THE ROLE OF ENDURING VULNERABILITIES, STRESSFUL LIFE EVENTS AND ADAPTIVE PROCESSES IN NEWLYWEDS MARITAL QUALITY AND ADJUSTMENT

By

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I declare that the above thesis is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

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ABSTRACT

In line with the Vulnerability-Stress-Adaptation (VSA) model of marriage, this study examined the role of *neuroticism*, *stressful life events*, *mutual problem solving* and *negative relationship attributions* on marital quality and adjustment among a sample of newlywed couples in Addis Ababa. A quantitative cross-sectional study design involving a sample of 192 newlywed couples was employed. Data were analysed using correlation and multiple regression analysis methods. The PROCESS module in SPSS and Structural Equation Modeling was also used to test indirect effects and actor and partner effects, respectively. The results showed that for both wives' and husbands', neuroticism significantly predicted their own marital satisfaction but only husbands' neuroticism significantly predicted their partners' marital satisfaction. Stressful life events did not have a significant actor and partner effect for both wives' and husbands'. Negative relationship attribution was found to be a significant predictor of actors as well as partners' marital satisfaction for both wives' and husbands' while only husbands' mutual problem solving, not that of wives', had a significant effect on their own marital satisfaction. Tests of indirect effects also showed that, for both wives' and husbands', neuroticism had a significant negative intrapersonal and interpersonal indirect effect on marital satisfaction through the mediation of both mutual problem solving and negative relationship attribution. Wives' and husbands' stressful life events had a significant negative intrapersonal and interpersonal indirect effect on marital satisfaction through the mediation of negative relationship attribution. Mutual problem solving only mediated a significant indirect effect of husbands' stress on marital satisfaction at the intrapersonal level and wives' stress on marital satisfaction at the interpersonal level. This research contributed to enhancing scientific knowledge that guides the design and implementation of policies, programs, and services to promote newlyweds' marital quality and adjustment in the Ethiopian context. The research also made a theoretical contribution to the VSA model by indicating that adaptive processes play a varying mediational role for wives' and husbands' in the indirect effect of stress on marital satisfaction and by confirming that adaptive processes such as mutual problem solving and negative relationship attribution play a more prominent role in affecting marital quality and satisfaction than the other two components of the model, that is neuroticism and stressful life events.

KEY TERMS:

Marital Quality; Marital Satisfaction; Marital Adjustment; Enduring Vulnerabilities; Neuroticism; Stressful Life Events; Adaptive Processes; Mutual Problem-solving; Negative Relationship Attributions; Newlyweds

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CHAPTER 1: INTRODUCTION AND SCIENTIFIC ORIENTATION

Marital quality and adjustment has been one of the focus areas of social and psychological research globally. This is mainly due to the continued importance placed on understanding the quality of marriage, as an end in itself and as a means to understanding its effect on numerous other processes inside and outside the family (Bradbury, Fincham, & Beach, 2000).

A significant proportion of research has shown that long-term marital life is determined by adjustment made during the first few years of marriage. Changes in marital relationships between couples in the first two years affect long-term marital fate after 13 years (Huston, Caughlin, Houts, Smith, & George, 2001). Previous researches on marital quality and adjustment also indicate the importance of understanding factors that influence marital quality during newlywed years and provide the necessary support to ensure that couples have better marital quality, adjustment, and stability.

This study is an empirical investigation, based on the Vulnerability-Stress-Adaptation (VSA) model of marriage. The study explores the role of enduring vulnerabilities (focusing on neuroticism), stressful life events and adaptive processes (focusing on mutual problem solving and negative relationship attribution) on marital quality and adjustment among newlyweds in Addis Ababa, Ethiopia. This chapter presents the research background, justification, problem statement, and research questions. Besides, the relevant theoretical perspectives, as well as the research design and methodology employed in this research are also presented in this chapter. Finally, a description of the way the report is organised and chapter summary is presented.

1.1. Background to and Motivation for the Research

Marriage is one of the most valued social constructs in Ethiopia and is considered in the Ethiopian society as a social union marking the beginning of a responsible, child-bearing and productive life. The Government of Ethiopia has recognised the importance of protecting marriage as stated in Article 34 of the constitution:

> …the family is the natural and fundamental unit of society and is entitled to protection by society and the state and men and women, without any distinction as to race, nation, nationality or religion, who have attained marriageable age as defined by law, have the right to marry and found a family. They have equal rights while entering into, during marriage and at the time of divorce… (Federal Democratic Republic of Ethiopia, 1994; pp 10).

The government of Ethiopia has formulated legislation to help in protecting marriage and the wellbeing of those entering into this important social unit. For example, Article 6 of the Revised Family Code of the Federal Democratic Republic of Ethiopia (FDRE, 2000) says that marriage can only take place when couples have given their full consent, and Article 7 of the same code clearly notes that a man or a woman who has not reached the age of eighteen shall not conclude marriage. These provisions indicate that the family-related policy environment in Ethiopia provides a solid foundation for the protection and wellbeing of marriage.

Marriage is nearly universal in Ethiopia. According to Ethiopia's 2016 Demographic and Health Survey (CSA, 2016), only 1% of women and 2% of men have never been married by age 45-49, and 65% of women and 56% of men age 15-49 were married or living together with a partner at the time of the survey. The same report indicated that the median age at first marriage for Ethiopian women was 17.1 years, while it was 23.8 years for Ethiopian men and 58% of women. Only 9% of men marry before their 18th birthday, showing that Ethiopian women tend to

marry at a considerably younger age than do men.

Even though marriage is universal in Ethiopia, and the government recognises in its constitution the importance of protecting marriage, recent studies and government reports indicate that the prevalence of divorce in the country is increasing over time. The 2016 Ethiopian Demographic and Health Survey (CSA, 2016) showed that divorce among 15-49 year old's was reported by 6.3% of women and 2.2% of men, which showed a significant increase from the 2011 EDHS report of 5.3% of women and 1.8 % of men who reported the same. These national figures indicate that divorce rates are increasing in Ethiopia. Furthermore, the proportion of newlyweds who file for divorce in Addis Ababa is also increasing every year. Data obtained from the Addis Ababa City Administration Vital Registration Office in August 2018 has indicated that the proportion of registered divorce compared to registered marriage has increased from 2.63% in 2014 to 4.7% in 2015, to 5.15% in 2016 and 7.4% in 2017. The 2018 first six-month report of the Vital Registration office also showed a 6.2% registration of divorce from the total marriages registered in the year. The trend generally shows that there is a decrease in marital adjustment among married couples in Addis Ababa, especially among newlyweds.

Divorce is identified by the Ministry of Labour and Social Affairs of Ethiopia as one of the main social problems facing families in Addis Ababa. This affects the incidence of poverty, which is exacerbated in families headed by divorced women (AAU, 2008). Following divorce, survival outside of family becomes difficult, especially for economically weak spouses and children, leading to serious socio-economic problems that affect the stability and development of the nation. The increasing prevalence of divorce calls for the need to understand the key factors that affect marital satisfaction and adjustment and ultimately lead to divorce. The problem also calls for the need to find solutions to make sure that issues that contribute to

poor marital satisfaction and adjustment among newlyweds are resolved before they lead to divorce.

While global studies to understand key factors influencing marital adjustment among newlyweds are widely available, such studies are scarce in the African as well as Ethiopian context. Especially in Ethiopia, open discussion on issues related to marriage is considered taboo, and this important social agenda has been far from the focus of researchers and academics in the country. Thus, the key influencers of marital satisfaction and adjustment among newlyweds in the Ethiopian context are still not systematically explored and documented. Lack of such empirical evidence has contributed to the poor attention given by the government and other stakeholders to design and implement locally relevant and effective interventions and services to support newlyweds in adjusting to the new experiences of their married life. This is one of the main reasons that motivated this research. Thus, this study was designed to systematically analyse the key influencers of marital satisfaction and adjustment among newlyweds in Ethiopia, and contribute to scientific knowledge in the field. This research was also motivated by the practical gaps caused by a lack of clear policy or social support system in Ethiopia that is designed to prepare couples for marriage and to help them adjust in their marital life, especially during their critical newlywed years. Availability of scientific knowledge on influencers of newlyweds marital satisfaction and adjustment in Ethiopian would motivate policy discussion and dialogue on the issue and serve as an evidence base in the design of policies, programmes and services that protect and support married couples, especially newlyweds, to adjust well to their new life, and to have a stable and fulfilling marital life that ensures the betterment of life of the family and the country at large.

1.2.   Problem Statement

A growing body of literature indicates that what occurs during the early formative years of marriage is predictive of later marital difficulties and disruption (Gottman & Levenson, 2000). According to Huston et al. (2001), patterns established in the first two years of marriage foreshadow a couple's long-term outcomes after 13 years of marriage. The early stages of marriage are particularly important to developing a sense of togetherness, and to determine the course the marriage will take. New marriages involve many adjustments and risks, and research indicates that marital dissolution often begins within the first few months of marriage (Schramm, 2003).

Recent government reports, such as Ethiopia's Demographic and Health Survey (CSA, 2016) and annual reports of the Addis Ababa City Administration Vital Registration Office, indicate that the prevalence of divorce in Addis Ababa is increasing over time. The trend generally shows marital adjustment, especially among newlyweds is decreasing in Addis Ababa. Despite the scale and seriousness of the problem, there is limited knowledge regarding the factors that are contributing to and influencing marital instability among married couples in Addis Ababa in general and newlyweds. Lack of such evidence also made it difficult for the government and other stakeholders working on family health and wellbeing to design context-specific, relevant and sustainable policies, programmes, interventions and services that support and protect marriage. Thus, there is a need to undertake a systematic study to understand the key factors that influence marital satisfaction and adjustment among newlyweds in Addis Ababa. Such a study is required to increase existing knowledge in the field of family psychology and to generate evidence to design targeted and relevant programmes and interventions to prepare newlyweds for a stable and satisfying marriage, and to help them cope with marital challenges

they may experience in their married life. Such a study is also required to generate evidence to influence policymakers in designing appropriate policies that protect and support marriage and improve marital quality and stability in the country.

1.3.   Justification for the Study

This research has empirical significance in its contribution to the field of family psychology, and the study of newlyweds' marital satisfaction and adjustment. Marital instability, and consequently divorce, results in psychosocial as well as socio-economic and other effects on the spouses involved, along with other family members and significant others. These effects result in unbearable consequences for a family that extend across generations. A significant proportion of research shows that long term marital life is determined by adjustment during the first few years of marriage (Huston et al., 2001). However, most of the knowledge regarding influencers of marital satisfaction and adjustment focuses on all married couples, where less attention has been given to understanding factors influencing the process and outcomes of newlywed marriages during the early and critical years of marriage. Thus, understanding the influencers of marital satisfaction and adjustment among newlyweds would add to the existing knowledge in the field of family psychology, in explaining why newlywed couples find it difficult to adjust in the first two years of their marriage. Furthermore, most studies previously carried out to explore influencers of marital satisfaction and adjustment among newlyweds concentrated on explaining marital satisfaction and adjustment as a function of common socio-demographic factors, such as income, educational attainment, religion, etc. instead of taking a more comprehensive theoretical perspective that shows the contributions of the past in the spouse's life (enduring vulnerabilities), the current (situations and events surrounding the marital

environment), as well as the adaptive behaviours and coping mechanisms that couples use to resolve their issues.

Thus, this research will have an empirical contribution to the field of family psychology and the study of marital satisfaction and adjustment, by investigating newlyweds' marital satisfaction and adjustment from the dyadic interaction perspective, rather than as merely an effect of socio-demographic variables. This research will also contribute to the existing knowledge base regarding the key influencers of marital satisfaction and adjustment among newlywed couples in the Ethiopian context, where similar studies are scarce or unavailable to the best of knowledge of the researcher. The research will also have practical significance in that understanding the key influencers of marital adjustment among newlyweds in the Ethiopian context will pave the way for policy dialogue and public discussion about the issue and thus break the long-standing silence on the issue. It will inform and encourage policy and decision-makers to take concrete policy measures to ensure protection, support and promotion of marriage in Ethiopia by designing policies that protect and support marriage and married couples, especially during their newlywed years. The research will also have significance in informing the design and implementation of family and social development programmes such as pre-marital and marital education and counselling targeting protection and support for marriage and preparing couples for better marital relationship and coping mechanisms.

This research will forward solutions and recommendations to be considered in the design and implementation of programmes and services that address family issues in general, and marital challenges in particular. Furthermore, family support programmes and marriage counselling interventions and services provided by counselling and support centres in Addis Ababa will be informed about the behavioural and couple communication issues that they need

to prioritise while providing counselling and other social services and support to newlyweds, and married couples in general.

1.4.   Theoretical Framework of the Study

Different researchers have explained marital satisfaction and adjustment from a variety of perspectives, and several theories have been developed and used in the scientific literature to explain the main determinants of marital satisfaction and adjustment. Considering past research and relevance to the main purpose of this study, an adapted form of the Vulnerability-Stress-Adaptation model formulated by (Karney & Bradbury,1995) was used as a theoretical framework for this study. The VSA model is a comprehensive model that explains how the quality and stability of numerous elements of marriage change over time. The Vulnerability-Stress-Adaptation (VSA) model explains that marital quality and stability is impacted by three key variables. These are enduring vulnerabilities (characteristics people bring into marriage), stressful life events(the experience of stress) and adaptive processes (behavioural exchanges in the marriage). The model emphasizes that enduring vulnerabilities have direct effects on stress as well as adaptive processes. Adaptive processes, such as how couples communicate and solve marital problems, not only affect the magnitude or frequency of stressful life events the couples encounter, but they are also thought to have the most proximal effect on marital quality (Karney & Bradbury, 1995).
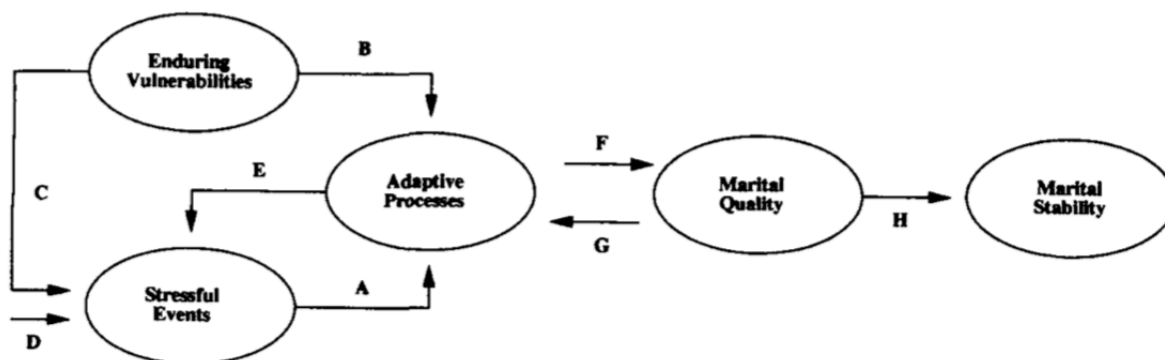
Figure 1: A Vulnerability-Stress-Adaptation Model of Marriage (Karney & Bradbury, 1995)

This model provides a comprehensive means to assess key variables from other psychological theories of marriage such as behavioural theory, social exchange theory, crisis theory, and attachment theory. The model also explains that both the past and the present are important in understanding the key influencers of marital satisfaction and adjustment. Moreover, this model has been widely used in recent studies focusing on marital satisfaction and adjustment among newlyweds (Lavner, 2013; Woszidlo & Segrin, 2013; Brock, 2014; Wickrama, 2018).

