the other hand, it is sometimes difficult when the mentees are too dependent on the mentor. Finally, mentors and mentees must find an appropriate balance with emotional attachment and mentors should be sure not to show favoritism (Colvin & Ashman, 2010).

2.3.2 Benefits. Peer mentoring has been shown to have positive effects for the mentees, mentors, and the university. Mentees report benefiting academically and mentors have expressed improved development of personal relationships and satisfaction of role (Leidenfrost, Strassnig, Schabmann, Spiel, & Carbon, 2011). Mentors are also able to learn and use resources, practice interpersonal skills, and exercise commitment.

Along with academic and social support, mentees also receive confidence, self-esteem, encouragement, solutions to problems, goals, focus, friends, and networking. Peer mentoring also may increase the mentee's grade point average and increase the retention rate for these individuals.

These measures were assessed by looking at the first year retention rate, grade point average, satisfaction surveys, mentor retention, and mentor debriefing between fall and spring semesters (Gattis & Hill, 2007). With improved traits in mentees and mentors, the universities can then see reduced dropout rates because the holistic student experience is being catered to instead of focusing solely on academics (Leidenfrost, Strassnig, Schabmann, Spiel, & Carbon, 2011).

3 Summary, Rationale, and the Significance to Social Work Practice

In short, peer mentoring has been implemented informally in collegiate studies for many years but formal peer mentoring programs is becoming more common. There are many functions and characteristics of the peer mentoring relationship and studies have found that mentors and mentees both report many benefits (Gattis & Hill, 2007; Leidenfrost, Strassnig, Schabmann, Spiel, & Carbon, 2011). However, there is less information regarding the mentee's role in the relationship and their functions and contributions. More research should be conducted to detail how mentee involvement can affect the mentoring relationship. In addition, because many peer mentoring studies focus on undergraduate students and adolescents, it is important to note how it may impact people on the graduate level as coursework, responsibilities, and development are at a more advanced stage. Hence, it is helpful to study how these relationships can affect confidence, social integration, and stress for incoming graduate students. With additional knowledge, social workers and other university clinicians can begin to enact higher quality peer mentoring programs. In this way, social workers are able to train and lead others to uphold the National Association of Social Workers (2008) Code of Ethics by providing a service, recognizing the importance of human relationships, valuing the dignity and worth of a person, and fighting for social justice in that all people will have adequate supports to complete the highest level of education they want to pursue.

4 Research Question and Hypothesis

Many studies have shown that mentoring in the workplace can benefit both the mentor and mentee professionally and personally (Allen, McManus, & Russell, 1999; Colvin & Ashman, 2010; Gattis & Hill, 2007; Terrion & Leonard, 2007). Research also suggests that peer mentor relationships are becoming more necessary for effective career development especially with younger adults (Allen, McManus, & Russell, 1999). Therefore, it is of interest to study the effects that having a peer mentor in the Master of Social Work (MSW) program has on first year students. This research will identify how peer mentoring programs affect confidence, social integration, and stress in incoming graduate students. It is predicted that there will be differences in confidence, stress, and social integration scores between students with and without a peer mentor. This hypothesis is rational as interaction with a peer mentor is expected to increase the confidence and social integration of the mentee while decreasing the mentee's stress. By contributing to and participating in positive social interactions, the student mentees will perceive more support from the graduate program. This will allow them to feel valued in the program and encourage them to continue to participate in related activities. Successful participation in sponsored programming and organizations will then help the students to build confidence in their engagements. Accordingly, by interacting with students who have been through the first year of the program, mentees will gain more realistic expectations of the program and therefore learn successful strategies to overcome the difficulties encountered while completing the area of study.

5 Methods

5.1 Target Population and Sampling

The target population for the study was all foundation (first year) MSW students enrolled at a mid-Atlantic urban university in the Fall 2013 and Spring 2014 academic semesters regardless of full-time, part-time, or distance education status. This population is predominately female, Caucasian, and has an average age of approximately 28 years old. All persons in the targeted population were included in the study without discrimination in regard to sex, race, sexual orientation, age, etc. Although it is recognized that for some participants English may be their second language, all MSW students in the program speak English and are tested for proficiency when entering the program. This study used convenience sampling by including all foundation year students currently enrolled in the program. This gave an estimated population size of 150 students which would potentially accumulate enough responses to have generalizable results as it pertains to first year graduate students in the program.

