

## Assertiveness, Self-Esteem, and Relationship Satisfaction

Josephine G Moss<sup>1</sup>, Casey Mace Firebaugh<sup>1,2</sup>, Heather Frederick<sup>1</sup>, Stephanie M Morgan<sup>3</sup>, Avi Mozes-Carmel<sup>1</sup>

<sup>1</sup>(School of Behavioral Sciences/California Southern University, USA)

<sup>2</sup>(Department of Health Sciences/Central Washington University, USA)

<sup>3</sup>(Department of General Education/Ameritech College, USA)

**ABSTRACT:** The purpose of this study was to examine the relationships between assertiveness, self-esteem, and relationship satisfaction while also accounting for the demographic variables of gender, age, relationship duration, and household income. An online survey-based, quantitative study (n=220) examined the following research questions: RQ1. What is the correlation between self-esteem, assertiveness, and relationship satisfaction? RQ2. Does self-esteem mediate the relationship between assertiveness and relationship satisfaction? RQ3. What factors are most significant in predicting relationship satisfaction? It was found that (RQ1) self-esteem and relationship satisfaction ( $p < .001$ ) and self-esteem and assertiveness were correlated ( $p < .001$ ). However, because assertiveness was not significantly related to relationship satisfaction, a mediational model was not tested (RQ2). Finally, when examining (RQ3) the most salient factors (length of relationship, income, assertiveness, self-esteem, gender) associated with relationship satisfaction via an ordinal regression model, only self-esteem remained significant ( $p < .001$ ). The findings support previous research conclusions and suggest that self-esteem has a greater predictive ability on relationship satisfaction than assertiveness, but that further research is needed to understand these findings.

**KEYWORDS** –Assertiveness, relationship satisfaction, self-esteem

### I. INTRODUCTION

Infrequent and inept communication between partners is often cited as a cause of conflict and distress in relationships and has been shown to influence relationship satisfaction and predict relationship termination [1, 2, 3, 4, 5, 6, 7]. Problematic communication is often the primary reason for seeking talk-based couples therapy [8]. Consequently, learning how to effectively communicate may increase relationship satisfaction and longevity.

Assertiveness and assertiveness training is an evidenced-based treatment modality that produces positive intra- and interpersonal outcomes [9]. Wolpe and Lazarus [10] pioneered assertiveness research and defined assertiveness as a way of expressing emotions, other than anxiety, in a socially acceptable manner that included the recognition and appropriate expression of all affective states. Assertiveness was conceived as a transdiagnostic treatment modality and was shown to relieve symptoms of varied mental health issues such as depression and anxiety [9]. High scores on assertiveness assessment tools following training have also been positively linked with perceptions of relationship satisfaction and personal self-esteem [9, 11, 12]

This study is grounded in Cognitive Behavioral Couples Therapy (CBCT) and attachment theory. The aim of CBCT is to identify and relieve relationship distress by taking into consideration the partners as individuals, the couple as a unit and the environment in which they live while utilizing many of the same interventions as Cognitive Behavioral Therapy related to challenging maladaptive cognitions and negative core beliefs/schemas [13].

In order to activate assertiveness traits, an individual must identify the underlying core beliefs that are activated in social circumstances which lead to unassertiveness. The maladaptive beliefs can then be replaced with more realistic, positive beliefs that will foster assertiveness, resulting in an increase in self-evaluation in social circumstances thereby impacting self-esteem and quality of relationships [9].

Attachment style is a pattern of relational expectations of behaviors and emotions that resulted from an individual's history of interactions with their attachment figures and is dependent on the consistency of attentiveness and responsiveness between a primary caregiver and child over time (14, 15). Individuals whose attachment needs are not met tend to experience insecure attachment, which has been shown to negatively affect the social and emotional development and quality of relationships in adulthood [15, 16, 17, 18].

The aim of the current study was to assess how an individual's ability to assert themselves was related to their self-reported self-esteem and whether their self-reported level of assertiveness influenced their perception of their intimate relationship. Covariates included gender, age, relationship duration and household income which were examined for statistical significance associated with individual assertiveness, self-esteem and perception of relationship quality.

Failure to communicate effectively affects relationship satisfaction and can be predictive of the demise of relationships [4, 19]. Interestingly, a positive relationship exists between assertiveness traits and level of self-esteem [12, 20, 21]. Level of self-esteem has been linked to perceived relationship satisfaction and relationship satisfaction varies between partners in the same relationship [22, 23 24]. It is unclear if assertiveness is at the core of relationship satisfaction, whether self-reported measures of relationship satisfaction in some way reflect a person's ability to be assertive, and if an individual's level of assertiveness impacts perceived relationship satisfaction and personal self-esteem.