Supporting the key theoretical explanations of the VSA model, several studies found that enduring vulnerabilities impact stress and adaptive processes, which in turn affect marital quality. The personality traits that couples bring to the marriage, the recurring stressful life events that they report six months after marriage, and the quality of their problem-solving conversations as newlyweds, all play a role in contributing to the different experiences that couples report regarding their relationship quality, stability, and length of their marriage (Lavner, Weiss, Miller, & Karney, 2018). Regarding the effect of enduring vulnerabilities on stress, Woszidlo & Segrin (2013a) found a significant positive relationship between neuroticism and perception of stress, and this relationship, according to the study, can be explained by the lack of

mutual problem-solving, or the willingness to work together to solve problems. This is because neuroticism is associated with interpersonal processes consistent with distancing one's self and refraining from working things out with others, including a spouse, which affects the perception of stressful events. Neuroticism has been consistently linked with maladaptive patterns of communication among couples. To maintain a stable relationship, each member of a couple evolves into a new suitable communication pattern (Mund, Finn, Hagemeyer, & Neyer, 2016) by behaving positively and less emotionally. However, neurotic individuals communicate with their partners in ways that are congruent with their level of neuroticism (Finn, Mitte, & Neyer, 2015). Johnson and Anderson (2015) also found a significant positive relationship between personality traits, such as lower self-esteem and high frequency of depressed mood, with frequent couple conflict and less constructive conflict behaviour for both couples. Lower maternal self-esteem was also associated with fathers' declining levels of marital satisfaction (Don & Mickelson, 2014).

Various studies also indicated the effect of stressful life events on marital quality. A study by Woszidlo and Segrin (2013a) found a negative relationship between family-related, work-related and job-home interference related stressful life events and marital quality. The negative association was found to be strongest between family stressors and marital quality indicating that perception and experience of family-related stressful life events are key predictors of marital quality and satisfaction. Analysis of the dyadic/interpersonal effect of stress also showed that actors' perception and experience of family stress affects partners' marital satisfaction. Stressful life events related to pregnancy and childbirth were also found to affect marital satisfaction. A study by Trillingsgaard, Baucom, and Heyman (2014) found first pregnancy and birth of a first child to be a key factor associated with marital satisfaction such

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that a moderate decline of relationship satisfaction was reported by men and women during the second trimester of the first pregnancy, and up to 30 months after birth of the first child. The study also found that vulnerability factors during pregnancy, such as anxiety and depression, as well as less constructive communication patterns, were among the main predictors of a greater decline in relationship satisfaction over time.

Recent studies also found direct effects of adaptive behaviour on marital satisfaction. Various theories acknowledge communication as an important factor in couples' relationships, both as a means of building intimacy and support that maintain relationships and as a method of resolving relationship conflicts (Williamson et al., 2012). Studies indicated that couples were more adjusted when they used more adaptive communication strategies (e.g., constructive communication), and less non-adaptive communication strategies (e.g., demand withdrawal or disengagement) (Pedro, Matos, Martins & Costa,2017). Lavner, Lamkin, Miller, Campbell, and Karney (2016) further advanced the understanding of the longitudinal association between marital interaction and marital quality, by identifying bidirectional pathways between marital communication and marital satisfaction among newlyweds. Furthermore, daily marital communication and marital conflict resolution explained the unique variance in marital quality above and beyond each other; and spouses' daily marital communication was associated with the changes in their marital quality, via shaping their subsequent marital conflict resolution strategies (at least for husbands') (Li, Zhou, Cao, & Ju, 2018). Much research has supported the notion that the way conflicts are managed turns out to be more important than the content of the conflict. According to Sanford (2006), the ways that couples communicate during conflict are predictive of a range of outcomes including relationship satisfaction, divorce, domestic violence, and physical health.

1.5. Aims of the Research

1.5.1. General Aim of the Research

The overall purpose of the study is to investigate the extent to which neuroticism, stressful life events, mutual problem-solving and negative relationship attributions contribute to marital quality and adjustment among newlyweds in Addis Ababa.

1.5.2. Specific Aims of the Research Specific aims of the empirical study include the following:

Research Aim 1: To explore the nature of the relationship between neuroticism, stressful life events, mutual problem-solving, negative relationship attribution, and marital quality and adjustment among a sample of newlyweds in Addis Ababa.

Research Aim 2: To explore the intrapersonal (actor) and Interpersonal(partner) effects of neuroticism, stressful life events, mutual problem-solving and negative relationship attribution on marital quality and adjustment among a sample of newlyweds in Addis Ababa.

Research Aim 3: To explore the direct and indirect effect of neuroticism and stressful life events on marital quality and adjustment through the mediation of adaptive processes of mutual problem-solving and negative relationship attribution among a sample of newlyweds in Addis Ababa.

Research Aim 4: To explore if significant differences exist in marital quality and adjustment between the different groups of socio-demographic characteristics (gender, educational level, income level, months of cohabitation, availability of children, couples ethnic similarity) among newlyweds in Addis Ababa.

1.6. Research Questions and Hypotheses

Recent studies carried out in the western world using the Vulnerability-Stress-Adaptation (VSA) model explain that marital quality and adjustment are impacted by three key variables. These are enduring vulnerabilities (characteristics people bring into marriage such as neuroticism), stressful life events(the experience of stress) and adaptive processes (behavioural exchanges in the marriage). The model emphasises that enduring vulnerabilities have direct effects on stress, as well as adaptive processes. Adaptive processes, such as how couples communicate and solve marital problems, not only affect the magnitude or frequency of stressful life events the couples encounter, but they are also thought to have the most proximal effect on marital quality (Karney & Bradbury, 1995). The key question that remains is as to whether these variables impact marital quality and adjustment among newlyweds in the Ethiopian context, and if so, the corollary of the nature and strength of the direct and indirect effects as well as the intrapersonal and interpersonal effects of these variables on marital quality and adjustment among newlyweds in Ethiopia. This research also aimed to answer which of the three variables, that is neuroticism, stressful life events and adaptive processes, contribute more to marital adjustment among newlyweds in the Ethiopian context.

This study aimed to answer the following research questions

Research Question 1: What is the nature of the relationship between neuroticism, Stressful life events, mutual problem solving, negative relationship attribution and marital satisfaction and adjustment among a sample of newlyweds in Addis Ababa? Specifically, does a significant relationship exist between the attributes of neuroticism, stress, mutual problem-solving and negative relationship attributions and marital satisfaction and adjustment among newlyweds in Addis Ababa?

The following hypotheses were tested under this research question.

- **Hypothesis 1**: There is a significant negative relationship between wives' and husbands' neuroticism and marital satisfaction

- **Hypothesis 2**: There is a significant negative relationship between wives' and husbands' stress and marital satisfaction

- **Hypothesis 3**: There is a significant positive relationship between wives' and husbands' mutual problem solving and marital satisfaction

- **Hypothesis 4**: There is a significant negative relationship between wives' and husbands' negative relationship attribution and marital satisfaction

Research Question 2: What is the intrapersonal (actor) and interpersonal (partner) effect of neuroticism, stressful life events, mutual problem-solving and negative relationship attribution on marital satisfaction among a sample of newlyweds in Addis Ababa?

The following hypotheses were tested under this research question

- **Hypothesis 5**: neuroticism will have a significant actor (intrapersonal) and partner (interpersonal) effect on marital satisfaction.

- **Hypothesis 6**: Stressful life events will have a significant actor (intrapersonal) and partner (interpersonal) effect on marital satisfaction.

- **Hypothesis 7**: Mutual Problem Solving will have a significant actor (intrapersonal) and partner (interpersonal) effect on marital satisfaction.

- **Hypothesis 8**: Negative Relationship Attribution will have a significant actor (intrapersonal) and partner (interpersonal) effect on marital satisfaction.

Research Question 3: What is the direct and indirect effect of neuroticism and stressful life events on marital satisfaction and adjustment through the mediation of adaptive processes among a sample of newlyweds in Addis Ababa?

The following hypotheses were tested under research question 3.

- **Hypothesis 9:** Neuroticism will have a significant negative intrapersonal and interpersonal indirect effect on marital satisfaction and adjustment through mutual problem solving

- **Hypothesis 10:** Neuroticism will have a significant intrapersonal and interpersonal indirect effect on marital satisfaction and adjustment through negative relationship attribution

- **Hypothesis 11:** Stressful life events will have a significant intrapersonal and interpersonal indirect effect on marital satisfaction and adjustment through mutual problem solving

- **Hypothesis 12:** Stressful life events will have a significant intrapersonal and interpersonal indirect effect on marital satisfaction and adjustment through negative relationship attribution

Research Question 4: Do significant differences exist in marital satisfaction and adjustment between the different groups of socio-demographic characteristics (gender, educational level, income level, months of cohabitation, availability of children, couples ethnic similarity) among newlyweds in Addis Ababa?

The following hypothesis was tested under research question 4.

Hypothesis 13: There are significant differences between different groups of demographic characteristics (gender, education, income, duration of cohabitation before marriage and ethnicity) on marital adjustment among newlywed couples in Addis Ababa.

1.7.   Research Design

This research followed both a descriptive and explanatory approach to identify and describe the key variables associated with marital satisfaction and adjustment among a sample of newlyweds in Addis Ababa and to explain the strengthen and direction of relationship between the variables and marital satisfaction and adjustment. It presents a description of the relationship between neuroticism, stressful life events, mutual problem-solving, negative relationship attributions and marital satisfaction and adjustment among newlyweds in Addis Ababa, in line with the Vulnerability-Stress-Adaptation model of marriage. The study also employed an explanatory design in the sense that it establishes the direction and strength of the relationship among these variables.

1.8.   Research Method

A quantitative cross-sectional survey method was employed to answer the research questions and test the hypotheses outlined above in section 1.6. The research method followed the following specific steps. A detailed description of each step is presented in chapter three of this report.

Step 1: Determining the Population and the Sample

The population of interest for this research was all couples in Addis Ababa who have been legally married for 12-24 months before the study period. These couples had legal marriage certificates from the Addis Ababa City Administration Vital Registration office, the office that manages records and registry of all legal marriages in the city, and issues a legal marriage certificate. Furthermore, as the minimum age for legal marriage in Ethiopian law is 18, the research population was all newlyweds over 18 years of age whose current marriage is their first marriage and had no children from another relationship before the current marriage. Besides, the

population of interest was one that completed a minimum of 10th-grade education to ensure that couples have proper comprehension of the measurement instruments used in the research. A systematic random sampling method was used to select a sample of 192 newlywed couples in Addis Ababa who participated in this research.

Step 2: Measuring Instruments and justification.

The main variables of interest measured in this research were neuroticism, stressful life events, mutual problem-solving, negative relationship attribution, and marital satisfaction. Various standard measuring instruments which have been repeatedly used in global research to measure these variables were identified through a rigorous literature review. Among the list of possible instruments identified to measure each variable, one instrument that was considered to be more appropriate and relevant to the objectives of this research and the context of the study area and population was selected for each variable. The selected instruments, which were originally in English were first translated into the local language (Amharic). Then, the translated version was pretested among a small sample of newlywed couples in Addis Ababa. Based on feedback from the pretesting participants and findings from the pretesting sessions, the instruments were then revised and adapted to make sure that all items in the instruments were relevant in achieving the research aims, are appropriate to the socio-cultural context of the study setting and are acceptable to the study participants in terms of avoiding any psychological or social harm resulting from participation in the research.

Neuroticism was assessed using a translated, pretested, and adapted version of the eight-item neuroticism subscale of the Big-Five Inventory (John & Srivastava, 1999). Stress was measured using a translated, pretested and adapted version of the life experiences survey checklist developed by Sarason, Johnson, and Siegel (1978) and mutual problem-solving was

measured using the working things out subscale of distance and isolation instruments (Gottman,1999). A translated, pretested and adapted version of the relationship attribution measure (RAM) developed by Fincham and Bradbury (1992) was used to assess negative relationship attributions. Marital quality (satisfaction) was measured using a translated, pretested and adapted version of the 15-item Locke Wallace (1959) Marital Adjustment Test (MAT)(Locke & Wallace, 1959). Furthermore, a short and structured questionnaire was used to capture data on pertinent socio-demographic characteristics of newlyweds, such as gender, educational level, income level, months of cohabitation, availability of children, couples, ethnic similarity, etc.

Step 3: Data Collection Procedure

A self-administered interview approach was used to collect relevant data for this research. A total of 20 experienced female data collectors who were trained for three days (two days of classroom training and one day pretesting) were deployed in the different sub-cities of Addis Ababa. Based on the participant selection criteria developed, the data collectors contacted the potential participants through phone calls and home visits to explain the purpose of the research and check for their willingness to participate in the study. Data collectors then discussed with couples who showed willingness and availability to participate and arranged a time and place to meet for the actual instrument administration. The instruments were administered in a place that the couples chose, mostly in their homes. The instruments were self-administered by each spouse independently and couples were not allowed to talk to each other or show their responses to each other. The data collectors observed the couples while completing the instruments without invading their privacy, and without looking at their responses but they were around to provide clarification for questions that couples may ask. When each spouse finished

completing the instrument, they were given an envelope to seal the completed questionnaire to ensure confidentiality. Data collectors then wrote a similar pre-identified code on couples' envelopes and signed each sealed envelope.

Step 4: Data Entry, Cleaning, and Analysis.

The main statistical analyses undertaken to answer the research questions included frequencies, correlation analysis, t-tests, and multiple linear regression analysis. In addition to this, tests of the indirect effects of the independent variables (neuroticism and stressful life events) on the dependent variable (marital satisfaction) were undertaken with the PROCESS module in SPSS Statistics 20.0 (Hayes, 2013). Furthermore, the actor-partner Interdependence Model (Cook & Kenny, 2005) using Structural Equation Modeling in SPSS AMOS 20.0 software was used to estimate the regression coefficients that represent the actor and partner effects. This method provides an estimate of the actor and partner effects of the independent variable on the actors' and partners' dependent variable while controlling for dyadic interdependence on the independent variable.

Step 5: Reporting and Interpreting the Results

The results were reported and interpreted in line with the empirical study aims. This was done with the assistance of tables, graphs, and figures.

Step 6: Discussion and Integration of Research Findings

The main findings of the research were discussed by referring to the literature review to explore similarities and differences between the findings of this research and other related research carried out globally by scholars in the field.

Step 7: Conclusions, Implications, and Recommendations

Conclusions were made based on discussions of the main findings of this research in line with findings from the literature review undertaken. The theoretical, empirical, as well as practical implications of the research, were also outlined based on the conclusions made. Recommendations for further research and action have also been forwarded based on the conclusions made and implications outlined.

1.9.   Delimitations and Limitations of the Research

Delimitation/Scope

The geographic scope of this research covered Addis Ababa, the capital city of Ethiopia. Addis Ababa was selected because of the fast-increasing rate of urbanization and the increasing prevalence of divorce, especially among newlyweds in the city. All of the study participants were literate couples who completed a minimum of Grade 10 education. This was done to ensure that participants read, understood and comprehended the items included in the measurement instruments, as some instruments contained hypothetical scenarios that require abstract thinking.

Limitations

This research on newlyweds' marital quality and adjustment was carried out in a country where talking about marital issues is largely considered a taboo. Even though the enumerators and the researcher made the utmost effort to ensure that participants provide a valid and reliable response to all items in the measuring instruments, the fact that a self-report approach was used for data collection may have its effect on the validity and reliability of the data. Considering the sensitivity of the research issue to the study participants, the self-report approach was preferred as a more reliable approach than an interviewer-administered approach. Furthermore, research

that has been undertaken on issues related to marital quality and adjustment in the Ethiopian context remains scarce. This limited the opportunity to compare the findings of this research with other similar local research and substantiate them accordingly. Thus, the findings of this research were only compared with research carried out in other countries.