The name and contact information for participants was provided through the School of Social Work at the university. All contact with the students was made via university email as this is the institution's official method of communication. Participants remained anonymous as no personally identifiable information was collected. Participants were able to respond privately and a record of who responded was not kept; there was no way to trace individual responses back to a specific participant. A consent form detailing the purpose and description of the study, risks, benefits, costs, confidentiality, and contact information was provided and digital acceptance of the consent form was required before accessing to the survey.

5.2 Study Design

All eligible students were sent an informational email to the student's university email address informing them about the study's purpose and description prior to the study being administered. When the data collection process began, the students received a second email inviting them to participate with the embedded link to the survey included in the email. During the next three weeks, the students received two follow-up emails reminding them to participate if they had not already completed the survey but were still willing to contribute. Included in the last three emails was also the consent form which could be printed or saved in order for the participant to maintain a copy. Data collection was in the form of a cross-sectional online survey using Redcap, a university approved system that provides anonymity and is a secure way to collect electronic data. Before accessing the online survey, a consent form detailing the purpose and description of the study, risks, benefits, costs, confidentiality, and contact information was provided. Digital acceptance of the consent form allowed access to the survey. A pre- post- test study design was considered to see how perspectives changed over time. However, this design would have been more beneficial if the research was also looking at academic impacts. A pre- post- test study design would have allowed for the retrieval of how grades were impacted over time from when the student was matched with a mentor until the end of the selected number of semesters.

5.3 Instruments and Measures

The independent variable in this study is whether or not the student has a peer mentor. The dependent variable is the impact that having a peer mentor has on the student in regard to confidence, stress, and social integration. The survey questions are based on several empirically-based, valid, and reliable test measurements (Appendix A). The Educational Outcome Measure was designed to assess school achievement as it relates to motivation (Dumont, et al. 2012). Five questions were selected from this instrument; four were used to evaluate confidence (questions 11, 12, 13, and 19) and one was used for stress (question 29). Three questions were included from the Positivity Scale (questions 14, 15, and 16) to measure confidence because the instrument was created to evaluate the positive views of a person's self, life, and future, as well as a person's confidence in others (Caprara et al., 2012). The Resiliency Scale, which was implemented to observe how employees coped with workplace stress, lent three questions to be used (Siu et al., 2009). Two of the questions related to confidence (questions 17 and 18), and the last was used to measure stress (question 22). Several questions were taken from the Daily Life Questionnaire (questions 20, 21, 27, 28, 30, 31, 32, and 33), and used to evaluate confidence and stress. The instrument was originally developed to assess mood, stress, and physical health (Schwartz, Romans, Meiyappan, De Souza, & Einstein, 2012). The Graduate Stress Inventory-Revised, developed by Rocha-Singh (1994) is used to study academic climate, social integration, and graduate student concerns. Thirteen of these questions (questions 23-26, 34, 36-43) were used to assess social integration and stress. The Quality of Social Support Scale was derived in order to observe health status, social integration, aspects of social support, and social and psychological functioning (Goodenow, Reisine, & Grady 1990). Therefore, six questions were taken from this scale to gauge social integration (questions 44-49).

Two questions from the Social Integration Index were selected (questions 50 and 51) as this index looks at the existence and number of formal and informal involvement in activities (Brown, Brown, House, & Smith, 2008). While the Work Relationships Scale looks at implications of workplace relationships and the perspectives of such (Khodarahimi, Hashim, & Mohd-Zaharim, 2012) the Work-Related Mood Scale was established to monitor the mood states at work by examining how mood relates to goal attainment (Bindl, Parker, Totterdell, & Hagger-Johnson, 2012). Two questions were used from the work relationships scale (questions 52 and 53) and one (question 10) was referenced from the work-related mood scale. Finally, because it was developed to examine the role of personal and social support factors involved in a student's decision to participate in formal academic mentoring, the Available Social Support Measure provided three questions (questions 7-9) to be used for this assessment measure (Larose et al., 2009).

6 Results

6.1 Population Outcome

A total of 55 participants began the survey with 47 participants completing the survey in totality.

The majority of the participants were Caucasian (42 participants) while four participants identified as African American, four identified as Hispanic, and one was Asian. The majority of the participants described themselves as full-time students meaning they are taking at least 12 graduate credit hours (39 participants). Three participants were part-time students meaning they are enrolled in less than 12 graduate credit hours this semester, and eight participants were identified as part of the online distance-education program. Twenty-six participants reported being matched with a peer mentor while 21 reported that they were not matched with a peer mentor through the School of Social Work. Figure 1 shows the distribution of participants based on student classification and peer mentors. Because the population is known to be predominately female with an average age of 28 years old, the age and gender of each participant was not obtained as possible outliers may have been potentially identifying.