## **II. RESEARCH QUESTIONS**

The purpose of this quantitative study was to examine relationship satisfaction in adults who were in a relationship for at least one year. The following research questions were tested:

Research Question One (RQ1): What is the correlation between self-esteem, assertiveness and relationship satisfaction?

Research Question Two (RQ2): Does self-esteem mediate the relationship between assertiveness and relationship satisfaction?

Research Question Three (RQ3): Do length of relationship, income, assertiveness, self-esteem, and gender uniquely predict relationship satisfaction?

## **III. METHODS**

A quantitative study was performed via an online survey administered via survey monkey. SurveyMonkey is an online survey development, cloud-based software service company. SurveyMonkey Audience's team of survey scientists ensured the sampling of individual respondents matched the US population at large. SurveyMonkey also performed ongoing panel calibration studies to ensure that response quality was on-par with national benchmarks.

### **Participants**

Participants were recruited through the SurveyMonkey platform, via a service called SurveyMonkey Audience [25]. Candidates for the study were adults, persons aged 18 years and older, from the United States, in a long-term romantic relationship (.defined as either married, cohabitating or dating for one or more years). The study's

focus was not limited to heteronormative relationships. Demographic data such as age, gender identity, and relationship duration were collected in the survey. The survey instrument was designed to protect participant anonymity. No identifying information was collected and ethical guidelines were adhered to under IRB approval.

SurveyMonkey Audience recruited participants from the over 2.5 million people who take surveys on their platform daily. Participants answered screening questions to determine if they met the study qualifications; if they did not, they were disqualified at this stage. The researcher paid approximately \$6.00 per respondent for this service with the goal of achieving a target sample of 200 respondents. A contribute respondent is not paid for their participation but instead SurveyMonkey donates 50 cents to a charity of their choice for every survey they complete. A contribute respondent may also opt to be part of a sweepstakes that offers a daily prize. Participants who did not complete the current study survey in-full were filtered out. Measures are also in place to ensure high response quality responses through email and location verification to prevent duplicate responses to the same survey [25].

### **Measurement**

Three empirically validated instruments were administered. The Rathus Assertiveness Schedule, RAS, was selected to assess assertiveness [26], The Rosenberg Self-Esteem Scale [27] was selected to assess participant's self-esteem, and the Relationship Assessment Scale, RSS, was selected to assess participant's relationship satisfaction levels [28].

### **Assertiveness**

Assertiveness was assessed in this study by means of a self-report assertiveness scale developed by Spencer Rathus[26]. The RAS is a 30-item assessment which poses situations to the participant in which they must rate how much it is like themselves and is the most commonly used scale to assess assertiveness [29]. This self-report inventory asks participants to rate, on a scale from negative 3 to 3 (there is no zero "0" value) whether the situations were either very "much like me" 3, "rather like me" 2, "slightly like me" 1, "slightly unlike me" negative 1, "rather unlike me" negative 2, or "very much unlike me" negative 3. Total scores on the RAS can vary from negative 90 to 90. For the purposes of this study, the scoring measure was based upon previous research [30, 31] in which similar cut-off points were used. Scores were assigned to one of the following 5 categories, derived from the percentile scoring key: negative 21 to negative 90= very non-assertive; negative 20 to negative= 1 situationally non-assertive, 0 to 20= somewhat assertive, 20 to 40= assertive, 40 to 90= probably aggressive. Scores were also recoded into a dichotomous system based on scoring scales conceived in recent research from Karakis and Okanli[32] and Yurstal and Ozdemir[33] on assertiveness training. Less than a 10 total score was considered non-assertive and above 10 was considered assertive.

### **Self-Esteem**

Self-esteem was measured by the RSES, a self-report measure developed by Morris Rosenberg [27] initially for his work with adolescents. Since its inception, it has been validated for use with both male and female adolescents as well as with adult and elderly populations in multiple studies [29, 34, 35, 36]. The RSES is a 10-item, self-report measure of global self-esteem. The 10 statements reflect an individual's general feelings of self-worth and self-acceptance. The statements are rated on a four-point scale ranging from strongly agree to strongly disagree, where "strongly disagree" equates to one point, "disagree" equates to two points, "agree" equates to three points and "strongly agree" equates to four points. Five items are reversed scored on the measure. Total scores range from 10 to 40 and fall into three broad categories- a total score of 15 and below is considered "low" self-esteem, scores from 15 to 25 are considered "normal" self-esteem, while scores of 25 and above are considered "high" self-esteem. The measure is part of the public domain so therefore no special permissions are needed. The RSES is well supported as a unidimensional scale [37].