1.10. Ethical Considerations

Key ethical considerations were made while undertaking this research. Ethical clearance to conduct this research was secured from the University of South Africa's (UNISA) Department of Psychology. Besides this, local ethical clearance was secured from the IRB at the Addis Ababa City Administration Health Bureau. Furthermore, recognising that issues related to marital relationship and adjustment are considered sensitive and private, especially in the Ethiopian context, where several measures were taken to ensure that consent and confidentiality are maintained throughout the research process.

1.11. Definition of Key Terms and Phrases

- **Marital Quality**: Determined by the degree of marital satisfaction, marital quality refers to a subjective, global evaluation of the marital relationship and perception of the degree of happiness with one's marriage.

- **Marital satisfaction**: Marital satisfaction is a primary indicator of marital quality that refers to the subjective and global perception of happiness and contentment with one's marriage (Woszidlo & Segrin, 2013a).

- **Marital Adjustment**: Refers to the process during which newlyweds in a marriage adapt and change to their new roles complementing and accommodating to each other, the

outcome of which is determined by the degree of marital quality, satisfaction, and stability.

- **Marital Stability**: A product of marital satisfaction(quality) that refers to the likelihood that the marriage will stay intact, without dissolution or divorce. It is expected that the probability of marital instability increases as marital quality declines.

- **Enduring Vulnerabilities**: Refers to the stable personality traits such as neuroticism that a person brings to the new marital relationship. Neuroticism is a personality trait composed of distressing emotions such as anxiety, disgust, embarrassment, helplessness, and/or sadness (Borkenau, Mauer, Spinath, Angleitner, & Riemann, 2004)

- **Stressful Life Events**: Refers to the day-to-day life incidences related to work, family, social, economic and other situations that create stress among newlywed couples.

- **Adaptive Processes**: Refers to aspects of behaviour in a marital relationship that allow spouses to adequately and effectively cope with and adjust to stressors (Woszidlo & Segrin, 2013b) and solve marital problems (Karney and Bradbury,1995).

- **Mutual Problem Solving** refers to partners talking things out, discussing and working on marital problems together, and perceiving collaboration as productive (Woszidlo & Segrin, 2013a). This communication behaviour has been associated with higher marital quality (Gottman, Swanson, & Murray, 1999).

- **Negative Relationship Attributions**: Refers to a component of adaptive process that involves making negative attributions and appraisals for marital interactions by ascribing a partner's negative behaviour to his or her enduring characteristics.

- **Newlyweds**: Refers to heterosexual couples in Addis Ababa who have been married for 12-23 months prior to the study period

1.12. Organisation of the Report

This report is organised into five chapters. Chapter 1 presents the introduction and scientific orientation of the research. Chapter 2 presents the literature review. Chapter 3 outlines the research methodology followed to undertake this research. Chapter 4 presents a discussion of the main research findings. Chapter 5 presents the conclusions made based on the research findings, the theoretical and practical implications of the research, as the recommendations forwarded for further research and action.

1.13. Chapter Summary

This chapter presented and discussed the background and motivation for the study, the problem statement, the purpose and aims of the research, the theoretical base of the research and methods followed to undertake the research. The overall purpose of the study is to investigate the extent to which neuroticism, stressful life events, mutual problem solving and negative relationship attributions contribute to marital quality and adjustment among a sample of newlyweds in Addis Ababa, Ethiopia. This research followed both a descriptive and explanatory approach to identifying and describing the key variables associated with marital quality and adjustment among newlyweds, and to explain the strength and direction of the relationship between these variables. The Vulnerability-Stress-Adaptation model of marriage formulated by Karney and Bradbury (1995) was used as a theoretical framework for this study. The VSA model explains that marital quality and stability is impacted by three key variables. These are enduring vulnerabilities (characteristics people bring into marriage), stressful life events(the experience of

stress) and adaptive processes (behavioural exchanges in the marriage). In order to answer the research questions and test the research hypotheses, a quantitative cross-sectional survey method was adopted. The next chapter presents and discusses findings of the review of the literature undertaken by the researcher with a focus placed on the relationship between neuroticism, stressful life events, mutual problem-solving, negative relationship attributions and marital quality among newlyweds.

CHAPTER 2: THEORETICAL CONTEXT AND LITERATURE REVIEW

2.1. Chapter Introduction

This chapter presents the theoretical background as well as the review of relevant research on marital quality, satisfaction and adjustment particularly in the context of newlywed marriages. The first section provides a brief description of the nature of marriage and marital quality and the importance of studying this important topic and related constructs as perceived by scholars in the field of family psychology. The next section explores some of the main theoretical perspectives developed and used by scholars to explain the process and outcomes of marriage. Following that, a section that presents the definitions and measurement methods of the main variables of interest in this research, that is neuroticism (an indicator of enduring vulnerabilities), stressful events, mutual problem-solving and negative relationship attributions (as indicators of adaptive/maladaptive processes) is included. Following that, a review of relevant research pertaining to the relationship between these above-mentioned variables and marital quality (marital satisfaction) is summarised and discussed. Finally, based on a review of the relevant theories available and a review of relevant literature, a conceptual framework that is adapted from the Vulnerability-Stress-Adaptation model of marriage (Karney and Bradbury,1995) is used for this research is presented in the last section of this chapter.

2.2. Overview of the Main Theories Related to Marital Quality and Satisfaction

2.2.1. Introduction

Increased interest in identifying the factors related to family functioning and dynamics comes from the fact that the family is the most important unit in terms of development and

maintenance of the physical, social, and psychological health of society (Ross, Mirowsky, & Goldsteen, 1990). Furthermore, in any conceptualisation of the family, it is important to note that the husband and wife are crucial parts of the system. For many people, marriage begins as a source of satisfaction and fulfillment, but ends as a source of frustration and despair as nearly two-thirds of all first marriages in the United States are expected to end in separation or divorce (Martin & Bumpass, 1989).

Studies on marital functioning and satisfaction have received increased attention over the last decades (Bertoni & Bodenmann, 2010b). Marital satisfaction has been defined by dynamic goal theory as "people's global subjective evaluation about the quality of their marriage" and this definition has been widely accepted and recommended as the main indicator of marital quality in the research field (Li & Fung, 2011). In their effort to understand and explain marital quality, Fincham and Beach (1999) have stimulated an interesting discussion where they note that marital quality is not necessarily the opposite of marital distress but may rather be constituted by positive and negative dimensions that coexist. According to this assumption, satisfied couples are characterized by mostly positive dimensions and low levels of negative dimensions while dissatisfied couples show mostly negative dimensions, even though some positive dimensions may coexist at the same time. Based on these approaches, marital quality is always characterised by both negative dimensions (e.g., conflicts and negative attitudes), as well as positive ones (e.g., love, affection, and positive attitudes)(Bertoni & Bodenmann, 2010a).

Marital satisfaction among newlyweds has recently received a lot of attention from scholars and researchers at the global level. Nearly all newly married couples seek to maintain a stable and fulfilling relationship, but the fact that divorce peaks in the first few years of marriage

(Bramlett & Mosher, 2001) indicates that many couples struggle to stay connected. Although few family scholars would disagree that change is a core feature of the early years of marriage, there is surprisingly little information regarding both the nature of this change and the factors that regulate it (Kurdek, 1998). Marital quality and adjustment in the newlywed years are strongly predictive of subsequent marital happiness and stability and the early years of marriage are a period of dramatic change for couples, both generally, as well as sexually (Fisher & McNulty, 2008).

2.2.2. Theoretical Perspectives

Scholars in the field of family psychology have developed several theories to explain the processes and outcomes of marriage. This section presents a summary of some of the main theories of marriage that have been formulated and used by scholars in the field of family psychology and are relevant to the focus of this research.

2.2.2.1. Social Exchange Theory

Social exchange theory is one of the most cited theoretical perspectives in extant research on marriage and close relationships. The theory explains the development, maintenance, and decay of exchange relationships in terms of the balance between the rewards that marital partners obtain and the costs that they incur by selecting themselves into marital relationships (Nakonezny & Denton, 2008). Levinger (1976) was among the first to apply the concepts of social exchange to marriage. He argued that marital success or failure depends on an individual's weighing of the attractions of the relationship, or all the aspects of the relationship that may be rewarding (e.g., emotional security, sexual fulfillment, and social status), the barriers to leaving the relationship (e.g., social and religious constraints and financial expenses), and the presence of

attractive alternatives outside the relationship (e.g., preferable partners and escape from the current relationship). According to this perspective, marriages end when the attractions of the relationship are few, the barriers to leaving the relationship are weak, and the alternatives to the relationship are enticing (Levinger, 1976). One of the strengths of this theory is that many types of variables can be incorporated into its framework. However, this theory doesn't provide a clear explanation as to how change in marriage occurs and how a marriage that was initially become unstable over time (Karney & Bradbury, 1995).

2.2.2.2.   Behavioural Theory

Behavioural theory emphasises that the interpersonal exchange of specific behaviours between partners drive perceptions about a relationship (Johnson, Horne, Hardy, & Anderson, 2018). Research in this tradition has concentrated on behaviours exchanged during problem-solving discussions, guided by the premise that rewarding or positive behaviours enhance global evaluations of the marriage, while punishing or negative behaviours harm the relationship (Karney & Bradbury, 1995). Behavioural theory of marriage also emphasised the importance of attributions that spouses make for a partner, suggesting that cognitive responses affect marriage through their influence on subsequent interaction behaviours as the accumulation of experiences during and after interaction gradually influence spouses' judgments of marital quality over time. One of the strengths of the behavioural theory is its explanation of how judgments of marital satisfaction change over time, in the sense that each satisfying interaction between satisfied couples justifies continued satisfaction, which in turn makes further satisfying interaction more likely. On the other hand, couples who have difficulty dealing with conflict may end up with marital distress. One of the weaknesses of this theory is its overemphasis on interaction, which

may have contributed to its limited focus on the broader developmental perspective on marriage (Karney & Bradbury, 1995).

2.2.2.3.   Attachment Theory

Attachment theories of marriage suggest that the nature of the first close relationship between infants and their primary caregivers determines a child's internal working model of what close relationships are like, which in turn determines the nature of ones' close relationships throughout the course of life (Brock & Lawrence, 2014). Attachment theory suggests that individuals with a more secure attachment style, which is characterised by less anxious and less avoidant attachment behaviour, will have more adaptive supportive exchanges that contribute to marital success and marital success or failure is affected by enduring aspects of each partner's relationship history and family of origin (Karney & Bradbury, 1995). Even though attachment theory has made an additional contribution to the study of marriage by suggesting links between levels of analysis that are underemphasised in, or absent from, exchange and behavioural theories, it has overlooked the sources of change and variability in marriage in its focus on continuity over lifespan, and does not explain when in the course of a marriage unmet attachment needs lead to divorce (Karney & Bradbury, 1995).

2.2.2.4.   Crisis Theory

Crisis theory derives from Hill's (1949) efforts to explain how families react to stressful life events(Karney & Bradbury, 1995). According to Hill's ABCX model, stressful life events(A) require some adaptation from a family. Families have varying levels of concrete resources (B) and may arrive at different definitions of events (C) that modify the impact of those events. In

any given circumstance, the extent to which available resources suffice to meet the requirements implied by a family's definition of an event determines the nature of the crisis (X) as well as whether a family will recover successfully. When used in the context of explaining marital outcomes, crisis theory states that couples experiencing more stressful life events ought to be more vulnerable to negative marital outcomes, and this effect should be moderated by the couple's levels of resources and definitions of events (Karney & Bradbury, 1995).

One of the strengths of crisis theory is that it has expanded the scope of thinking about marriage in important ways, as it is the first theory to focus on the direct effects of external events on processes within spouses (definitions of the event) and between spouses (adaptation), placing married couples in an ongoing interaction with their external world (Karney & Bradbury, 1995). Crisis theory also addresses aspects of marital outcome for which other theories do not provide account, by explaining that it is the failure to adapt to stressful life events that precipitates problems in marriages and families. According to crisis theory, marriages change in response to the need to adapt to stressful events. However, crisis theory does not sufficiently explain and address the specific coping responses that lead to either adaptation or maladaptation and the development over time of the constructs that influence coping, which has received little attention in this theory (Karney & Bradbury, 1995).

2.2.2.5. Family systems theory

According to this theory, tension between spouses will often arise as a result of a third party's involvement in their lives (Bowen, 1978). In particular, a partner's lack of differentiation from his or her family of origin can be problematic for the marital system. Concerning everyday support given to parents, the provision of more frequent support may reflect the presence of a

powerful parent-child bond that diminishes the role of the adult child's spouse. Consequently, the spouse may be dissatisfied with the couple's relationship. A wife who gives more frequent everyday help to her own parents, for example, may be highly interdependent with her parents in a way that interferes with functioning in her marital role. As a result, her husband may be unhappy with the marriage because he resents this interference and the amount of time his wife spends with her parents (Polenick et al., 2017).

2.2.2.6. A Vulnerability-Stress-Adaptation Model of Marriage (Karney & Bradbury, 1995)

The Vulnerability-Stress-Adaptation model of marriage (Karney & Bradbury, 1995) was developed by integrating several of the aforementioned theories and research on marriage and couple relationships (Johnson et al., 2018). According to this model, certain patterns of relationship personality at the individual and couple level can be viewed as "enduring vulnerabilities" that require adaptive processes in the face of stressful events. These adaptive processes encompass more or less functional conflict resolution behaviours. The quality of these conflict resolution behaviours determines the amount and intensity of prevalent conflict episodes and influences overall marital quality and stability (Schneewind & Gerhard, 2002). This approach is in line with a process-oriented paradigm advocated for in recent family research in general, and developmental marital research in particular (Mueller et al., 2002). The model positions adaptive processes as mediating the effects of stress and vulnerability on marital outcomes and suggests specific mechanisms through which stress and vulnerability lead to changes in marriage (Karney & Bradbury, 1995).

One of the strengths of the vulnerability-stress-adaptation model of marriage is its comprehensiveness in integrating in its framework the main variables that previous theories identified as having a relationship with marital quality and satisfaction, and accounts for both change and stability in marital satisfaction, as well as when changes are most likely to occur (Karney & Bradbury, 1995). One of the limitations of the VSA model is its claim that marital quality is the main factor that likely influences the likelihood of marital stability or instability. However, other theories, such as social exchange theory, claim that factors external to the marriage (e.g., barriers to leaving the relationship and the presence of attractive alternatives) are likely to influence the decision to divorce as well (Karney & Bradbury, 1995).

2.3.   Definition and Measurement of the Research Variables

The VSA model holds that relationship satisfaction and dissolution are a function of three influences, namely: partners' enduring strengths and vulnerabilities or stable characteristics of the partners (e.g., personality traits such as neuroticism); the stressful life events and circumstances that couples encounter (e.g., work-related stress, family-related stress, the transition to parenthood, job loss, etc.); and the adaptive processes that partners display (e.g., emotion experienced during interactions, behavioural skills such as mutual problem-solving, and associated cognition) (Gonzaga, Campos, & Bradbury, 2007). This section defines and explains the main constructs embedded in the VSA model of marital quality and stability.