Figure 2 illustrates the distribution of students who have and have not received mentoring support outside of their graduate studies prior to being matched with a peer mentor in the program. The majority of students who have received prior mentoring services were currently interacting with a peer mentor in their academic program. Additionally, almost half of the student participants who had no previous mentoring support were currently engaging in peer mentoring services sponsored through their academic program.

Figure 1: Student Classification and Peer Mentor Matches

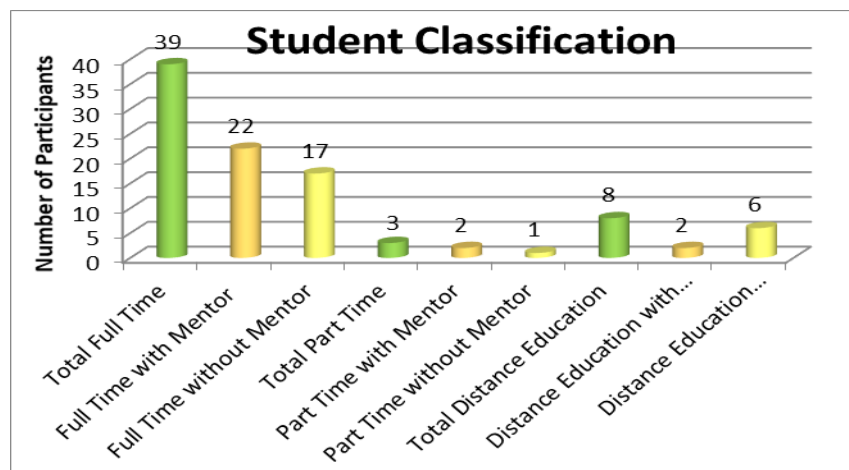
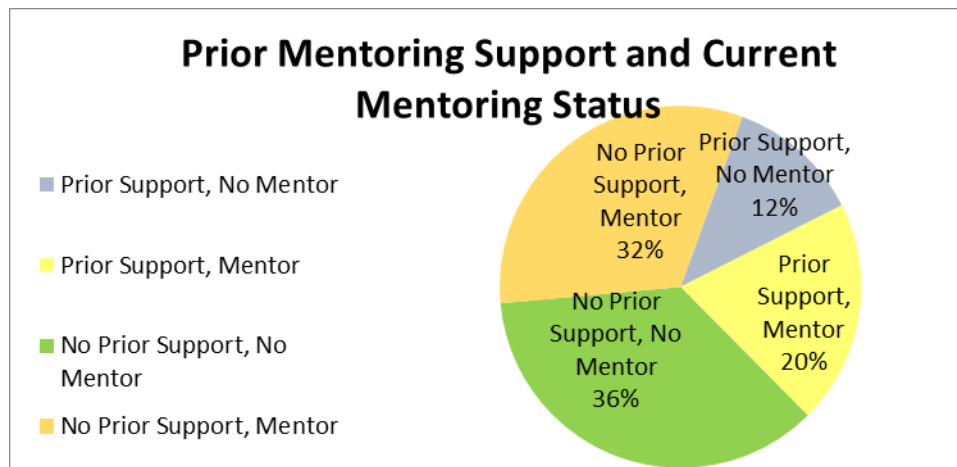


Figure 2: Previous Mentoring Support



6.2 Peer Mentoring Effects on Student Confidence

An independent t-test was performed to determine if there was a difference between confidence levels of students with peer mentors ($m=28.375$, $sd= 5.207$) compared to students without peer mentors ($m=27.417$, $sd= 5.571$). The results indicated that students with a peer mentor reported no major difference in confidence levels compared to students without a peer mentor ($t=-0.616$, $p > 0.05$). Additionally, there is no significant difference in confidence scores between students who occasionally interacted with a peer mentor ($m= 27.824$, $sd= 5.399$) compared to students who did not meet with their peer mentor at all ($m= 28.429$, $sd= 5.353$, $t= 0.592$, $p > 0.05$).

6.3 Peer Mentoring Effects on Student Stress Levels

An independent t-test was performed to determine if there was a difference between stress levels of students matched with a peer mentor through the School of Social Work ($m= 38.75$, $sd= 3.417$) compared to students without a peer mentor through the social work graduate program ($m= 38.958$, $sd= 5.204$). The results indicate that there is no reported difference in stress levels between students with and without peer mentors ($t= 0.164$, $p > 0.05$). However, data shows that stress scores are lower in students who interact with peer mentors occasionally ($m=38.588$, $sd= 3.063$) compared to students who do not interact with their peer mentor at all ($m=40.143$, $sd= 3.485$, $t= -1.087$, $p > 0.05$). Furthermore, it is significant that students who interact with a peer mentor a few times a month ($m= 37.5$, $sd= 1.919$) have lower stress scores than students who interact with a peer mentor a few times a semester ($m= 38.923$, $sd= 3.328$). Thus, it can be inferred that more interaction with a peer mentor can lower stress levels ($t= -.804$, $p > 0.05$).