### **Relationship Satisfaction**

Hendrick [28] developed a relationship assessment scale, RSS. It expanded on a previously developed marital assessment questionnaire, compelled by the need to broaden the accessibility of the scale to couples who were not in a traditional marital relationship [38]. The RSS is a seven-item, Likert-type scale where one reflects low satisfaction and five reflects high satisfaction, while two of the seven items were reversed scored for an overall mean score. Testing for the efficacy of the scale, Hendrick administered it to participants who reported themselves to be “in-love” or in “ongoing” relationships. Correlations were analyzed between the RSS and the other relationship measures. The scale was found to have a single factor alpha analysis reliability of .86 and it correlated highly with measures of love, sexual attitudes, self-disclosure, commitment, and investment in a relationship. Additionally, at a follow-up study of the “on-going” couples, the RSS scores were analyzed and were shown to have predictive ability for those couples who stayed together and those who parted. The use of the RSS is well-supported in the literature as a common measure of relationship satisfaction [39].

### **Data Collection**

Volunteer participants were recruited via SurveyMonkey and then directed to the online survey. Potential participants were asked to electronically sign a consent form at which point they were prompted to the qualifying question of, “are you currently in a romantic relationship; cohabitating, married or dating for a year or more?”. Anyone who responded “no”, was sent to a disqualification page and “yes” routed them to the survey for the study. The survey included the three instruments described above. The instrument questions were presented in the same order as presented in the original measures and were not labeled but separated by means of different instructions for completion. Incomplete surveys were rejected, and the survey was closed when it met saturation. Survey Monkey archived all surveys after the collection period was over and data was then downloaded into SPSS for analysis. SPSS was used to carry out the data analysis procedures.

### **Data Analysis**

There were two recruitment efforts on August 12, 2020 and August 28, 2020, yielding 126 respondents and 152 respondents respectively. The average abandon rate was 5%. Respondents who reported that they were not in a romantic relationship for at least a year were disqualified. The disqualification rate for the combined sample was 20.5%. Eliminating the respondents who abandoned the survey or were disqualified (n=58) yielded a total of 220 qualified participants. Of the sample, 93 identified as male, 127 identified as female, 2 as non-binary/queer. Diverse regions throughout the United States were represented. The age of the original 284 persons recruited for the survey was balanced based on recent US census figures based on age and gender. Eliminating non-qualifying and abandoning respondents and combining respondents from both trials resulted in the following age distribution: 18 to 29 years old= 75; 30 to 44 years old= 67; 45 to 60 years old= 50; and greater than 60 years old= 29.

Qualified respondents were asked to categorize the length of their current romantic relationship in seven-year intervals and the following groups of “length of relationship” resulted from the combined trials: one to seven years= 100; 8-17 years= 41; 15-21 years= 28; 22-28 years= 20; and > 28 years= 32.

A generalized linear model was built to examine the statistically significant relationships between the independent variables (assertiveness & self-esteem) with the dependent variable (relationship satisfaction) along with salient factors to relationship satisfaction identified in the literature review including age, gender, length of the relationship and income. Due to the ordinal natures of the independent variables, logistical regression settings were selected in the generalized linear models that were built into SPSS. Independent variables were tested through bivariate regressions with the dependent variable for significance ( $p < .05$ ). Only statistically significant p values and beta value were reported in the results.

### ***Assertiveness, Self-Esteem, and Relationship Satisfaction of Sample***

The average score of respondents on the assertiveness measure was  $x = 12.53$ , where the total score could range from a negative 90 to 90. On the recoded five-point scale, the mean score equated to the “somewhat assertive” category and the “assertive” category for the dichotomous scale. The standard deviation of the sample was  $s = 24.588$  while the mode of the sample was 14. On the self-esteem measure, the average score of the sample was  $x = 28.49$ , on a scale range of 10 to 40. The mean for this sample equates to the “high self-esteem” classification for this measure. The standard deviation of the sample group was  $s = 5.523$  and the mode total score was 28. Out of a scale range of seven to 35, the average or mean score of the sample group was 26.71 on the RSS. Based on the range of scores, the average score fell between the satisfied and very satisfied end of the total scale. The standard deviation of the measurement was 6.263 while the mode was a score of 21.

### ***Results of Research Question One***

Research question one (RQ1) was to determine whether self-esteem, assertiveness, and relationship satisfaction were correlated. A bivariate correlational analysis using Spearman’s rho was conducted due to the ordinal nature of two of the three variables included. A negative, moderately significant correlation was found between the assertiveness and self-esteem scores of the study participants,  $p = -.40$ . A weaker yet positive correlation was identified between self-esteem and relationship satisfaction,  $p = .27$ . No other significant correlations were identified in the current study data between the three measurement scales.