2.3.1. Neuroticism as an Indicator of "Enduring Vulnerabilities"

2.3.1.1.   Definition

Enduring vulnerabilities refer to the stable characteristics (e.g., personality traits such as neuroticism) that people bring into marriage (Karney & Bradbury, 1995). One personality trait that has been linked consistently with marital relationship functioning is neuroticism. Neuroticism is a personality trait composed of distressing emotions such as anxiety, disgust, embarrassment, helplessness, and/or sadness (Borkenau et al., 2004), and reflects an individual's tendency to respond negatively with more avoidance and withdrawal from unpleasant situations, such as marital conflict (Volling, Gonzalez, & Kuo, 2015). Among the five main groups of personality factors (neuroticism, extraversion, impulsivity, agreeableness, and conscientiousness), neuroticism, which is more generally referred to as negative affectivity, shows greater effects on marital outcome than the other four factors (Karney & Bradbury, 1995).

2.3.1.2.   Measurement

Different measurements of neuroticism have been developed and used by different scholars in the field. The most commonly used measurements of neuroticism are the following.

- *The neuroticism Subscale of the 'Big Five' Personality Inventory*

One of the measures of neuroticism that have been commonly used in research focusing on marital quality and adjustment is the neuroticism subscale of the Big Five Personality Inventory (John & Srivastava, 1999). This instrument consists of 10 statements with which research participants indicate the extent of agreement or disagreement on a five-point scale, ranging from 1 (strongly disagree) to 5 (strongly agree). Sample items include " I become stressed out easily"

or " I do things that I later regret". Participants' responses to items are summed up to create a scale from 10 to 50, with higher scores indicating a greater degree of neuroticism. This scale was used in this research considering its proven strength in measuring neuroticism and the appropriateness of the items included in the scale for the psycho-social and socio-cultural context of the target research population and the study setting in Ethiopia as evidenced from the pilot testing of the tools.

- *Neuroticism scale of the Eysenck Personality Questionnaire (EPQN)*

The other commonly used measure of neuroticism is the neuroticism scale of the Eysenck Personality Questionnaire (Eysenck & Eysenck, 1978), a 23-item measure asking spouses to answer yes or no questions about their negative affectivity (e.g., Are you a worrier, or does your mood go up and down often?).

- *The Schedule for Non-adaptive and Adaptive Personality (SNAP-2)*

The Schedule for Non-adaptive and Adaptive Personality is a 375-item factor analytically derived self-report inventory designed to assess personality traits extending from the normal into the pathological range. The measure has a true/false response format. The SNAP-2 comprises three temperament scales. The negative temperament scale assesses mistrust, manipulativeness, aggression, self-harm, eccentric perceptions and dependency. The positive temperament scale assesses exhibitionism, entitlement, and detachment. The disinhibition scale assesses impulsivity, propriety, and workaholism. Neuroticism is measured by using the negative temperament scale comprising 28 items. Sample items include, "I have a trustful, even naively positive attitude toward others", "I experience little distress and recover quickly from negative

experiences ", "I am satisfied with myself and do not consider suicide as a solution to my problems"

2.3.2. **Stressful Life Events**

2.3.2.1. **Definition**

Stressful Life Events refer to the day-to-day life incidences related to work, family, social, economic and other situations that create stress among newlyweds. Theories of family stress and resilience indicate that a stressful life event can turn into a family crisis if families are unable to adjust and adapt over time (Volling et al., 2015). When different sources of stress have been examined prospectively, however, the presence of stress predicts lower marital stability, and less marital satisfaction over time (Karney & Bradbury, 1995).

2.3.2.2. **Measurement**

Scholars have been using several measures of stressful life events in the context of marital functioning and quality. The main measures are outlined below.

- *The Hassles Scale*

The Hassles scale, developed by Kanner, Coyne, Schaefer, and Lazarus (1981), is one of the common measures of stress in the context of marital functioning, which is being used to assess self-perceived stress in the form of external daily stress and relationship daily stress (Bodenmann, Pihet, & Kayser, 2006).

- *The Chronic Strains Inventory (CSI)*

The Chronic Strains Inventory (Hammen et al., 1987) has been used to assess chronic stress via a self-report, paper-and-pencil method. This modified version has been widely used in research and involves a consideration of the multiple domains of life from which chronic stress originates.

- *Index of life stress(ILS)*

The index of life stress measure consists of 30 self-reported stress-related questions on five dimensions of stress, namely: (1) financial constraints; (2) language barriers; (3) interpersonal stress; (4) cultural adjustment; and (5) academic pressure. The response for each item is measured on a five-point Likert-type scale ranging from never (1), to always (5).

- *The Life Experiences Survey*

The Life Experiences Survey (Sarason et al., 1978) is designed to assess life events in the previous 6 months of couples married life containing negative stressful life events that are likely to occur in a young, married population. Events are grouped to represent several life domains such as marriage (e.g., separation from spouse due to work or travel), work (e.g., passed over for promotion at work), family and friends (e.g., death of a friend or family member), finances (e.g., encountered unexpected expenses), health (e.g., had minor physical illness), personal events (e.g., becoming involved in an accident), living conditions (e.g., difficulties with neighbours), and legal problems (e.g., involved in a lawsuit or legal action). This instrument was used in this research to measure stressful life events.

2.3.3. Mutual Problem-Solving as an Indicator of "Adaptive Processes"

2.3.3.1. Definition

In the VSA model of marriage, adaptive processes are those aspects of a marital relationship that allow spouses to adequately and effectively cope with and adjust to stressors (Woszidlo & Segrin, 2013b). More specifically, Karney and Bradbury (1995) noted that these are the behaviours spouses exchange to solve marital problems. Expressing positive affect and soothing one another with positive communication are two behaviours that are predictive of marital stability and happiness among newlyweds (Gottman, Coan, Carrere, & Swanson, 1998). Because the behaviour of working problems out with one's partner can be an important determinant of marital quality, Gottman et al. (1994) have suggested that the willingness of spouses to work through problems together can positively influence the trajectory of the marriage. In contrast, the desire to work problems out individually is a significant predictor of marital dissolution (Gottman, 1994). One of the key adaptive processes which has been closely linked to marital quality and stability is mutual problem-solving. Mutual problem-solving refers to partners talking things out, discussing and working on marital problems together, and perceiving collaboration as productive (Woszidlo & Segrin, 2013a). This communication behaviour has been associated with higher marital quality (Gottman, Swanson, & Murray, 1999).

2.3.3.2. Measurement

- *The Working Things Out subscale of the Distance and Isolation Questionnaires*

One of the common measures of mutual problem-solving in the context of marital functioning and quality is the Working Things Out subscale of the Distance and Isolation Questionnaires

(Gottman et al., 1999). This 12–item sub-scale measures how people try to work things out/mend problems via communication with their spouse. Sample items include, "Talking things over with my partner seems to make them better," or "Our conversations about our problems never seem to get anywhere", etc. Each item is scored on a five-point Likert-type scale, ranging from 1 = strongly disagree to 5 = strongly agree, with higher scores being more indicative of openly communicating with one another and successfully working together on problems. This instrument was used in this research to measure mutual problem-solving.

- *The Conflict Resolution Styles Inventory (CRSI)*

The Conflict Resolution Styles Inventory (Kurdek, 1994) is used to assess the conflict resolution style of couples. The CRSI measures the frequency of use of various strategies for dealing with conflict, assessed by four items each, including positive problem-solving (e.g., "focusing on the conflict at hand"), conflict engagement (e.g., "exploding and getting out of control"), compliance (e.g., "not defending my position"), and withdrawal (e.g., "tuning the other person out"). For every item, each partner is asked to indicate how frequently (1 for "never" up to 5 for "always"), and they use that particular strategy to deal with arguments or disagreements with their partner.

2.3.4. Negative Relationship Attribution as Indicator of "Adaptive Processes"

2.3.4.1. Definition

Relationship attributions refer to the explanations that a spouse makes for an event (e.g., a partner behaviour) and the accountability or answerability for the event. Distressed spouses are hypothesised to make attributions for negative events that accentuate their impact, whereas non-distressed spouses are thought to make attributions that minimise the impact of negative events.

The attribution hypothesis specifies that spouses who make attributions that accentuate the impact of negative marital events and minimise the impact of positive events will be more distressed. This hypothesis has been supported for attributions concerning who or what caused the event (causal attributions), as well as who is accountable, and therefore liable to sanction, for the event (responsibility attributions) (Fincham, 1998).

2.3.4.2. Measurement

- *The Relationship Attribution Measure*

The Relationship Attribution Measure (Fincham & Bradbury, 1992b) asks respondents to consider hypothetical situations (e.g., "Your partner criticises something you say"), and then rate several possible attributions for the partners' behaviour (e.g., "My partner criticised me on purpose, rather than unintentionally") using a five-point Likert scale ranging from disagree strongly to agree strongly. The RAM is a reliable instrument that is short, simple in format, permits assessment of different types of attributions, relates to marital behaviour, and yields the same association found previously between attributions and marital satisfaction (Fincham & Bradbury, 1992b). This instrument was used in this research to measure negative relationship attribution.

2.3.5. Marital Quality/Marital Satisfaction

2.3.5.1. Definition

According to the VSA model of marriage, marital satisfaction, a primary indicator of marital quality, refers to the subjective and global perception of happiness and contentment with one's marriage (Woszidlo & Segrin, 2013a). Marital satisfaction can vary over time, as well as in

magnitude. All variables (i.e., enduring vulnerabilities, stress, and adaptive processes) in the VSA model have documented associations with marital satisfaction.

2.3.5.2. Measurement

- *The Quality Marriage Index (QMI)*

The Quality Marriage Index (Norton, 1983) is one of the common global measures of marital satisfaction. This scale consists of five items asking participants to rate the extent to which they agree with statements about their marriage (e.g., "We have a good marriage"), and one item asking participants to rate their overall happiness with their marriage.

- *The Marital Adjustment Test (MAT)*

The Marital Adjustment Test (Locke & Wallace, 1959) is a widely-used scale that assesses spouses' global evaluations of the marriage, the amount of disagreement across different areas of possible conflict, and aspects of conflict resolution, cohesion, and communication. Yielding scores ranging from 2 to 158, the MAT demonstrates adequate cross-sectional reliability (split-half = .90), and discriminates between non-distressed spouses and spouses with documented marital problems (Locke & Wallace, 1959). This instrument was used in this research to measure marital quality (satisfaction).

- *Dyadic Adjustment Scale (DAS)*

The Dyadic Adjustment Scale (Spanier, 1976) is a commonly used measure of marital adjustment. The DAS consists of 32 items in a variety of response formats, which are summed to

provide an overall measure of marital quality. The DAS contains items that assess spouses'
evaluations of specific areas of potential conflict as well as items assessing spouses' sentiments
toward the relationship as a whole.

2.4. A Review of Relevant Empirical Research on Marital Quality and Satisfaction among Newlyweds

2.4.1. Introduction

Over the last decades, the question of how marriages in general and new marriages in particular
develop, and what factors influence their success or failure has aroused the interest of
psychological research. The vulnerability-stress-adaptation (VSA) model of marriage is one of
the most comprehensive models that provides a framework for understanding the development of
processes that sustain or damage marriage (Karney & Bradbury, 1995). Karney and Bradbury
(1995) propose that marital outcomes, such as marital quality and stability, are a function of
enduring vulnerabilities, stressful events, and adaptive processes. The VSA model emphasizes
the direct effects that enduring vulnerabilities have on adaptive processes or how spouses solve
marital-problems, and the direct effect these have on marital quality. Whereas previous models
had focused on interpersonal processes to the relative exclusion of other influences on
relationship development, the VSA model draws attention to factors that may affect (and be
affected by) interpersonal processes and judgments of relationship satisfaction (Gonzaga et al.,
2007).

Considering its relative importance and appropriateness to better explain processes and
outcomes of new marriages in recent studies, the VSA model has been preferred to guide this
research and illustrate the relationships among neuroticism, stressful life events, mutual problem-

solving, negative relationship attribution and marital quality and adjustment among newlyweds as evidenced in previous studies. Besides, the VSA model was selected because of its comprehensiveness in entertaining key variables from other theories of marriage in the field of psychology. The model also explains that both the past and the present are important in understanding the key influencers of marital adjustment. Besides, this model has been widely used in studies focusing on marital adjustment among newlyweds.

2.4.2. Relationship between Neuroticism, Stressful Life Events, Adaptive Processes and Marital Satisfaction among Newlyweds

2.4.2.1. The Direct and Indirect Effect of neuroticism on Marital Quality and Satisfaction

The personality traits that couples bring to the marriage, the recurring stressful life events that they report six months after marriage, and the quality of their problem-solving conversations as newlyweds all play a role in contributing to the different experiences that couples report regarding their relationship quality, stability and length of their marriage (Lavner et al., 2018). A prospective study by Kurdek (1991) assessed personality traits and their relationship with marital quality, finding that important changes occur in marital quality over the first year of marriage and wide inter-spousal discrepancies on personality variables were concurrently negatively related to marital quality.

Empirical evidence has pointed to neuroticism as the personality trait that plays the most significant role in marital outcomes, as spouses, and the partners of spouses, who are higher in neuroticism appear to be less satisfied with their relationships (Fisher & McNulty, 2008). Neuroticism is a personality trait composed of distressing emotions such as anxiety, disgust, embarrassment, helplessness, and/or sadness (Borkenau et al., 2004) and reflects an individual's

tendency to respond negatively with more avoidance and withdrawal from unpleasant situations, such as marital conflict (Volling et al., 2015). Neuroticism, which is a predisposition to experience negative affect and irrational ideas, is a salient personality trait that influences intimate relationships (Solomon & Jackson, 2014). A substantial amount of research carried out globally found that neuroticism has both a direct and indirect effect on marital quality and satisfaction. Individuals who rate themselves as high in neuroticism experience low levels of relationship quality (Lavee & Ben-ari, 2004) and have partners who have similar experiences (Karney & Bradbury, 1997).

Neuroticism is one of the most robust predictors of dyadic maladjustment (Malouff, Thorsteinsson, Schutte, Bhullar, & Rooke, 2010). This trait reflects individual differences in the extent to which one perceives the world as threatening and problematic, and accounts for nearly 10% of the variability in marital satisfaction (Karney & Bradbury, 1995). Individuals high in neuroticism are more likely to engage in negative interactions, and less likely to exhibit adaptive behaviours such as mutual problem-solving (Woszidlo & Segrin, 2013a). An additional perspective regarding the link between neuroticism and dyadic adjustment posits that individuals high in neuroticism are inherently more dissatisfied individuals, who bring their negativity to bear on their relationships (Caughlin, Huston, & Houts, 2000). This negativity is then manifested in poor dyadic adjustment scores, due to their negative perceptions of their partner, their partner's behaviour, and the relationship in general. Similarly, a study conducted by Whisman (2001) to clarify the effects of neuroticism in marriage found that one's own neuroticism predicted lower levels of own marital and sexual satisfaction concurrently for wives' and husbands', and that for both husbands' and wives', neuroticism predicted lower levels of marital satisfaction in their partners concurrently. Moreover, Fisher and McNulty (2008) demonstrated that neuroticism

influences relationships via both perceptual and behavioural processes, as individuals high in neuroticism view their partners more negatively, and engage in maladaptive dyadic behaviours. For example, individuals high in neuroticism tend to engage in more negative interactions with their partners (Woszidlo & Segrin, 2013a), and this appears to influence their partners' perceptions of the relationship beyond their partners' own perceptual biases.