6.4 Peer Mentoring Effects on Social Integration Scores

Results from an independent t-test show that there is a significant difference between social integration scores between students with a peer mentor ($m= 52.208$, $sd= 8.377$) and students without a peer mentor ($m= 54.044$, $sd= 7.819$).

However, based on the data, students without a peer mentor have greater social integration scores than those with a peer mentor ($t= 0.777$, $p > 0.05$). Additionally, students who never interact with a peer mentor ($m=59$, $sd= 7.457$) have greater reported social integration than students who occasionally interact with a peer mentor ($m= 50.118$, $sd= 7.737$, $t= -2.438$, $p > 0.05$). However, those who only interact with a peer mentor a few times a semester ($m= 49.307$, $sd= 8.606$) have lower social integration scores than those who interact with a peer mentor a few times a month ($m= 52.75$, $sd= 3.304$). Thus, those who interact more frequently with their peer mentor have higher social integration scores ($t= 1.186$, $p > 0.05$) although overall, those who do not interact with a peer mentor have higher scores than those who interact occasionally ($t= -2.438$, $p > 0.05$).

6.5 Prior Mentoring Experience

Independent t-tests were also used to determine the difference in confidence, stress, and social integration scores between students with and without prior mentoring support. It is significant that students with prior mentoring support ($m= 0.63$, $sd= 0.5$) are more likely to have a current peer mentor in the graduate program than those with no previous formal mentoring support ($m= 0.47$, $sd= 0.507$, $t= 3.19$, $p > 0.05$). In regard to confidence scores based on students with prior mentoring experience, those with prior support had a mean confidence score of 26.429 with a standard deviation of 5.515 and those without prior mentoring experience had a mean confidence score of 28.5 with a standard deviation of 5.253. Thus, the results of this independent t-test indicate that students with prior support reported no significant difference in confidence compared to students without prior mentoring support ($t = -1.224$, $p > 0.05$). On the other hand, based on data calculations from an independent t-test ($t= -0.759$, $p > 0.05$), it is significant that students with prior mentoring support have higher stress scores ($m= 39.571$, $sd= 4.071$) than those who did not have prior support ($m= 38.559$, $sd= 4.494$). Results from an independent t-test also show significant differences in social integration scores in students with prior peer mentor support ($m= 51.214$, $sd= 9.167$) compared to those without prior peer mentor support ($m= 53.909$, $sd= 7.572$) as those without prior peer mentor support have higher social integration scores ($t= 0.969$, $p > 0.05$).

7 Discussion

Based on the results of the study, there are no significant differences between confidence scores of foundation Master of Social Work students with and without a peer mentor. A plausible explanation for these results may be that students already feel fairly competent in their abilities because they are currently enrolled in a nationally ranked graduate level program. The program may also do an excellent job of providing resources for their students if they need support.

Based on the test analyses, peer mentoring does not have a significant effect on stress levels between students with and without a formal peer mentor although students who utilize a peer mentor more frequently have lower stress scores than those who do not rely on their peer mentor as often. Students without formal peer mentor matches through the School of Social Work may be relying on informal mentoring and support among friends, family, colleagues, and professors and therefore are still receiving adequate support. More research should be conducted to test confidence, stress, and social integration, between students with formal peer mentors through the program and informal mentoring and support relationships outside of their academic program.

On the other hand, there is a significant difference in social integration scores between students with and without peer mentors; students without a peer mentor seem to be more involved with their academic community. Although the results were surprising, it could be indicative that the academic program, faculty, and staff are proficient in welcoming, servicing, and supporting students in the program whether they have a peer mentor or not. Additionally, having a peer mentor may result in lower social integration scores because, instead of seeking supports from numerous facets of the graduate level program, most of the support is coming from the individual peer mentor. Nevertheless, students who interacted with a peer mentor more frequently have greater social integration scores. Therefore, more should be done to encourage peer mentors to engage their mentees in activities that are provided and sponsored by the academic program so the mentees have more opportunities to interact with peer mentors as well as with the academic community.