Although this was not a part of the original research strategy, additional correlations were examined to determine what other relationship may exist between the variables collected in this study. A significant correlation was also found to exist between self-esteem and age. Demographic data, which included age, gender, household income and length of relationship, were examined as they related to the strength of relationship findings between assertiveness and self-esteem. When controlling for the demographic factors, a secondary finding was revealed between self-esteem and age. A strong relationship was found to exist between self-esteem and age ( $p < .044$ ) while assertiveness remained significantly related to self-esteem ( $p < .001$ ). Respondents in the age group 18-29 years of age ( $n = 75$ ) had a mean self-esteem score of 26.87 while participants in the over 60 years of age group ( $n = 29$ ) had a mean self-esteem score of 32.38. Effectively, the greater the participant’s age, the greater their self-esteem scores.

### ***Results of Research Question Two***

Research question two (RQ2) asked whether self-esteem was a mediating factor in the relationship between assertiveness in relationship satisfaction. The first step in building a mediation model was testing the statistical relationship between assertiveness and relationship satisfaction. In the ordinal regression, the relationship was not statistically significant ( $p = .381$ ) and therefore the mediation model could not proceed. As the relationship between the total RAS score was not significant, an additional analysis was performed to determine if any of the individual constructs of the RAS were statically significantly correlated with relationship satisfaction.

Five assertiveness constructs significantly correlated with relationship satisfaction. A bivariate analysis of each construct of the assertiveness measure showed that 5 of the 30 constructs comprising the measure, significantly negatively correlated with relationship satisfaction- questions 1, 11, 14, 17 and 28. Based on the first item analysis conducted by Rathus[26] when testing for the validity of the measure, six constructs/factors emerged. These factors were translated to a semantic differential scale that included the following constructs: boldness, outspokenness, assertiveness, aggressiveness, confidence. The final validity analysis revealed that 19 of the 30 constructs correlated with at least one of the constructs/factors. Within this study, of the five assertiveness scale constructs that correlated with relationship satisfaction, four significantly correlated on at least two semantic scales- boldness and outspokenness. Of those four items, three additionally correlated significantly with the assertiveness factor item, and two of those also correlated on a total of four traits to include aggressiveness. The first construct did not correlate with any of the other constructs nor did it show a significant correlation with any of the five factors. Of the 30-constructs of the RAS only 5 were statically significantly correlated with relationship satisfaction.

### ***Results of Research Question Three***

The third research question (RQ3) of this study was: What factors are most significant in predicting relationship satisfaction? To answer this, a generalized regression model was attempted using ordinal logistic settings due to the ordinal nature of the variables included in the model. When assessing the relationship between the independent variables (income, gender, length of time spent in relationship, gender, self-esteem) and the dependent variables, the independent variables were examined first for their individual significance ( $p < .05$ ) to the dependent variable to determine whether they could be included in the final regression model. When tested individually for significance, only self-esteem ( $p < .001^{**}$ ) was statistically significant, while the other variables were not found to be statistically significant: age ( $p = 0.09$ ), gender ( $p = .541$ ), length of time spent in the relationship ( $p = .173$ ), and income (.179). Because the salient factors were not significant to the dependent variable in this study it was not possible to build a model. Although self-esteem was statistically significant, the final model could not be performed and thus a psudeo-R2 was not able to be calculated to create a predictive model. Due to the ordinal nature of the variables, a traditional R2 or value would not have been possible to achieve. However, the 95% confidence interval settings were used in the model to ensure valid statistical findings.

#### IV. SUMMARY

Statistical analysis of the resultant data from the executed survey study revealed several statically significant correlations between the measures employed; the RAS, the RSES and the RSS. Specifically, assertiveness and self-esteem scores of the participants were found to be negatively correlated while self-esteem and relationship satisfaction scores were found to have a mildly significant correlation. Although assertiveness scores and relationship satisfaction were also identified as having a significant relationship, when demographic factors were controlled, the relationship between the two did not sustain a significant correlation.

Examination into self-esteem as a mediating factor between assertiveness and relationship satisfaction had to be abandoned due to insignificant results from an ordinal regression. Unexpectedly, five constructs of the assertiveness measure revealed a negative, significant relationship to relationship satisfaction and between themselves. Also, a significant relationship was found to exist between self-esteem and age of the participant group. And finally, a bivariate regression model revealed a statistically significant relationship between self-esteem and relationship satisfaction. However, due to the ordinal nature of the measurements utilized in the current study, a predictive model could not be performed.