Negative affectivity is one of the main characteristics of neuroticism. Negative affectivity is defined as the stable tendency to experience and express negative emotion and is typically assessed using various measures of neuroticism and negative emotionality (Watson, Clark, & Harkness, 1994). Negative affectivity is thought to be a stable personality trait that wreaks havoc on interpersonal relationships (Woszidlo & Segrin, 2013b). This trait is comprised of distressing emotions such as anxiety and feelings of depression (Borkenau et al., 2004), it is one of the most detrimental and enduring vulnerabilities that can be brought into a marriage, and it has consistently been reported to have deleterious effects on marital communication (Kurdek, 1997). Negative affectivity predicts a rapid decline in marital well-being among newlywed couples (Rogge, Bradbury, Hahlweg, Engl, & Thurmaier, 2006). Further, research suggests that the interpersonal problems stemming from negative affectivity are typically experienced and felt by both spouses (Barelds, 2005). For example, negative affectivity is associated with lower marital and sexual satisfaction for one's self and one's partner in newlywed relationships (Fisher & Mcnulty, 2008). A recent study by Woszidlo and Segrin (2013a), which examined the role of negative affectivity in newlywed couples' mutual problem-solving and marital quality, found that negative affectivity was uniformly associated with lower mutual problem-solving and lower marital quality. The study also showed that the ill effects of negative affectivity were evident within persons (actor effects) and between spouses (partner effects), showing that the enduring

vulnerabilities people bring to into marriage play a substantial role in newlyweds' marital quality. Studies also indicated that one person's negative affectivity can be reciprocated by his or her partner, which, or negative affect reciprocity (Gottman, 1994), during which the couple remains in a negative affect state for some time.

Several theories and research undertaken in the field of marital quality and adjustment indicated that effective communication is one of the key features of better adjusted and less distressed marriages (Lavner & Bradbury, 2016). Compared with dissatisfying relationships, satisfying relationships are associated with better communication (Lavner & Bradbury, 2016). However, neuroticism has been consistently linked with maladaptive patterns of communication among couples. To maintain a stable relationship, each member of a couple evolves a new suitable communication pattern (Mund et al., 2016), by behaving positively and less emotionally. However, neurotic individuals communicate with their partners in ways that are congruent with their level of neuroticism (Finn et al., 2015). Thus, they are more likely to experience conflict and negative affect during communication, which in turn might impair partner relationships (Iveniuk, Waite, Laumann, McClintock, & Tiedt, 2014).

Depression is another externalising form of neuroticism that affects marital quality and stability by affecting the quality of dyadic interaction. In this regard, a study by Kouros and Cummings (2011) found that high levels of depressive symptoms predicted subsequent decreases in marital satisfaction and vice versa. Similarly, Smith, Breiding, and Papp (2012) also found that a greater depressive mood was associated with greater marital distress. Similarly, a recent study by Gana, Saada, Broc, Koleck, and Untas (2016) tested a hypothesis that marital dissatisfaction predates depression and interactional model of depression and found that common dyadic coping partially mediated the negative association between depressive mood and

relationship satisfaction. The study also showed that depressive moods are direct and indirect negative predictors of one's own relationship satisfaction, through common dyadic coping for husbands'. However, for wives', depressive moods were only direct negative predictors of their own marital satisfaction, through common dyadic coping, showing that wives' common dyadic coping was not a mediating factor between women's own depressive mood and relationship satisfaction. This study did not find a direct partner effect between depressive mood and relationship satisfaction, showing that partner effects of depressive mood on relationship satisfaction were mainly mediated by common dyadic coping. Similarly, through a prospective study, Whisman and Uebelacker (2009) found that for both husbands' and wives', the baseline marital dissatisfaction was significantly associated with follow-up depressive mood and the baseline depressive mood was significantly associated with follow-up marital dissatisfaction. In their recent study investigating the relationship between couple psychological distress and couple conflict and interaction behaviour, Sutton, Simons, and Cutrona (2017) found a significant positive relationship between maternal psychological distress (depression) and their own conflict behaviour in their relationship with their spouse. Interestingly, the study did not find a significant relationship between fathers' psychological distress and their own conflict behaviour, even though the relationship approached significance. This partly indicates that fathers' psychological distress could have a strong relationship with withdrawal behaviour, or reduction in negative behaviours, such as anger and hostility, as well as positive behaviours such as interest and warmth. The dyadic analysis of the study also found a significant positive association between mothers' psychological distress and father's high hostility and low warmth with his partner, as well as fathers' psychological distress and mother's interactional behaviours in the couple relationship.

A significant body of evidence-based on the VSA model also showed the effect of neuroticism on the perception of stress among newlywed couples. For example, a study by Woszidlo and Segrin (2013a) found a significant positive relationship between neuroticism and perception of stress and this relationship, according to the study, can be explained by the lack of mutual problem-solving, or the willingness to work with a spouse to solve problems. This is because neuroticism is associated with interpersonal processes consistent with distancing oneself and refraining from working things out with others, including a spouse, which affects the perception of stressful events.

2.4.2.2.   The Direct and Indirect Effect of Stressful life events on Marital Quality and Satisfaction

Marriages do not occur in a vacuum, but take place within environments that may constrain or facilitate marital development. When the environment of a couple contains numerous sources of strain, such as work stress, or financial difficulties, marriages tend to suffer. Stressors external to the marriage have been associated, both cross-sectionally and longitudinally, with lowered marital quality and greater marital instability (Conger, Rueter, & Elder, 1999). Consequently, changes in marital quality over time cannot be fully understood without reference to the stressful life events outside the relationship to which couples must adapt (Karney & Bradbury, 1995).

Theories of family stress and resilience indicate that a stressful life event can turn into a family crisis if families are unable to adjust and adapt over time (Volling et al., 2015). During the entire life span, various developmental tasks, critical life events, and, just as importantly, daily hassles are stressors to be coped with individually, as well as by a couple or family (Bodenmann

et al., 2006). More recently, studies have provided empirical evidence that stress also significantly influences marital communication, marital satisfaction, and the development of close relationships (Neff & Karney, 2004). Theories such as the social-ecological model, which notably draws attention to how the external context affects relationships, also emphasise a gradual process whereby "minor stresses originating outside the relationship and spilling over into marriage are particularly deleterious for close relationships as these stresses lead to mutual alienation and slowly decrease relationship quality over time" (Randall & Bodenmann, 2009, pp. 108).

Stressors are common occurrences in married couples' lives, where couples must deal with various day-to-day hassles or problems, such as the car breaking down, traffic, or looming work deadlines (Timmons, Arbel, & Margolin, 2017). The quality of intimate relationships is likely to be influenced by both context and intra-dyadic factors. Williamson, Karney, and Bradbury (2013) examined the association between the average level of role strain assessed over several time points, and changes in marital satisfaction over the early years of marriage, and found that overall, the level of role strain was associated with a steeper decline in one's own marital satisfaction for both husbands' and wives'. Woszidlo and Segrin (2013a) also assessed both the intrapersonal and interpersonal effects of stressful life events on marital quality and found a negative relationship between intrapersonal effects of family-related, work-related and job-home interference related stressful life events on marital quality. The negative association was found to be strongest between family stressors and marital quality, indicating that perception and experience of family-related stressful life events are key predictors of marital quality and satisfaction. Analysis of the dyadic/interpersonal effect of stress also showed that the actor's perception and experience of family stress affect the partner's marital satisfaction. The findings

generally indicated that wives' and husband's perception and experience of family stress is negatively associated with partners level of marital quality and satisfaction, which suggests that one's stress in a marital relationship influences the marital experience and quality of both spouses.

Some studies have also distinguished the effect of daily stress and relationship stress on marital quality and satisfaction. A study carried out by Ledermann, Bodenmann, Rudaz, and Bradbury (2010) to examine intradyadic associations between external daily stress and daily relationship stress and marital functioning, in the form of marital communication in conflict situations and marital quality in intimate relationships, found that the association between external daily stress and marital functioning is mediated by relationship stress at the level of the dyad members. Specifically, in both women and men, one's own relationship stress mediated the association between one's own external stress and, on the one hand, one's own, as well as partner's sense of marital quality; and marital communication in conflict situations.

A significant body of evidence shows the indirect effect of stressful life events on marital quality and satisfaction through affecting adaptive dyadic processes such as marital communication and problem-solving interactions. For example, Karney and Bradbury (1995) highlighted the role of spouses' capabilities to adapt to stressful circumstances (e.g., ability to support each other), which mediates the association between stress and marital quality, indicating that the relationship between stress and marital outcomes is mediated by intra-dyadic variables. The stress-divorce model indicates that higher levels of stress are expected to contribute to poor communication, disengagement and withdrawal, and decreased self-disclosure. These maladaptive dyadic behaviours occurring in times of stress may lead spouses to withdraw and

attempt to cope with problems on their own. Under these circumstances, partner support is likely to be unwelcome (Brock & Lawrence, 2014). When levels of external stress are relatively low, partners ought to have more time and more cognitive and emotional resources for effective problem-solving. When levels of external stress are relatively high, partners may have less energy available for effective interaction, and so maybe more likely to engage in maladaptive behaviours (Frye & Karney, 2006).

Previous research has examined the within-subjects association between stress and other negative behaviours. For instance, Repetti (1989) found, in a three-day study of workload and stress, that husbands' withdrew more from their wives' on days when they experienced more stress at work, suggesting that partners may be more likely to engage in negative behaviours at times when they experience more stress. Similarly, Frye and Karney (2006) examined the relationship-specific and situational correlates of within-couple variability in aggression overtime on a sample of newlywed couples, and found a positive and significant association between acute stress and psychological aggression in both spouses, indicating that both partners were, in fact, more likely to engage in psychological aggression at times when they experienced higher levels of acute stress.

Several studies have investigated the way spouses' stress may influence their partners' marital well-being. One of the explanations given to this is the transmission of stress between couples, a phenomenon referred to as stress spillover (Bolger, DeLongis, Kessler, & Wethington, 1989). Negative responses (e.g., engaging in negative reciprocity) are likely to exacerbate the transmission of stress between partners. Spouses' stress frequently is associated with changes in their own relationship functioning, where, as external stress increases, spouses engage in more

negative behaviours in the home (Bolger et al., 1989) and report increasingly negative

relationship evaluations (Tesser & Beach, 1998). Moreover, a four-year marriage study by Neff

and Karney (2004) revealed that when spouses experience higher levels of stress than normal,

they not only report more specific problems in the marriage (e.g., problems with communication,

showing affection), but also tend to rely on a maladaptive attributional style, blaming their

partner for negative marital events. A recent study by Timmons et al. (2017) examining links

between stress and marital conflict showed that both husbands' and wives' experiences of total

daily stress were associated with greater same-day marital conflict, and that conflict was greater

on days both spouses experienced high levels of stress. This result indicated that stress takes up

emotional, physical, and cognitive resources, which interferes with the ability to regulate

behaviour and emotion. On the one hand, stress may leave people depleted of the energy needed

to engage in a meaningful way with their partner (Doumas, Margolin, & John, 2003). Similarly,

a study by Langer, Lawrence, and Barry (2008) found that increases in stress tended to predict

increases in physical aggression, as the experience of stress demands more emotional resources;

and spouses under increased stress find it difficult to employ adaptive behaviours such as mutual

problem-solving. A study by Woszidlo and Segrin (2013a) found that perception and

experience of stressful life events have an indirect effect on marital quality and satisfaction, as

wives' and husbands' with high perception of stressful life events reported lower levels of

marital quality and satisfaction, partly because stressed spouses are more likely to have less

mutual problem-solving skills and perceive mutual problem-solving as impossible. The finding

partly indicated that perception of stressful life events diminishes spouse's conversation, mutual

support mechanisms, and perception regarding the importance and effectiveness of mutual

problem-solving, which in turn results in low marital quality and satisfaction. The study

generally showed that stressful life events play a key role in predicting couples' level of engagement in mutual problem-solving.

Studies also indicated that a spouse's stress in marriage can be crossed over or spilled over to the partner in the marital relationship. A study by Neff and Karney (2007) examined conditions that may facilitate crossover in a sample of 169 newlywed couples over 3.5 years and found that the influence of husbands' stress on wives' marital satisfaction depended on wives' own stress levels. This finding indicated that stressful life events can severely challenge a couple's ability to maintain their relationship, suggesting that some of the antecedents of marital decline may be found in the external context of a marriage.

2.4.2.3. The Relationship Between Mutual Problem Solving and Marital Quality and Satisfaction

Newlyweds vary substantially in their ability to resolve disagreements. Among recently married couples, some are able to confront problems in a loving and affectionate way, whereas others descend into anger or withdrawal (Gottman et al., 1998). The quality of newlyweds' problem-solving behaviours accounts for subsequent changes in their marital satisfaction (Johnson et al., 2005), and predicts whether the marriage will endure or end in divorce (Gottman et al., 1998). According to Karney and Gauer (2010), cognitive behavioural models of marriage have long described a circular relationship between problem-solving behaviours and relationship satisfaction, in the sense that more satisfied couples are more likely to exchange positive behaviours around areas of disagreement, supporting their initial satisfaction, whereas less satisfied couples are more likely to exchange negative behaviours, further eroding their initial satisfaction (Jacobson, Follette, & Mcdonald, 1982).

Decades of marital research have demonstrated that the quality of couple communication plays a crucial role in shaping marital outcomes. The quality of marital communication and dyadic coping contribute significantly to marital quality, to maintenance of satisfaction, and to a positive developmental course of marriage (Bodenmann & Cina, 2005). Diverse theoretical accounts also acknowledge communication to be an important factor in couples' relationships, both as a means of building intimacy and support that maintain relationships and as a method of resolving relationship conflicts (Williamson et al., 2012). Several studies have shown that marital communication is associated with marital quality and satisfaction, explaining 8% of the variance and marital communication has been identified as a salient predictor of marital outcomes in newlywed couples (Sullivan, Pasch, Johnson, & Bradbury, 2010). Research has also found that communication patterns and couple interactions predictive of marital instability are present early in marriage and that marital instability and divorce can be predicted through the observation of newlywed couple conversations about problem topics (Gottman et al., 1998). In their study using a cross-cultural methodology to test the cultural generalisability of findings, demonstrating a strong association between communication behaviours and marital satisfaction among couples from three different cultural groups, Rehman and Holtzworth-Munroe (2007) found that marital satisfaction models focusing on marital communication behaviours are fairly robust and powerful models of marriage that have currency across cultures. Furthermore, a systematic review by Pedro, Matos, Martins & Costa (2017) found that couples were more adjusted when they used more adaptive communication strategies (e.g., constructive communication) and less nonadaptive communication strategies (e.g., demand withdrawal or disengagement). Lavner and Bradbury (2016) further advanced the understanding of the longitudinal association between marital interaction and marital quality, by identifying

bidirectional pathways between marital communication and marital satisfaction among newlyweds. Similarly, Rottmann et al. (2015) found that communication patterns were linked to marital adjustment for both members of the couple, and couples were more adjusted when they used more adaptive communication strategies such as constructive communication and less non-adaptive communication strategies such as demand withdrawal or disengagement.

Conflict management is conceptualised as comprising the frequency and length of arguments, problem-solving behaviours implemented by partners to address disagreements, the degree and severity of psychological and physical aggression occurring during arguments, and strategies implemented to resolve disagreements and regain stability in the relationship (Brock & Lawrence, 2014). A great deal of research supports the notion that the way conflicts are managed turns out to be more important than the content of the conflict. According to Sanford (2006), the ways that couples communicate during conflict are predictive of a range of outcomes, including relationship satisfaction, divorce, domestic violence, and physical health. According to Bertoni and Bodenmann (2010a), conflicts are inevitable in marriage, and thus conflict resolution is an integral component of couple relationships, and the association between conflict resolution and marital quality has been well-documented. Specifically, constructive conflict resolution strategies/styles, such as direct communication, compromising, and soothing are positively related to marital quality, whereas destructive strategies/styles such as avoidance, attacking, and demand-withdraw often are negatively associated with marital quality. A cross-sectional study by Fincham, Beach, and Davila (2004) found that husbands' marital satisfaction significantly accounted for the variance in both partners' ineffective conflict resolution behaviours. Similarly, a study by Li, Zhou, Cao, and Ju (2018) examined the associations among daily marital communication, marital conflict resolution, and marital quality among 268 Chinese couples in

the early years of marriage, and found that daily marital communication and marital conflict resolution explained unique variance in marital quality above and beyond each other; and spouses' daily marital communication was associated with the changes in their marital quality, shaping their subsequent marital conflict resolution strategies (at least for husbands').