Lastly, it may be assumed that mentoring has had positive effects in the past because most of the students who had previous peer mentoring support are currently participating in mentoring services again. Furthermore, about half of the students who have never received peer mentoring support in the past are currently receiving support now. Conversely, based on the study findings, those with prior peer mentoring support have more stress and lower social integration scores than those without prior peer mentoring support.

This could affirm beliefs that a stressor of moving to a new academic program may result in students losing previous support systems and having to create new supports. In other words, students may feel a sense of loss when out of connection with previous support systems and therefore have more difficulty establishing them elsewhere. This study should be expanded to other graduate programs in other institutions to see if the results are a common theme or unique for this program.

7.1 Limitations

This study compared stress, confidence, and social integration levels between foundation Master of Social Work students who have and have not been matched with a peer mentor through the School of Social Work at a mid-Atlantic urban university. Because the survey was distributed during the middle of a spring semester, the results only show a snapshot of current levels of stress, confidence, and social integration. Implementing a pre- post-test at the beginning and end of the first semester in the program may provide further insight into how these levels of stress, confidence, and social integration change over time. Additionally, these results include participants who were matched with a peer mentor throughout the previous fall semester from before September until December. Therefore, the amount of interaction each mentee had with a mentor may be misconstrued as some mentees had more opportunities to interact with a peer mentor.

Also, based on the demographics of the target population, the majority of participants are Caucasian, female students which does not lend much diversity to the population. Moreover, only nine of the forty-seven respondents who completed the survey identified as a racial minority which makes generalizing the results of confidence, stress, and social integration scores by minority status unreasonable. Therefore, analyzing how peer mentoring may affect minority racial populations should be further studied. Finally, only one discipline at one academic institution is being studied. Therefore, the results can be generalized within this study but may not be accurate for other programs or disciplines. In spite of the limitations of the study, several strengths were present as well. First, the self-reported primary data collection allowed for accurate feedback. There was a relatively large sample size and all of the measures used were strong in validity and reliability.

Finally, the Institutional Review Board-approved research upholds the National Associations of Social Workers (2008) Code of Ethics as it expands one's competence, provides future information to accurately lend services, and values the importance of human relationships on multiple spectrums.

8 Implications for Practice

It should be noted that the peer mentor program for Master of Social Work students that was observed for this study was a fairly new program at the university. The peer mentor program did not require students to interact with the mentors for a specified amount of time or frequency and none of the participants reported interacting with their peer mentor daily or a few times a week. However, based on the results of this study, it is suggested that, in order to reduce stress, students matched with a peer mentor should interact with the mentor more frequently. It is also suggested that peer mentors strive to incorporate university programming into their interactions with their mentees.