It was not clear which of the covariates moderated the relationship between assertiveness and relationship satisfaction nor why not even a minimal relationship remained between the two factors. An explanation could be related to the recoding and cut-off points assigned to the total scores of participants assertiveness measures into two recoding scales. The RAS was originally designed to measure individual differences in assertiveness pre- and post-assertiveness training. It was also designed to measure assertiveness across varying situations and was not considered to be a global assessment. The dichotomous coding scale utilized was adapted from recent studies on assertiveness training [32, 33] where a total score below 10 indicated unassertive and a score 10 and above indicated assertiveness. The expectation was that the measure could then be a free-standing measurement of assertiveness without the application of an intervention. Perhaps the simplicity of the recoding unintentionally affected the situational nature of the measurement which, in-turn, impacted its overall meaning.

Even when controlling for the covariates, self-esteem alone retained the only significant relationship with relationship satisfaction. The findings of this study supported those of past studies that found the higher an individuals' self-esteem score, the higher their self-reported relationship/marriage satisfaction score [22, 23, 24]. When controlling for the covariates of length of relationship, gender and age in the regression analysis conducted on assertiveness and self-esteem, an unanticipated association was found. A significant relationship surfaced between self-esteem and age making it clear from the data that as age increased, so did self-esteem. This study found the mean self-esteem score for the age group 18 to 29 years was 26.87 out of a possible 40 while the mean score for the over 60 age group was 32.38 out of a possible 40. The mean score for the entire sample was 28.49 so that the over 60 group averaged nearly four points higher than the entire sample. These

findings were supported by several studies, including one conducted by Orth and Robins (2014) who noted the existence of a trajectory of self-esteem. They found that self-esteem tended to increase from adolescence to middle adulthood, peaked at about age 50 to 60, and then decreased into old age. One of the explanations for their findings was that self-esteem becomes progressively less contingent on external contingencies and thereby fluctuations in self-esteem decrease through adolescence to middle years. Von Soest et al. [40] also found that both global self-esteem and domain-specific self-esteem increased over age.

## V. CONCLUSION

The strongest relationships were identified between assertiveness and self-esteem as well as between self-esteem and age. However, it cannot be determined whether the converse was true; whether relationship satisfaction had an influence on self-esteem or assertiveness based on results of the current study. A mediational model to determine the influence of self-esteem on the relationship between assertiveness and relationship satisfaction was unable to be performed due to a lack of significance results attained in an ordinal regression analysis. A significant correlation was found to exist between self-esteem and relationship satisfaction.

Incidental findings resulting from an analysis of the survey data were discussed, specifically the discovery of a strong, positive relationship between self-esteem and age, so that older participants demonstrated a higher, overall average self-esteem than younger participants. Notably, the study was conducted during an unprecedented, global pandemic and the unknown impact it may have had on participants data as well as the lack of information on participant's stress and attachment levels.

### **Limitations and Delimitations**

This study was limited to the United States. Assertiveness research that utilized the RAS in the literature review were conducted on samples from Japan, Romania, Portugal, Turkey, India, Iran and elsewhere. This is interesting because assertiveness is a culturally and socially constructed trait. However, like our study, the RAS was not commonly found to be significant in their analyses [31, 35].

Attachment style has been identified as a predictor of perceived relationship quality, relationship adjustment and quality of relationship communication [18]. This study did not identify or distinguish between personality attributes and assertiveness skills thereby suggesting that measuring personality factors along with assertiveness could give a fuller picture of assertiveness of an individual. Additionally, participants' attachment styles were not assessed but may have more fully explained the interaction between participant's RAS and RSES scores and the total outcomes of the current study. It is possible that individuals in the current study who scored high on self-esteem might have secure attachment and that secure attachment may more fully explain the statistically significant relationship between self-esteem and relationship satisfaction. Also, not having ascertained the participant's attachment styles nor whether they were representative of the population may have accounted for the unusually high levels of relationship satisfaction found in the sample respondents.

The study was further limited in that although the sample was representative for age, gender and region based on a recent US census, it was not representative for combinations of these and other variables, e.g. age interlocked with gender; the generalizability of the study findings was also uncertain due to a rather small sample size of n=220; only self-rating scales were used to assess assertiveness, self-esteem, and relationship satisfaction, without an additional clinical interview or assessment.

This survey did not collect demographic information on race, ethnicity, or sexual orientation. It did allow for the reporting of gender identity, however, only two participants self-reported as non-binary. Therefore, we were unable to draw any conclusions about the study results relative to these demographics categories. To date, research on the experiences of the LGBTQ+ community in this area remains sparse and further investigation is warranted.