Bertoni and Bodenmann (2010b) also conducted a study to analyse the marital functioning of satisfied couples and dissatisfied couples and, to how the spouses deal with conflict. The study found that satisfied couples are different from the others since they obtained the lowest levels of offense, avoidance, and violence, and the highest levels of compromise. This result showed that partners, who can handle conflict more constructively, with more positive communication and less negative interactions, create an environment that allows for higher levels of self-disclosure and acceptance of vulnerabilities, which are central aspects of intimacy. It is usually through dyadic communication that newlyweds try to work out how to resolve their conflicts and to support each other during this stressful transition. Moreover, their communication during the early years also may establish interaction patterns affecting the long-term marital outcomes (Lavner & Bradbury, 2010).

Despite the relatively high relationship satisfaction for most newlyweds, previous studies concerned with newlyweds' interactions have demonstrated that negative behaviours (e.g., hostility, anger, disengagement, negative reciprocity, avoidance, physical aggression, criticism, and contempt) can still clearly distinguish between couples' highs and lows in terms of marital satisfaction and stability (Markman, Rhoades, Stanley, Ragan, & Whitton, 2010). A study by Lavner and Bradbury (2012), which aimed to identify risk factors that distinguish initially satisfied couples who eventually divorce from those who remain married in a sample of 136

newlywed couples, found that low-distress marriages that eventuated in divorce were characterised by the display of more anger and contempt and by more negative skills (e.g., disagreement, blame, invalidation) during laboratory-based discussions of important relationship difficulties. Moreover, when discussing a personal issue that their partner wanted to change, newlyweds in low-distress relationships that eventually ended displayed support that was more negative (e.g., expressing inappropriate pessimism, discouraging the expression of feelings, insisting that partners resolve it on their own), when compared with otherwise similar couples who remained married. Brock and Lawrence (2014) also found that, when couples experience a higher degree of conflict, spouses may feel less comfortable turning to one another for help, be less willing to provide support, and may view support efforts more negatively. In contrast, individuals who are effective at resolving disagreements and communicating their distinct points of view might also be better at communicating their support needs to each other, thus influencing the adequacy of the support they receive. Fink and Shapiro (2013) suggested that it is plausible that coping styles (i.e., emotion-focused and problem-focused coping) that are adaptive for the individual in various situations may not be adaptive in the context of the relations for a given couple, because at a couple level, recurring personal, interpersonal, social, and financial strains need to be faced together by both partners, leading inevitably to dyadic coping.

2.4.2.4.   Negative Relationship Attributions and Marital Quality and Satisfaction

Within the VSA model, Karney and Bradbury (1995) proposed that maladaptive processes can affect how enduring vulnerabilities are translated into marital distress or conflict, and one such maladaptive process that has been previously linked to both marital conflict is the tendency toward negative relationship (and partner) attributions (Marshall, Jones, & Feinberg,

2011). The longitudinal association between relationship attributions and satisfaction has also been replicated over 18 months and appears to be mediated by the impact of attributions on efficacy expectations which, in turn, influences satisfaction (Fincham, Harold, & Gano-phillips, 2000). Looking at marital satisfaction from the attribution-behaviour relation perspective, it has been shown that husbands' and wives' conflict-promoting attributions are related to increased rates of negative behaviour during a problem-solving discussion (Fincham & Bradbury, 1992b). There is some evidence to suggest that the attribution-behaviour association is moderated by marital quality, in the sense that it is more prominent for distressed spouses, and tends to occur more consistently for responsibility attributions (Miller & Bradbury, 1995). Couples in distressed marriages have been shown to make attributions, which minimise their spouse's positive behaviours (by viewing their causes as unstable, specific, and external) and enhance their partners' negative behaviours (by viewing their causes as stable, global, and caused by their partners) (Graham & Conoley, 2006).

Studies also indicated that spouses who make negative marital attributions are less able to maintain marital quality in the face of negative aspects of the relationship (McNulty & Karney, 2001). In this regard, a study by Graham and Conoley (2006) examined the moderation role that marital attributions play in the relationship between the occurrence of stressful life events and marital quality, and found that the marital quality of couples who make relationship-enhancing attributions about their spouses' negative behaviours are less prone to stress than those who make distress-maintaining attributions. While, on average, there was a negative trend between stress and marital quality, couples who made negative marital attributions were found to experience lower marital quality in the face of an accumulation of life stressors. The study generally indicated that the presence of negative marital attributions appears to have the potential

to make the relationship of couples more vulnerable to the impact of stressful events, while the presence of relationship-enhancing attributions appears to serve as a protective factor.

Studies also indicated a robust relationship between satisfaction in marriage, and the types of attribution couples make for negative relationship events. A study by Sanford (2005) found that when there is conflict in a marriage, distressed couples tend to view each other as the cause of the problem and to ascribe blame to each other. Besides, when couples make negative attributions, they are more likely to engage in destructive forms of communication when discussing areas of conflict, which in turn is predictive of relationship dissatisfaction and instability (Karney & Bradbury, 1995). Along this line, Karney and Bradbury (2000) demonstrated that attributions in marriage often change over time and that changes in attributions predict longitudinal changes in relationship satisfaction. Furthermore, Marshall et al. (2011) tested an integrative model of individual and dyadic variables, contributing to intimate partner violence (IPV) perpetration, and found that men's and women's negative relationship attributions, as well as their depression and hostility, were associated with increased couple conflict.

2.5. **Conceptual Framework for the Relationship Between Neuroticism, Stressful Life Events, Adaptive Processes, and Marital Quality and Adjustment**

Considering past research and relevance to the main purpose of this study, a slightly adapted form of the Vulnerability-Stress-Adaptation model of marriage formulated by Karney and Bradbury (1995) was developed and used as a conceptual framework for this study (Figure 2 below). One of the reasons that this model was selected as a theoretical framework is because of its comprehensiveness in entertaining key variables from other theories of marriage in the field of psychology. The model also explains that both the past and the present are important in understanding the key influencers of marital adjustment. Beyond this, the model has been widely used in studies focusing on marital adjustment among newlyweds.
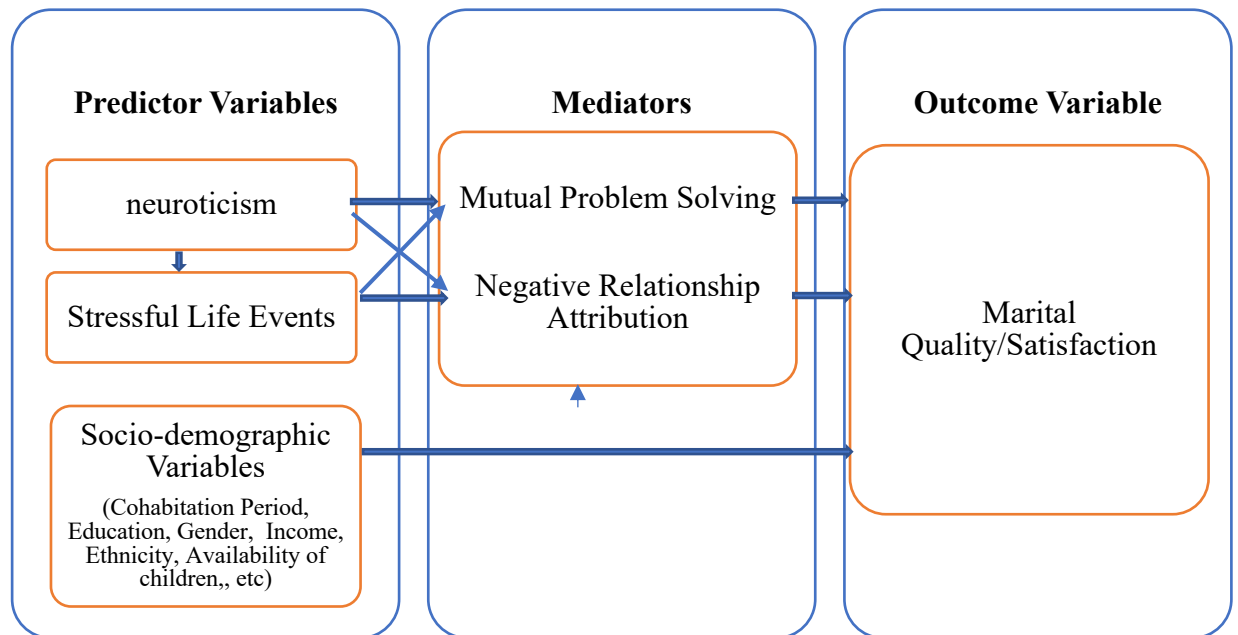
Figure 2: Conceptual Framework of the Study

2.6. Chapter Summary

This chapter presented and discussed the main theoretical perspectives developed and used by scholars to explain the process and outcomes related to marital functioning, quality, and satisfaction. Furthermore, definitions and measurement methods of the main variables of interest in this research, that is neuroticism, stressful life events, mutual problem-solving and negative relationship attributions, as well as marital quality (satisfaction), have also been presented and discussed. A summary of the review of relevant research pertaining to the relationship between these above-mentioned variables is presented and discussed. Finally, based on a review of the relevant theories and literature available, a conceptual framework that is adapted for this research has been presented. The next chapter will present and discuss the methodology and approach followed to undertake this research.

CHAPTER 3: DESCRIPTION OF THE RESEARCH METHODS

This study is an empirical investigation into the role of enduring vulnerabilities (focusing on neuroticism), stressful life events and adaptive processes (focusing on mutual problem solving and negative relationship attribution) on marital quality and adjustment among a sample of newlyweds in Addis Ababa, Ethiopia. It aims to make a scientific as well as practical contribution to a better understanding of the key variables that influence marital quality and adjustment among newlyweds in the Ethiopian context in particular. This chapter describes the methodology and approaches employed to answer the research questions and test the hypotheses outlined in this research. Specifically, this section presents a description of the study population, the sample size, measurement instruments used, the data collection procedure followed, and the ethical considerations made by the researcher and the research team throughout the research process.

3.1. Research Questions and Hypotheses

Recent studies carried out in the western world using the Vulnerability-Stress-Adaptation (VSA) model of marriage explain that marital quality and adjustment is impacted by three key variables. These are enduring vulnerabilities (characteristics people bring into marriage); stressful life events(the experience of stress); and adaptive processes (behavioural exchanges in the marriage). The model emphasises that enduring vulnerabilities have a direct effect on stress, as well as on adaptive processes. Adaptive processes, such as the ways in which couples communicate and solve marital problems, not only affect the magnitude or frequency of stressful life events the couples encounter, but they are also thought to have the most proximal effect on marital quality (Karney & Bradbury, 1995). The question that remains to be answered through this study is as to whether these variables impact marital quality and adjustment among

newlyweds in the Ethiopian context, and if so, what would be the nature and strength of the direct and indirect effects as well as the intrapersonal and interpersonal effects of these variables on marital quality and adjustment among newlyweds in Ethiopia. This research also aimed to answer which of the three variables, that is neuroticism, stressful life events, and adaptive processes, thereby contributing more to marital adjustment among newlyweds in the Ethiopian context. The main research questions and hypotheses of the research are presented in Table 1 below.

Table 1: Research Questions and Research Hypotheses

Research Questions	Hypotheses
Research Question 1: What is the nature of the relationship between neuroticism, stressful life events, mutual problem-solving, negative relationship attribution, marital satisfaction, and adjustment among a sample of newlyweds in Addis Ababa?	- **Hypothesis 1:** There is a significant negative relationship between wives' and husbands' neuroticism and marital satisfaction - **Hypothesis 2:** There is a significant negative relationship between wives' and husbands' stress and marital satisfaction - **Hypothesis 3:** There is a significant positive relationship between wives' and husbands' mutual problem solving and marital satisfaction - **Hypothesis 4:** There is a significant negative relationship between wives' and husbands' negative relationship attribution and marital satisfaction
Research Question 2: What is the intrapersonal (actor) and interpersonal (partner) effect of neuroticism, stressful life events, mutual problem solving and negative relationship attribution on marital satisfaction among a sample of newlyweds in Addis Ababa?	- **Hypothesis 5:** Neuroticism will have a significant actor (intrapersonal) and partner (interpersonal) effect on marital satisfaction. - **Hypothesis 6:** Stressful life events will have a significant actor (intrapersonal) and partner (interpersonal) effect on marital satisfaction. - **Hypothesis 7:** Mutual problem solving will have a significant actor (intrapersonal) and partner (interpersonal) effect on marital satisfaction. - **Hypothesis 8:** Negative relationship attribution will have a significant actor (intrapersonal) and partner (interpersonal) effect on marital satisfaction.
Research Question 3: What is the direct and indirect effect of neuroticism and stressful life events on marital satisfaction and adjustment through the	- **Hypothesis 9:** Neuroticism will have a significant negative intrapersonal and interpersonal indirect effect on marital satisfaction and adjustment through mutual problem solving

mediation of adaptive processes among a sample of newlyweds in Addis Ababa?	- **Hypothesis 10:** Neuroticism will have a significant intrapersonal and interpersonal indirect effect on marital satisfaction and adjustment through negative relationship attribution - **Hypothesis 11:** Stressful life events will have a significant intrapersonal and interpersonal indirect effect on marital satisfaction and adjustment through mutual problem solving - **Hypothesis12:** Stressful life events will have a significant intrapersonal and interpersonal indirect effect on marital satisfaction and adjustment through negative relationship attribution.
Research Question 4: Do significant differences exist in marital satisfaction and adjustment between the different groups of socio-demographic characteristics (gender, educational level, income level, months of cohabitation, having or not having children, couples ethnic similarity) among newlyweds in Addis Ababa?	- **Hypothesis 13:** There are significant differences between different groups of demographic characteristics (gender, education, income, duration of cohabitation before marriage and ethnicity) on marital adjustment among newlywed couples in Addis Ababa.

3.2. Research Population and Sample

3.2.1. Research Population

The population of interest for this research was all couples in Addis Ababa who have been legally married for 12-24 months before the study period. These couples had legal marriage certificates from the Addis Ababa City Administration Vital Registration Office, which keeps records and registries of all legal marriages in the city, and issues legal marriage certificates. Furthermore, as the minimum age for legal marriage in the Ethiopian law is 18, the research population was all newlywed couples over 18 years of age, whose current marriage is their first marriage and who had no children from another relationship before their current marriage. Besides, the population of interest was one that completed a minimum of 10th-grade education to

ensure that couples have proper comprehension of the measurement instruments used in the research. Most similar studies conducted globally also targeted literate participants with a minimum of high school education, because the measurement items included in the standard instrument require a higher level of comprehension and understanding.

3.2.2. Research Sample

Similar research is not available in the Ethiopian context, with the available studies focusing on marital quality and adjustment undertaken in countries with a socio-economic and political context different from that of Ethiopia. Thus, it is difficult to determine the anticipated population proportion (P). As a result, a p-value of 0.5(50%) was taken as the safest choice, since P is unknown (Lwanga & Lemeshow, 1991). With a 95% confidence interval, the sample size was determined as follows:

$$n = Z_c^{\;2} \frac{P(1-P)}{d^2}$$ Sample size determination formula for a single population

Where Zc = 1.96

P (Estimated Proportion) = 50%

d (margin of error) = .05

n = sample size = 384.