References

- Allen, T. D., McManus, S. E., Russell, J. E. A. (1999). Newcomer Socialization and Stress: Formal Peer Relationships as a Source of Support. *Journal of Vocational Behavior*, 54, 453-470. Retrieved from <http://www.sciencedirect.com.proxy.library.vcu.edu/science/article/pii/S0001879198916748>
- Bindl, U. K., Parker, S. K., Totterdell, P., & Hagger-Johnson, G. (2012). Fuel of the self-starter: How mood relates to proactive goal regulation. *Journal of Applied Psychology* 97(1), 134-150. doi: 10.1037/a0024368
- Brown, S. L., Brown, R. M., House, J. S., & Smith, D. M. (2008). Coping with spousal loss: Potential buffering effects of self-reported helping behavior. *Personality and Social Psychology Bulletin*, 34(6), 849-861. doi: 10.1177/0146167208314972
- Caprara, G. V., Alessandri, G., Eisenberg, N., Kupfer, A., Steca, P., Caprara, M. G., Yamaguchi, S., Fukuzawa, A., & Abela, J. (2012). The Positivity Scale. *Psychological Assessment*, 24(3), 701-712. doi: 10.1037/a0026681
- Colvin, J. W., & Ashman, M. (2010). Roles, Risks, and Benefits of Peer Mentoring in Higher Education. *Mentoring & Tutoring: Partnership in Learning*, 18(2), 121-134. doi: 10.1080/13611261003678879
- Dumont, H., Trautwein, U., Lüdtke, O., Neumann, M., Niggli, A., & Schnyder, I. (2012). Does parental homework involvement mediate the relationship between family background and educational outcomes? *Contemporary Educational Psychology*, 37(1), 55-69. doi: 10.1016/j.cedpsych.2011.09.004
- Fickey, A., & Pullen, E. (2011). Maintaining Sanity in Graduate School: A Brief Commentary on the Significance of Informal Networks. *The Geographical Bulletin*, 52(2), 64-66. Retrieved from <http://www.gammathetaupsilon.org/the-geographical-bulletin/2010s/volume52-2/article1.pdf>
- Frels, R. K., Onwuegbuzie, A. J., Bustamante, R. M., Garza, Y., Nelson, J. A., Nichter, M., & Leggett, E. S. (2013). Purposes and Approaches of Selected Mentors in School-Based Mentoring: A Collective Case Study. *Psychology in Schools*, 50(6), 618-633. doi: 10.1002/pits.21697
- Galatzer-Levy, I. R., & Bonanno, G. A. (2012). Heterogeneous Patterns of Stress Over the Four Years of College: Associations With Anxious Attachment and Ego-Resiliency. *Journal of Personality*, 81(5), 476-486. doi: 10.1111/jopy.12010
- Gattis, C., & Hill, B., (2007). A successful engineering peer mentoring program. In *Proceedings of the ASEE Annual Conference and Exposition*, 114. Retrieved from http://scholar.google.com.proxy.library.vcu.edu/scholar?hl=en&q=Gattis+A+Successful+Engineering+Peer+Mentoring+Program&btnG=&as_sdt=1%2C47&as_sdtp=#
- Goodenow, C., Reisine, S. T., & Grady, K. E. (1990). Quality of social support and associated social and psychological functioning in women with rheumatoid arthritis. *Health Psychology*, 9(3), 266-284. doi: 10.1037/0278-6133.9.3.266
- Harris, P. A., Taylor, R., Thielke, R., Payne, J., Gonzalez, N., Conde, J. G. (2009) Research electronic data capture (REDCap) - A metadata-driven methodology and workflow process for providing translational research informatics support, *J Biomed Inform*, 42(2), 377-81.
- Hirose, E. I., Wada, S., Watanabe, H., (1999). Effects of Self efficacy on adjustment to college. *Japanese Psychological Research*, 41(3), 163-172. Retrieved from <http://onlinelibrary.wiley.com.proxy.library.vcu.edu/doi/10.1111/1468-5884.00115/pdf>
- Khodarahimi, S., Hashim, I. H. M., & Mohd-Zaharim, N. (2012). Workplace relationships, stress, depression and anxiety in a Malaysian sample. *International Journal of Psychology and Behavioral Sciences*, 2(2), 1-9. Doi: 10.5923/j.ijpbs.20120202.01
- Larose, S., Cyrenne, D., Garceau, O., Harvey, M., Guay, F., & Deschênes, C. (2009). Personal and social support factors involved in students' decision to participate in formal academic mentoring. *Journal of Vocational Behavior*, 74(1), 108-116. doi: 10.1016/j.jvb.2008.11.002

- Leidenfrost, B., Strassnig, B., Schabmann, A., Spiel, C., & Carbon, C.-C. (2011) Peer Mentoring Styles and Their Contribution to Academic Success Among Mentees: A Person-Oriented Study in Higher Education. *Mentoring & Tutoring: Partnership in Learning*, 19(3), 347-364. doi: 10.1080/13611267.2011.597122
- National Association of Social Work (2008). Code of Ethics. Retrieved from <http://www.socialworkers.org/pubs/code/code.asp>
- Pratt, T. C., Cullen, F. T., Sellers, C. S., Winfree Jr., L. T., Madensen, T. D., Daigle, L. E., Fearn, N. E., & Gau, J. M. (2010). The Empirical Status of Social Learning Theory: A Meta-Analysis. *Justice Quarterly*, 27(6), 765-802. doi: 10.1080/07418820903379610
- Rocha-Singh, I. A. (1994). Perceived stress among graduate students: Development and validation of the graduate stress inventory. *Educational and Psychological Measurement*, 54(3), 714-727. doi: 10.1177/0013164494054003018
- Schlemper, M. B. (2011). Challenges and coping in graduate school. *The Geographical Bulletin*, 52(2), 67-72. Retrieved from <http://www.gammathetaupsilon.org/the-geographical-bulletin/2010s/volume52-2/article2.pdf>
- Schwartz, D. H., Romans, S. E., Meiyappan, S., De Souza, M. J., & Einstein, G. (2012). The role of ovarian steroid hormones in mood. *Hormones and Behavior*, 62(4), 448-454. doi: 10.1016/j.yhbeh.2012.08.001
- Siu, O.-L., Hui, C. H., Phillips, D. R., Lin, L., Wong, T.-w., & Shi, K. (2009). A study of resiliency among Chinese health care workers: Capacity to cope with workplace stress. *Journal of Research in Personality*, 43(5), 770-776. doi: 10.1016/j.jrp.2009.06.008
- Terrion, J. L., & Leonard, D. (2007). A taxonomy of the characteristics of student peer mentors in higher education: findings from a literature review. *Mentoring and Tutoring*, 15(2), 149-164. doi: 10.1080/13611260601086311
- Van Der Roest, D., Kleiner, K., & Kleiner B. (2011). Self Efficacy: The Biology of Confidence. *Culture and Religion Review Journal*, 2011(1), 26-35. Retrieved from <http://web.ebscohost.com.proxy.library.vcu.edu/ehost/pdfviewer/pdfviewer?sid=b66da799-3d97-401c-ab83-c59c39d408e4%40sessionmgr4002&vid=1&hid=4204>