Both collection periods of the survey occurred in August 2020 in the US, amid the global COVID-19 pandemic [41, 42]. Although most states no longer had mandated quarantines, a large majority of employers and schools

continued to maintain a shutdown of their brick and mortar offices and institutions during that time the survey was available for completion. Approximately one in four Americans were working full-time from home, telecommuting, during August 2020 while one in five Americans reported a mix of on-site and remote work, and a total of 51% of the workforce were working full-time at an outside location [43]. Colleges and universities were beginning to open during the same time and endorsed different operation configurations, including 100% online classes or a mix of in-class and online classes. This could have impacted relationship and communication dynamics [44].

### **Implications**

Mental health professionals working with couples could benefit from several of the findings of this study. It was originally anticipated that individuals with high assertiveness would also demonstrate high or positive perceptions of self and ultimately, their relationships. Although assertive communication was demonstrated to have a statistically significant effect on self-esteem, a significant relationship was not found to exist between assertiveness and relationship satisfaction. Rather, a significant relationship was discovered between self-esteem and relationship satisfaction. Therapists, particularly those who work with couples, have a more empirically supported reason to assess a couple's individual self-esteem and relationship satisfaction as a means of identifying self-esteem as a root cause or contributing factor to relationship distress. For those individuals who demonstrated low self-esteem, couples' therapists might consider recommending individual therapy in conjunction with the couples' therapy. This could help ensure that enough time and focus is given to identify the underlying or unresolved issues of the individual that could be inadvertently impacting the relationship.

Significant relationships between assertiveness and self-esteem and between self-esteem and relationship satisfaction were identified. Albeit indirectly related to relationship satisfaction through self-esteem, assessing for assertive communication could also assist in increasing the therapist's capacity for identifying relationship problems. Mental health professionals who work with couples may spend a significant amount of time deciphering the communication of said couples to arrive at core relationship issues. Assertiveness measures could help therapists identify underlying impediments to communication and can target communication interventions accordingly.

### **Recommendations for Research**

The link between assertiveness and self-esteem has been previously examined in studies with individuals [9, 45, 46, 47, 48, 49] but was rarely explored in the context of romantic relationships. This study was noteworthy in that it examined the relationship between assertiveness and self-esteem measures for individuals in partnerships of one or more years duration. Additional research could focus on how and in what ways self-esteem affects relationship satisfaction in couples. The relationship between age and self-esteem revealed in a regression analysis of the data in the study also warrants additional investigation.

The global COVID-19 pandemic and quarantine mandates in place during the time data was collected for this study may have had a significant, yet unknown, impact on the results obtained. Specifically, the amount of distress that individuals were or were not experiencing during this time may have had a deleterious or beneficial impact on results. A measure of participants' distress was suggested for any future studies focusing on relationship satisfaction as environmental and personal stressors may nullify the effect of other significant associations.