Thus, a sample of 384 newlyweds (192 couples) participated in the research.

3.2.3. Sampling Method

A systematic random sampling method was used to select a sample of newlyweds in Addis Ababa who participated in this research. First, to ensure the representativeness of the sample to the different smaller administrative units (sub-cities) of Addis Ababa, the total sample

size computed (192 couples) was equally distributed to the ten sub-cities that currently exist in the capital. According to this approach, nine sub-cities were allocated a sample proportion of 19 couples each, while the remaining sub-city was allocated 20 couples. The next step involved the selection of the research participants. Selection of the research participants in each sub-city was facilitated by the Urban Health Extension Workers in each sub-city, who know the profile of households in their respective sub-cities, due to their day-to-day interaction with the community to implement health promotion activities of the sub-city administration office. The Urban Health Extension Workers, who were also the data collectors in this research, were asked to list newlywed couples in their catchment area, who were married for a minimum of 12 and a maximum of 24 months. Then, they were provided with the inclusion and exclusion criteria for the selection of participants and they compiled a second listing of newly married couples who meet the selection criteria. The main selection criteria used were the following:

- being over 18 years of age;

- current marriage being the first marriage;

- have no children from another relationship;

- being fluent in Amharic (the language of the study area);

- being in a legally registered marriage as per the law of the country;

- being married for at least six months and at most two years before the interview period; and

- completion of at least Grade 10 education.

Based on this list, a systematic random sampling method was used to select the number of sample couples allocated for each sub-city. A waiting list of five couples was also prepared in

each sub-city using a lottery method of selection, in case some of the couples became unavailable during the data collection period, whether by choice or otherwise.

3.2.4. Instrumentation

The main variables of interest measured in this research were neuroticism, stressful life events, mutual problem-solving, negative relationship attribution and marital quality (satisfaction). Various standard measuring instruments which have been repeatedly used in global research to measure these variables were identified through a rigorous literature review. Among the list of possible instruments identified to measure each variable, a single instrument that was considered to be most appropriate and relevant to the objectives of this research and the context of the study area and population was selected for each variable. The selected instruments, which were originally in English, were first translated into the local language of the study (Amharic). Then, the translated version was pretested among a sample of 22 newlywed couples in Addis Ababa. Based on feedback from the pretesting participants, and findings from the pretesting sessions, the instruments were then revised and adapted to make sure that all items in the instruments were relevant in achieving the research aims, are appropriate to the socio-cultural context of the study setting, and are acceptable to the study participants in terms of avoiding any psychological or social harm as a result of participating in the research. The instruments used in this research to measure these variables of interest are described below.

3.2.4.1. Neuroticism

Neuroticism is a personality trait composed of distressing emotions such as anxiety, disgust, embarrassment, helplessness, and/or sadness (Borkenau et al., 2004). One of the central features of neuroticism is negative affectivity (Watson et al., 1994), and individuals high in neuroticism are more prone to worry, feelings of depression, and distorted perceptions.

Neuroticism was assessed using a translated, pretested and adapted version of this eight-item neuroticism subscale of the Big-Five Inventory (John & Srivastava, 1999). Participants were asked to rate the level they discover themselves after reading the eight Likert-type scale statements, where 1=Disagree strongly, 2=Disagree a little, 3=Neither agree nor disagree, 4=Agree a little, and 5=Agree strongly. According to John and Srivastava (1999), the neuroticism subscale of the big five inventory questionnaire has a standardized validity coefficient of 0.90. Cronbach's alphas in the current study for husbands' and wives' were 0.53 and 0.56, respectively. One of the possible reasons why Cronbach's alpha for this scale was low could be because only eight items were included in the final test after pretesting.

3.2.4.2. Stressful Life Events

A stressful event refers to situations or events that have the potential to evoke emotional reactions in individuals, both positive and negative in nature (Cano & Vivian, 2003). Stressful life events are thought to have a direct effect on adaptive processes, and vice versa. According to the VSA model, the amount of stress perceived directly influences how spouses manage their stress. Additionally, styles of coping with stressful life events are assumed to have an impact on the amount of perceived stress. Spouses who report higher levels of chronic stress also tend to report lower levels of marital quality and are more vulnerable to marital dissatisfaction with the presence of acute stressors (Cohan & Bradbury, 1997). Such couples appear to reach a ceiling in their ability to cope with further stress, regardless of its magnitude. According to Wheaton (1997), marital stressors include, but are not limited to, threats, problems, demands, and/or constraints that can affect one or both spouses.

In this research, a translated, pretested and adapted version of the Life Experiences Survey checklist developed by Sarason et al. (1978), which originally had 47 items, was used to assess

stress. The Life Experiences Survey (LIS) was designed to eliminate certain shortcomings of previous life stress measures and allows for separate assessment of positive and negative life experiences, as well as individualised ratings of the impact of events (Sarason et al., 1978). According to Sarason et al (1978), the LES possesses sufficient reliability correlating with a variety of relevant dependent measures. The format of the LES allows for the individualised rating of the impact of events plus the availability of separate measures of positive and negative change. This makes it especially appropriate for use in future research concerning how people deal with the stresses and strains of modern life (Sarason et al., 1978). This checklist was translated into a local language and pretested for relevance, appropriateness, and acceptability of items. Based on feedback from the pretesting, 16 items found to be inappropriate for the socio-economic and cultural context of the study population in Addis Ababa were removed, and some items were revised to ensure acceptability and cultural appropriateness. For instance, items indicating stressful life events in the original questionnaire such as "death of spouse" were irrelevant, because the study targeted both spouses in a household. Besides, items measuring stressful life events such as "major change in eating habits", "foreclosure on mortgage or loan", and "major change in church activities", were found to be irrelevant and inappropriate considering the socio-economic and cultural context of Ethiopia. Furthermore, stressful life events such as "retirement from work", "son or daughter leaving home", "Ending of formal schooling", "Engagement", Breaking up with boyfriend/girlfriend", "Reconciliation with boyfriend/girlfriend" were removed because they were found not to be relevant and appropriate to the study participants, who were already married newlyweds at a young age.

This checklist allowed respondents to indicate common events (life events) that they have experienced during the year, before the study and indicate the extent to which they viewed the

event as having either a positive impact (where +3 indicates extremely positive and +1 somewhat positive), or negative impact (where -3 indicates extremely negative, and -1 somewhat negative) on their life at the time the event occurred. The positive changes score was obtained by summing the impact ratings of those events designated as positive by the participant and negative changes score was obtained by summing the impact ratings of those events experienced as negative by the participant. Finally, a total change score was obtained by adding the two values, representing the total amount of rated change (desirable and undesirable) experienced by the participant during the past year. Cronbach's alphas in this study for husbands' and wives' were 0.82 and 0.81, respectively, which indicates a high level of internal consistency for this scale for both samples.

3.2.4.3.Mutual Problem Solving

Because the behaviour of working problems out with one's partner can be an important determinant of marital quality (Gottman, 1999), the present study focused on the communicative nature of mutual problem-solving as an indicator of an adaptive process. Mutual problem-solving refers to partners talking things out, discussing and working on marital problems together, and perceiving collaboration as productive. This communication behaviour has been associated with higher marital quality (Gottman, 1999).

The Working Things Out subscale of Distance and Isolation Instruments (Gottman, 1999), which originally had 12 items, was translated, pretested, adapted and used to assess participants' perceptions of solving problems in their marriage through communication. Participants were asked to read statements regarding the communication between them and their spouse when they are discussing stressful situation, and to indicate the extent to which they agree with each statement by rating each of the 11 Likert-type scale statements, where 5 = Always

agree and 0 = always disagree, regarding the communication they had with their spouse during

stressful situations. Cronbach's alphas in this study for husbands' and wives' were 0.83 and 0.79,

respectively, revealing high internal consistency for this scale for both samples.

3.2.4.4. Negative Relationship Attribution

Negative Relationship Attribution refers to a component of adaptive process that involves

making negative attributions and appraisals for marital interactions by ascribing a partner's

negative behaviour to his or her enduring characteristics. A translated, pretested and adapted

version of the Relationship Attribution Measure (RAM) developed by Fincham and Bradbury

(1992b) was used to assess negative attributions. The four-item version, which contains four

stimulus events, was used. Participants were asked to imagine four hypothetical behaviours

(stimulus events) that their spouse might do. These stimulus events included, "your spouse

criticizes something you say", "your spouse begins to spend less time with you", "your spouse

doesn't pay attention to what you are saying" and "your spouse is cool and distant". Then, for

each stimulus event, six statements showing the attributions they have to the stimulus event were

listed. Three statements measured causal attribution. These were, "my spouse's behaviour was

due to something about him" (locus dimension), "The reason my spouse criticised me is not

likely to change" (stability dimension), and "The reason my spouse criticised me is something

that affects other areas of marriage" (globality dimension). The remaining three statements

measured responsibility attribution. These were, "my spouse criticised me on purpose rather

than unintentionally" (intent dimension), "my spouse's behaviour was rather motivated by selfish

rather than unselfish concerns" (motivation dimension), and "my spouse deserves to be blamed

for criticising me" (Blame dimension). Participants were asked to rate their responses to each

statement on a Likert-type scale, where 1=strongly disagree, and 6=strongly agree. Cronbach's

alphas in this study for husbands' and wives' were 0.91 and 0.92, respectively, which indicates a high level of internal consistency for this scale for both samples.

3.2.4.5.Marital Quality and Adjustment (Stability)

Determined by the degree of marital satisfaction, marital quality refers to a subjective, global evaluation of the marital relationship and perception of the degree of happiness with one's marriage. Marital Stability refers to a product of marital satisfaction (quality) concerning the likelihood that the marriage will stay intact, without dissolution or divorce. It is expected that the probability of marital instability increases as marital quality declines. According to the VSA model, "the quality of marriage should be a result of enduring vulnerabilities, stressful life events and adaptive processes" (Karney & Bradbury, 1997, pp.1077). Marital quality can be determined in many ways, such as satisfaction (Hanzal & Segrin, 2009). To represent marital quality, the current study examined marital satisfaction.

A translated, pretested, and adapted version of the 15-item Locke Wallace Marital Adjustment Test was used to assess marital quality (satisfaction). Participants were asked to rate the level they discover themselves after reading the 15 Likert-type scale statements, where 1=strongly disagree and 5=strongly agree. Cronbach's alphas in this study for husbands' and wives' were 0.72 and 0.76, respectively.

3.2.4.6. Socio-demographic Characteristics

The nature of the relationship between certain socio-demographic factors (gender, educational level, income level, months of cohabitation, availability of children, couples ethnic similarity) and marital quality and adjustment were assessed in this study. A short, structured questionnaire was used to capture data on these socio-demographic characteristics of the study participants.

3.3.   Data Collection Method and Procedure

A cross-sectional quantitative data collection method that employed self-administered interview techniques was used to collect data for this study. A total of 20 experienced female data collectors who were familiar with the sociocultural context of Addis Ababa and were serving as Urban Health Extension Workers providing door-to-door health education services for communities in the different sub-cities in Addis Ababa were recruited and trained. They were provided with two days of intensive training on the objectives of the research, the data collection procedure, participant identification procedure, measurement instruments, and ethical issues to be considered during data collection and data management. After the training, each of the data collectors selected two volunteer couples who meet the participant selection criteria to participate in an instrument pretesting exercise. Accordingly, a one-day pretesting exercise was carried out. The data collectors then regrouped for a debriefing session, to share their observation and findings on any challenges related to instrument administration, as well as the reaction from the participants concerning each item in the instrument. Data collectors also submitted the measurement instrument they filled during pretest interviews, which were sealed in envelopes provided to them in advance. Based on feedback from the data collectors, the instruments were revised and finalised for the actual data collection. The data collectors were then deployed for field data collection in their respective sub-cities and catchment communities. Each data collector then started making phone calls or home visits to selected couples to explain the purpose of the research, and to check on their willingness to participate in the study. Data collectors then discussed with couples who showed willingness and availability to participate, and arranged a time and place to meet for the actual instrument administration. During the interview day, data collectors arrived at the homes of the participants and made sure that there

was a space in the participants' home that ensures privacy and confidentiality while they completed the instruments. The data collectors also ensured that there was adequate space between the two couples, such that they were not privy to one another's answers. The data collectors then provided an overall introduction about the purpose and objective of the research and the instrument administration procedure and explained the instructions for completing the instrument. Couples started completing the instrument after they confirmed to the data collector their understanding and readiness to do so.

The instruments were self-administered by each spouse independently and they were not allowed to talk to one another or show their responses to each other. The data collectors observed the couples while completing the instrument without invading their privacy, and looking at their responses, but they were around to provide clarification for questions that may arise from each spouse. When each spouse finished completing the instrument, each was given an envelope to seal the completed questionnaire to ensure confidentiality. Data collectors then wrote a similar, pre-identified code on both couples envelopes and put their signature on it. The supervisors assigned by the researcher closely worked with the data collectors and collected the envelopes containing the completed instruments and submitted them to the researcher. The researcher then made sure that all the sealed envelopes were returned in good shape and as per the expected identification and coding and submitted them to the data entry clerk. The data collection took three months, from August-October, 2017.

3.4.   Data Processing

3.4.4. Data Coding and Scoring

Once all the completed instruments were submitted to the researcher, data coding and scoring was carried out according to the standard scoring instructions provided by the

developers. The scores and codes were written on the completed instruments to make it easy for the data entry clerk to understand which score will be entered for which item.

3.4.5. Data Entry and Cleaning

An experienced and trained data entry clerk was assigned to undertake the data entry assignment. Data was entered using a data entry template prepared using SPSS version 21 software.

3.4.6. Data Analysis

Various methods of quantitative data analysis were used to answer the research questions and test the research hypothesis. These methods are described below.