Appendix A

Measurement Questions

Background Information

1. How old are you?
2. What is your race?
 - a. African American (Black); Caucasian; Asian; Native American; Hispanic; Other (please specify)
3. What type of student are you in the program?
 - a. Full-time; Part-time; Distance Education
4. Were you matched with a Peer Mentor?
 - a. Yes; No (if no, move to question 6)
5. When did you get matched with a peer mentor through the School of Social Work at VCU?
 - a. Before September 2013; September 2013; October 2013; November 2013; December 2013; after December 2013
6. How frequently do you interact with your peer mentor either in person or through other means such as email/text/phone/etc.?
 - a. Daily, 1-3 times a week; A few times a month; A few times a semester; Never
7. Did you receive mentoring support unaffiliated with the MSW program before entering the MSW program at VCU?
 - a. Yes; No
8. What is your mother's highest level of education?
 - a. Grade school; Some high school; High school diploma or equivalent; Some college; College degree; Graduate degree; Unknown
9. What is your father's highest level of education?
 - a. Grade school; Some high school; High school diploma or equivalent; Some college; College degree; Graduate degree; Unknown
10. To what extent do you agree with this statement: VCU and the School of Social Work have a great deal of personal meaning to me?
 - a. Strongly agree, Agree, Neutral, Disagree, Strongly disagree

Confidence Questions

11. I am not very good at learning.
 - a. Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree
12. Even if I am well prepared for an assignment, I do worse than the others.
 - a. Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree
13. I consider myself successful.
 - a. Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree
14. On the whole, I am satisfied with myself.
 - a. Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree
15. I feel I have many things to be proud of.
 - a. Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree
16. I generally feel confident in myself.
 - a. Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree
17. When I have made a mistake during a stressful situation I continue to like myself.
 - a. Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree
18. When I need to stand up for myself I can do it easily.
 - a. Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree
19. I am doing as well as the others.
 - a. Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree
20. Last semester, how confident did you feel in regard to your involvement in the MSW program?
 - a. Very confident, Confident, Neutral, Somewhat confident, Not at all confident
21. This semester, how confident do you feel in regard to your involvement in the MSW program?
 - a. Very confident, Confident, Neutral, Somewhat confident, Not at all confident

Stress Questions

22. When there is a great deal of pressure being placed on me I remain calm.
 - a. Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree
23. I fear failing to meet VCU's MSW program expectations.
 - a. Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree
24. I struggle handling my academic workload.
 - a. Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree
25. I have difficulty writing my papers.
 - a. Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree
26. I do not do well meeting deadlines for course assignments.
 - a. Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree
27. Last semester, how motivated did you feel?
 - a. Very motivated, Motivated, Neutral, Somewhat motivated, Not at all motivated
28. How would you describe your current mood this semester?-DLQ
 - a. Best ever, Pretty good, Neutral, Not good, Worst ever
29. I am not very capable of doing school work.
 - a. Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree
30. Last semester how much did you feel like you just "couldn't cope" or were overwhelmed by ordinary demands?
 - a. All the time, A Lot, Somewhat, A little, Not at all
31. Last semester, how anxious and worried did you feel?
 - a. Very much, A lot, Somewhat, A little, Not at all
32. Last semester, how much did you feel under stress?
 - a. All the time, A lot, Somewhat, A little, Not at all
33. Last semester, how happy did you feel?
 - a. Very much, A lot, Somewhat, A little, Not at all

Social Integration Questions

34. I struggle handling relationships within the MSW program at VCU.
 - a. Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree
35. Last semester, how included did you feel within the MSW program at VCU?
 - a. Very much, A lot, Somewhat, A little, Not at all
36. Meeting peers on campus is easy for me.