## **VI. Acknowledgements**

None

REFERENCES

- [1] Alberti, R. E., & Emmons, M. L. (1976). Assertion training in marital counseling. *Journal of Marriage and Family Counseling*, 2(1), 49-54.
- [2] Blanchard, V. L., Hawkins, A. J., Baldwin, S. A., & Fawcett, E. B. (2009). Investigating the effects of marriage and relationship education on couples' communication skills: A meta-analytic study. *Journal of Family Psychology*, 23(2), 203-214.
- [3] Burleson, B. R., & Denton, W. H. (1997). The relationship between communication skill and marital satisfaction: Some moderating effects. *Journal of Marriage and the Family*, 59(4), 884-902.
- [4] Gottman, J. M., & Gottman, J. S. (2008). Gottman method couple therapy. In A. S. Gorman (Ed.), *Clinical handbook of couple therapy*, 138-166. New York, NY: The Guilford Press.
- [5] Hafner, J. R., & Spence, N. S. (1988). Marriage duration, marital adjustment and psychological symptoms: a cross-sectional study. *Journal of Clinical Psychology*, 44(3), 309-316.
- [6] Markman, H. J., Rhoades, G. K., Stanley, S. M., Ragan, E. P., & Whitton, S. W. (2010). The Premarital communication roots of marital distress and divorce: the first five years of marriage. *Journal of Family Psychology*, 24(3), 289-298.
- [7] Vanhee, G., Lemmens, G., Stas, L., Loeys, T., & Verhofstadt, L. (2016). Why are couples fighting? A need frustration perspective on relationship conflict and dissatisfaction. *Journal of Family Therapy*, Advance online publication. <https://doi.org/10.1111/1467-6427.12126>
- [8] Sanchez Bravo, C., & Watty Martinez, A. (2017). Profiles using indicators of marital communication, communication styles, and marital satisfaction in Mexican couples. *Journal of Sex & Marital Therapy*, 43(4), 361-376. <https://doi.org/10.1080/0092623x.2016.1168332>
- [9] Speed, B. C., Goldstein, B. L., & Goldfried, M. R. (2018). Assertiveness training: A forgotten evidence-based treatment. *Clinical Psychology: Science and Practice*, 25(1), 1-20.
- [10] Wolpe, J., & Lazarus, A. A. (1966). *Behavior therapy techniques: A guide to the treatment of neuroses*. New York, NY: Pergamon Press.
- [11] MacDonald, M. J. (1975). Teaching assertion: A paradigm for therapeutic intervention. *Psychotherapy: Theory, Research, Practice, Training*, 12(1), 60-67.
- [12] Vargas, P., & Pereira, A. (2016). A cognitive perspective on assertiveness. *European Psychologist*, 21(2), 109-121.
- [13] Fischer, M. S., Baucom, D. H., & Cohen, M. J. (2016). Cognitive-behavioral couple therapies: Review of the evidence for the treatment of relationship distress, psychopathology, and chronic health conditions. *Family Process*, 55(3), 423-442.
- [14] Bowlby, J. (1969). *Attachment. Attachment and loss: Loss Vol. 1*. New York, NY: Basic Books.
- [15] McNelis, M., & Segrin, C. (2019). Insecure attachment predicts history of divorce, marriage, and current relationship status. *Journal of Divorce and Remarriage*, 60(5) 407-417. <https://doi.org/10.1080/10502556.2018.1558856>
- [16] Mikulincer, M., & Shaver, P. R. (2012). An attachment perspective on psychopathology. *World Psychiatry*, 11, 11-15.
- [17] Mikulincer, M. & Shaver, P. R. (2015). The psychological effects of the contextual activation of security-enhancing mental representations in adulthood. *Current Opinion in Psychology*, 1, 18-21. <https://doi.org/10.1016/j.copsyc.2015.01.008>
- [18] P. R., Mikulincer, M., Sahdra, B., & Gross, J. (2017). Attachment security as a foundation for kindness toward self and others. In K. W. Brown & M. R. Leary (Eds.), *The Oxford handbook of hypo-egoic phenomena* (pp. 1-35). New York, NY: Oxford University Press.
- [19] Hou, Y., Jiang, F., & Wang, X. (2019). Marital commitment, communication and marital satisfaction: An analysis based on actor-partner interdependence model. *International Journal of Psychology*, 54(3), 369-376. <https://doi.org/doi/epdf/10.1002/ijop.12473>

- Center for Clinical Interventions. (2019). *Assert Yourself!* Retrieved from <https://www.cci.health.wa.gov.au/Resources/Looking-After-Yourself/Assertiveness>
- [20] Pipas, M. D., & Jaradat, M. (2010). Assertive communication skills. *Annales Universitatis Apulensis Series Oeconomica*, 12(2), 649-656.
- [21] Diener, E., & Diener, M. (1995). Cross-cultural correlates of life satisfaction and self-esteem. *Journal of Personality and Social Psychology*, 68(4), 653-663.
- [22] Erol, R. Y., & Orth, U. (2014). Development of self-esteem and relationship satisfaction in couples. *Developmental Psychology*, 50, 2291-2303.
- [23] Kang, S. M., Shaver, P. R., Sue, S., Min, K. H., & Jing, H. (2003). Culture-specific patterns in the prediction of life satisfaction: Roles of emotion, relationship quality, and self-esteem. *Personality and Social Psychology Bulletin*, 1596-1608.
- [24] SurveyMonkey. (2020). *How SurveyMonkey gets its data*. Retrieved from <https://www.surveymonkey.com/mp/survey-methodology/>
- [25] Rathus, R. A. (1973). A 30-item schedule for assessing assertive behavior. *Behavior Therapy*, 4(3), 398-406.
- [26] Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.
- [27] Hendrick, S. S. (1988). A generic measure of relationship satisfaction. *Journal of Marriage and the Family*, 50(1), 93-98.
- [28] Yoshinaga, N., Nakamura, Y., Tanoue, H., MacLiam, F., Aoishi, K., & Shiraishi, Y. (2018). Is modified brief assertiveness training for nurses effective? A single-group study with long-term follow-up. *Journal of Nursing Management*, 26(1), 59-65.
- [29] Alghamdi, N. G. (2015). Anxiety and assertiveness in females: A comparison of medical and non-medical university students. *Mediterranean Journal of Social Science*, 6(3 S2), 84-89.
- [30] Suzuki, E., Kanoya, Y., Katsuki, T., & Sato, C. (2007). Verification of reliability and validity of a Japanese version of the Rathus Assertiveness Schedule. *Journal of Nursing Management*, 15(5), 100-110.
- [31] Karakis, S. A., & Okanli, A. E. (2015). The effect of assertiveness training on the mobbing that nurses experience. *Workplace Health and Safety*, 63(10). <https://doi.org/10.1177/2165079915591708>.
- [32] Yurstal, Z. B., & Ozdemir, L. (2015). Assertiveness and problem solving in midwives in Iran. *Iranian Journal of Nursing and Midwifery Research*, 20(6), 647-654.
- [33]
- [34] Kwan, V. S., & Bond, M. H. (1997). Pancultural explanations for life satisfaction: Adding relationship harmony to self-esteem. *Journal of Personality and Social Psychology*, 73(5), 1038-1051.
- [35] Nakamura, Y., Yoshinaga, N., Tanoue, H., Kato, S., Nakamura, S., Aoishi, K., & Shiraishi, Y. (2017). Development and evaluation of a modified brief assertiveness training for nurses in the workplace: A single-group feasibility study. *BMC Nursing*, 16(29). doi:<https://dx.doi.org/10.1186%2Fs12912-017-0224-4>
- [36] Parray, W. M., & Kumar, S. (2017). Impact of assertiveness training on the level of assertiveness, self-esteem, stress, psychological well-being and academic achievement of adolescents. *Indian Journal of Health and Well-being*, 8(12), 1476-1480.
- [37] Gnambs, T., Scharl, A., & Schroeders, U. (2018). The structure of the Rosenberg Self-Esteem Scale: A cross-cultural meta-analysis. *Zeitschrift für Psychologie mit Zeitschrift für Angewandte Psychologie*, 226, 14-29. <http://dx.doi.org/10.1027/2151-2604/a000317>
- [38] Hendrick, S. S. (1981). Self-disclosure and marital satisfaction. *Journal of Personality and Social Psychology*, 40(6), 1150-1159.
- [39] Maroufizadeha, S., Omani-Samania, R., Almasi-Hashiania, A., Navida, B., Sobatib, B., & Payam Amini (2018). The Relationship Assessment Scale (RAS) in infertile patients: A reliability and validity study. *Middle East Fertility Society Journal*, 23(4), 471-475. <https://doi.org/10.1016/j.mefs.2018.04.001>

- 
- [40] Von Soest, T., Wichstrom, L., & LundinKvalem, I. (2016). The development of global and domain-specific self-esteem from age 13-31. *Journal of Personality and Social Psychology*, doi:10.1037/pspp0000060
- [41] World Health Organization. (2020, October 12). Coronavirus disease (COVID-19). Retrieved from <https://www.who.int/news-room/q-a-detail/coronavirus-disease-covid-19>
- [42] Budimir, S., & Probst, T. (2020). Relationship quality and mental health during COVID-19 lockdown. *PLOS One*, 15(9), <https://dx.doi.org/10.1371/journal.pone.0238906>
- [43] Jones, J. M. (2020). *U.S. remote workdays have doubled during pandemic*. Retrieved from <https://news.gallup.com/poll/318173/remote-workdays-doubled-during-pandemic.aspx>
- [44] Pieh, C., O'Rourke, T., Budimir, S., & Probst, T. (2020). Relationship quality and mental health during COVID-19 lockdown. *PLOS One*, 15(9). <https://dx.doi.org/10.1371/journal.pone.0238906>
- [45] Parmaksiz, I. (2019). Relationship of phubbing, a behavioral problem, with assertiveness and passiveness: A study on adolescents. *International Online Journal of Educational Sciences*, 11(3), 34–45. <https://doi.org/10.15345/iojes.2019.03.003>
- [46] Postolati, E. (2017). Assertiveness: Theoretical approaches and benefits of assertive behaviour. *Journal of Innovation in Psychology, Education and Didactics*, 21(1), 83-96.
- [47] Orth, U., & Robins, R. W. (2014). The development of self-esteem. *Directions in Psychological Science*, 23, 381-387.
- [48] Harris, M. A., & Orth, U. (2020). The link between self-esteem and social relationships: A meta-analysis of longitudinal studies. *Journal of Personality and Social Psychology*, 119(6), 1459-1477. <http://dx.doi.org/10.1037/pspp0000265>
- [49] Luciano, E. C., & Orth, U. (2017). Transitions in romantic relationships and development of self-esteem. *Journal of Personality and Social Psychology*, 112, 307–328. <https://doi.org/10.1037/pspp0000109>