- a. Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree
37. It is not difficult for me to find support groups sensitive to my needs at VCU.
- a. Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree
38. Participating in class is easy for me.
- a. Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree
39. I feel comfortable meeting with VCU faculty in regard to my progress in the MSW program.
- a. Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree
40. I feel included living in the local community.
- a. Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree
41. I feel as if my peers treat me unlike the way they treat each other.
- a. Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree
42. I feel as if the VCU faculty in the MSW program treat me differently from my peers.
- a. Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree
43. I have had difficulty adjusting to the campus environment.
- a. Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree
44. It's hard to find someone who can give me objective feedback on how I'm handling problems within the School of Social Work.
- a. Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree
45. There is someone within the School of Social Work whose advice I really trust.
- a. Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree
46. When I need good information on how to get things done in the program I know that I can get it.
- a. Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree
47. I find it hard to be the sort of person I'd like to be when I'm around peers and professors in the program.
- a. Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree
48. No one at VCU will really listen when I need to talk about personal problems.
- a. Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree
49. It is easy to talk to my professors and close peers about things going on in my life.
- a. Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree
50. How often do you attend meetings or programs of groups, clubs, or organizations at VCU?
- a. Very often (nightly), Often (weekly), Occasionally (a few times a month), Not often (a few times a semester), Not at all
51. How often do you attend meetings or programs of groups, clubs, or organizations in the School of Social Work?
- a. Very often (nightly), Often (weekly), Occasionally (a few times a month), Not often (a few times a semester), Not at all
52. How satisfied are you with your relationship with this program?
- a. Very satisfied, Satisfied, Neutral, Not satisfied, Extremely dissatisfied
53. How satisfied are you with your colleagues in this program?
- a. Very satisfied, Satisfied, Neutral, Not satisfied, Extremely dissatisfied

Test Measures Used

Available Social Support Measure

Larose, S., Cyrenne, D., Garceau, O., Harvey, M., Guay, F., & Deschênes, C. (2009). Personal and social support factors involved in students' decision to participate in formal academic mentoring. *Journal of Vocational Behavior*, 74(1), 108-116. doi: 10.1016/j.jvb.2008.11.002

Daily Life Questionnaire

Schwartz, D. H., Romans, S. E., Meiyappan, S., De Souza, M. J., & Einstein, G. (2012). The role of ovarian steroid hormones in mood. *Hormones and Behavior*, 62(4), 448-454. doi: 10.1016/j.yhbeh.2012.08.001

Educational Outcome Measures

Dumont, H., Trautwein, U., Lüdtke, O., Neumann, M., Niggli, A., & Schnyder, I. (2012). Does parental homework involvement mediate the relationship between family background and educational outcomes? *Contemporary Educational Psychology*, 37(1), 55-69. doi: 10.1016/j.cedpsych.2011.09.004

Graduate Stress Inventory-Revised

Rocha-Singh, I. A. (1994). Perceived stress among graduate students: Development and validation of the Graduate Stress Inventory. *Educational and Psychological Measurement*, 54(3), 714-727. doi: 10.1177/0013164494054003018

Quality of Social Support Scale

Goodenow, C., Reisine, S. T., & Grady, K. E. (1990). Quality of social support and associated social and psychological functioning in women with rheumatoid arthritis. *Health Psychology*, 9(3), 266-284. doi: 10.1037/0278-6133.9.3.266

Resiliency Scale

Siu, O.-L., Hui, C. H., Phillips, D. R., Lin, L., Wong, T.-w., & Shi, K. (2009). A study of resiliency among Chinese health care workers: Capacity to cope with workplace stress. *Journal of Research in Personality*, 43(5), 770-776. doi: 10.1016/j.jrp.2009.06.008

Social Integration Index

Brown, S. L., Brown, R. M., House, J. S., & Smith, D. M. (2008). Coping with spousal loss: Potential buffering effects of self-reported helping behavior. *Personality and Social Psychology Bulletin*, 34(6), 849-861. doi: 10.1177/0146167208314972

Work-Related Mood Scale

Bindl, U. K., Parker, S. K., Totterdell, P., & Hagger-Johnson, G. (2012). Fuel of the self-starter: How mood relates to proactive goal regulation. *Journal of Applied Psychology* 97(1), 134-150. doi: 10.1037/a0024368

Work Relationships Scale

Khodarahimi, S., Hashim, I. H. M., & Mohd-Zaharim, N. (2012). Workplace relationships, stress, depression and anxiety in a Malaysian sample. *International Journal of Psychology and Behavioral Sciences*, 2(2), 1-9. Doi: 10.5923/j.ijpbs.20120202.01