3.4.6.5. Correlation

A dyadic correlation analysis using the Pearson correlation coefficient was employed to test the hypotheses and explore the nature as well as the strength of the relationship, between neuroticism, stressful life events, mutual problem-solving, negative relationship attributions, and marital satisfaction among newlyweds in Addis Ababa. Dyadic correlation analysis using the Pearson correlation coefficient was found to be the most appropriate and practical approach to study the kind of relationship that exists between these variables of interest because of the interdependence in the relationship between the two dyads, that is the husband and wife. There is interdependence in a relationship when one person's emotion, cognition, or behaviour affects the emotion, cognition, or behaviour of a partner (Kelley, Holmes, Kerr, Reis, Rusbult, & Van Lange, 2003). A consequence of interdependence is that observations of two individuals are linked or correlated such that knowledge of one person's score provides information about the other person's score. Thus, whenever there are nonindependent observations, it is necessary to

treat the dyad (or group) rather than the individual as the unit of analysis (Kenny, 1995). The presence of nonindependence is determined by measuring the association between the scores of the dyad members. For dyads with distinguishable members (e.g., husbands and wives or older and younger siblings), nonindependence can be measured with the Pearson product-moment correlation. (Kenny, 1995)

3.4.6.6. Structural Equation Modeling

The Actor-Partner Interdependence Model (Cook & Kenny, 2005) using structural equation modeling (SEM) in AMOS 20.0 was used to estimate the regression coefficients that represent the actor and partner effects of the independent variables (neuroticism , stressful life events , mutual problem solving and negative relationship attribution) on the dependent variable (marital quality). The actor-partner interdependence model is a model of dyadic relationships that integrates a conceptual view of interdependence in two-person relationships, with the appropriate statistical techniques for measuring and testing it. As the name suggests, the APIM is designed to measure interdependence within interpersonal relationships. The two most central components of the APIM are the actor effects, and the partner effects (Cook & Kenny, 2005). The question of whether characteristics of the spouse predict his or her own marital outcome is measured and tested by the actor effects, while the question of whether characteristics of the partner predict the spouse's marital outcome is measured and tested by the partner effects (Cook & Kenny, 2005). Thus, actor effects are estimated controlling for partner effects, and partner effects are estimated controlling for actor effects. Structural equation modeling is one of the most commonly used approaches in assessing actor and partner effects based on the actor-partner interdependence model. The SEM approach has several advantages over the ordinary regression analysis

approach to testing the APIM. Concerning the APIM, key features of SEM are (1) that more than one equation can be estimated and tested simultaneously and (2) the relations between parameters in different equations can be specified (Cook & Kenny,2005). In this analysis, the dyads were considered to be the unit of analysis instead of individual spouses.
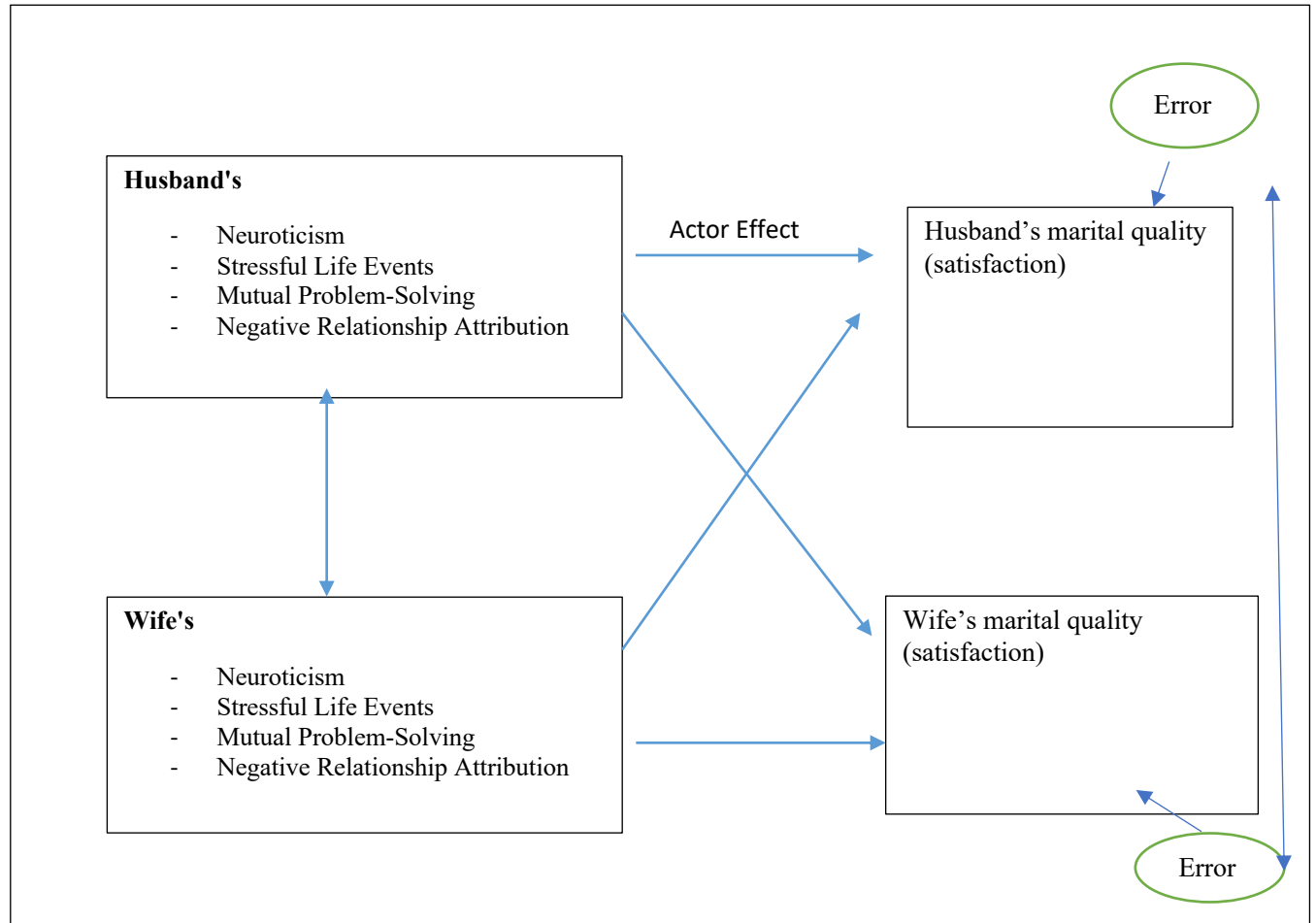
Figure 3: *A Conceptual Model for the Actor Partner Interdependence Model (APIM) Analysis*

3.4.6.7. Regression Analysis Using the PROCESS Module

In order to estimate the indirect effect of the independent variables (neuroticism and stressful life events) on the dependent variable (marital quality), regression analysis was carried out using the PROCESS module in SPSS Statistics 20.0, which generates bias-corrected confidence intervals

around indirect effects. The mediation analysis involved estimating the indirect effect of X on Y via an intervening variable called the mediator (M). In the simplest case, the researcher regresses M on X and separately regresses Y on both X and M (Preacher & Kelley, 2011). The amount of mediation is known as the indirect effect. In this hypothesis, the indirect effect of "x" variable (neuroticism) on "y" variable (marital satisfaction) through the mediation of "M" variables (mutual problem-solving and negative relationship attribution) was tested.

Indirect effects were tested separately for husbands and wives', as fully intrapersonal as well as interpersonal models. The intrapersonal model tested the indirect effect of wives' and husbands' independent variables on their dependent variable through the mediation of their own mediation variables, which in this case are mutual problem-solving and negative relationship attribution. The interpersonal model, on the other hand, tested the indirect effect of wives' and husbands' independent variables on their own dependent variable through the mediation of each other's mediator variable.
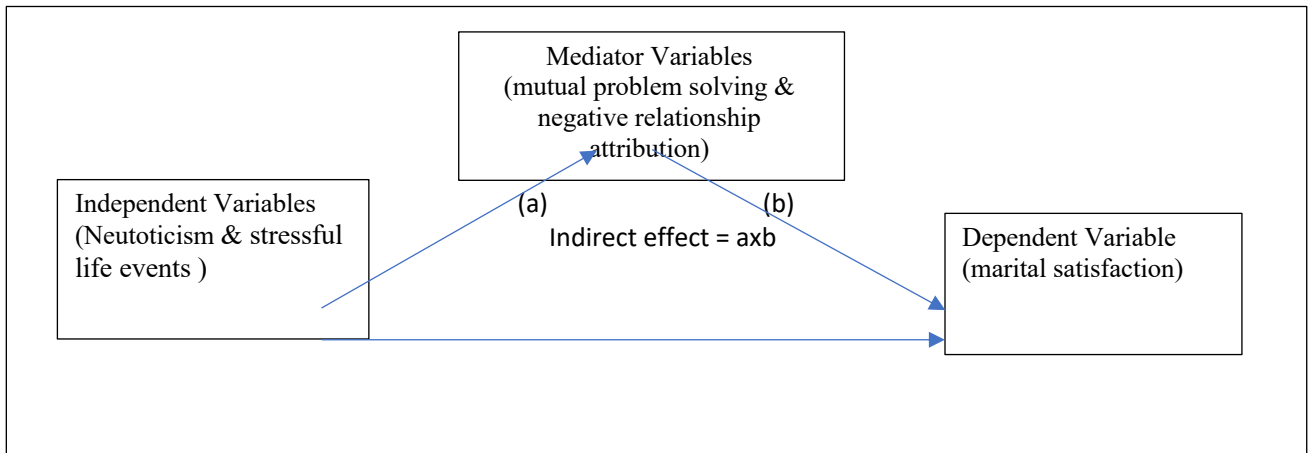
figure 4: *Diagrammatic Presentation of the Indirect Effect of the Independent Variable through the Mediator Variable*

3.4.6.8. Independent t-test and Multiple Linear Regression Modelling

The Independent t-test was used to explore the relationship between two different groups of samples concerning their basic sociodemographic variables such as gender, educational level,

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income level, months of cohabitation, availability of children, couples' ethnic similarity, and their marital satisfaction. Most of these sociodemographic variables were treated as categories. For instance, educational level was categorized into those with college education and those without a college education. Income level was categorized into those with higher income and those with low income. The t-test is one of the most widely known and used tests in psychological research which is designed to test for the difference between two mean scores (Langdridge,2004). Furthermore, multiple linear regression modelling was used to estimate the role and contribution of these sociodemographic variables in predicting newlyweds' marital satisfaction. Multiple linear regression analysis was chosen because this method is most commonly used in research where the scores on a number of independent variables (such as gender, educational level, income level, months of cohabitation, availability of children, couples ethnic similarity) are used to predict some outcome variables, which in the case of this study refers to marital satisfaction. Multiple regression is used when we have more than one independent variable but mostly one dependent variable(Langdridge,2004).

3.5.   Ethical Considerations

Key ethical considerations were made while undertaking this research. Ethical clearance to conduct this research was secured from the Ethics Committee of the University of South Africa (UNISA), Department of Psychology. Beyond this, local ethical clearance was secured from the Internal Review Board (IRB) at the Addis Ababa City Administration Health Bureau. Furthermore, recognising that issues related to marital relationship and adjustment are considered sensitive and private, especially in the Ethiopian context, several measures were taken to ensure that consent and confidentiality are maintained throughout the study process. Based on the consent form prepared for this research, each data collector clarified to each participant regarding

the purpose of the study and the potential risks and benefits of participating in the research. Data collectors also explained to every participant that participation is voluntary and that they can even withdraw from the interview at any time if they find themselves to be uncomfortable with the instruments. Each participant signed the consent form attached with the instrument to express their level of agreement in regards to their understanding and willingness to take part in the study. During the data collection process, the names or any personal identifiers of participants were not recorded. Rather, codes were used to refer to the participants. Besides this, an envelope was given to each participant to ensure that all completed instruments were sealed by the participants themselves before returning them to the data collectors. Only the researcher, the data entry clerk, and the statistician had access to the completed instruments.

3.6.   Chapter Summary

This chapter outlined the methods and procedures followed by the researcher while undertaking this research. The population of interest for this research was all couples in Addis Ababa who have been legally married for 12-24 months before the study period. A systematic random sampling method was used to select a sample of 192 newlywed couples in Addis Ababa who participated in this research. Various measuring instruments were translated, pretested, adapted and used in this research to measure the variables of interest. Neuroticism was assessed using a translated, pretested, and adapted version of the eight-item neuroticism subscale of the Big-Five Inventory (John & Srivastava, 1999). Stress was measured using a translated, pretested and adapted version of the Life Experiences Survey checklist, developed by Sarason, Johnson, and Siegel (1978), and mutual problem-solving was measured using the Working Things Out subscale of Distance and Isolation Instruments (Gottman,1999). A translated, pretested and adapted version of the Relationship Attribution Measure (RAM) developed by Fincham and

Bradbury (1992) was used to assess negative relationship attributions. Marital quality

(satisfaction) was measured using a translated, pretested and adapted version of the 15-item

Locke Wallace (1959) Marital Adjustment Test (MAT)(Locke & Wallace, 1959). Furthermore, a

short and structured questionnaire was used to capture data on pertinent socio-demographic

characteristics of newlyweds such as gender, educational level, income level, months of

cohabitation, availability of children, couples' ethnic similarity, etc. A self-administered

instrument administration approach was used to collect the relevant data for this research.

Statistical analyses undertaken to answer the research questions included dyadic correlation

analysis, independent t-test, multiple regression analysis, regression analysis using the

PROCESS module and Structural Equation Modelling using AMOS. The next chapter presents

the main findings of the research.

CHAPTER 4: RESULTS OF THE STUDY

4.1. Chapter Introduction

The main purpose of the study was to investigate the role of neuroticism, stressful life events, mutual problem-solving and negative relationship attributions on newlyweds' marital quality and adjustment among a sample of newlywed couples in Addis Ababa. This chapter presents the results of the study as per the specific hypothesis tested. The first section of the chapter presents the sociodemographic profile of the study participants disaggregated by gender. Following that, a descriptive statistic of the measurement variables of the study and instruments is presented. Then, the results of the study structured as per the research questions and hypotheses tested are presented.

4.2. Sociodemographic Description of the Study Participants

The final sample of the study included 192 newlywed couples who were married for less than 24 months (M=20.3, SD=9.5). The mean age of husbands' was 32.5 (SD: 4.8) and the mean age of wives' was 27.9 (SD=3.7). The majority of the couples (53.3%) were ethnic Amhara, followed by ethnic Oromo (23.2%), ethnic Gurage (11.5%), and ethnic Tigre (7.6%), while the proportion of Afar, Somali, and other ethnic groups was very small. Nearly 57% of couples reported having a child from their current marriage.

4.2.1. Educational Level

Most of the husbands' (68.8%) and wives' (54.7%) who participated in this study had completed college/university level education, while nearly 20% of husbands' and 23% of wives' completed secondary education at the time of the study. Completion of a minimum of Grade 10 education was one of the criteria used to select the study participants because the items included in the measuring instruments require a higher level of comprehension and understanding of

hypothetical issues. Most similar studies conducted globally also targeted literate participants who have a minimum of high school education.

Table 2: *Educational Level of Study Participants*

Variable	Group	Dyad	Frequency	Percentage	Total
Educational Level	Secondary education	Husbands'	38	19.8%	82 (21.4%)
		Wives'	44	22.9%	
	Technical and Vocational	Husbands'	22	11.5%	65 (16.9%)
		Wives'	43	22.4%	
	College/University	Husbands'	132	68.8%	237 (61.7%)
		Wives'	105	54.7%	
Total					**384 (100%)**

The data shows that more husbands' than wives completed college/university level education, while more wives' than husbands completed either secondary or technical and vocational education as their higher level of formal education.

4.2.2. Occupation

One-third of both husbands and wives' were civil servants working in government organisations and nearly a quarter of both husbands and wives' were employed in private business organisations. However, more husbands' (17.2%) than wives' (10.4%) were employed in non-governmental organisations. Nearly 30% of wives' did not have any employment at the time of the survey, indicating that they are either fulltime mothers or students, while only 1.6% of husbands' reported the same.

Table 3: *Occupation of study participants*

Variable	Group	Dyad	Frequency	Percentage	Total
Occupation	No employment (Full-time mother, student, etc.)	Husbands'	3	1.6%	45 (11.7%)
		Wives'	42	21.9%	
	Petty trade	Husbands'	9	4.7%	65 (16.9%)
		Wives'	9	4.7%	
	Daily labor	Husbands'	5	2.6%	237 (61.7%)
		Wives'	0	0.0%	
	Working in own/family business	Husbands'	24	12.5%	34 (8.9%)
		Wives'	10	5.2%	
	Employed in private organization	Husbands'	50	26%	98 (25.5%)
		Wives'	48	25%	
	Employed in an NGO	Husbands'	33	17.2%	53 (13.8%)
		Wives'	20	10.4%	
	Civil servant	Husbands'	62	32.3%	124 (32.3%)
		Wives'	62	32.3%	
	Other	Husbands'	6	3.1%	7 (1.8%)
		Wives'	1	0.5%	
Total					**384 (100%)**

4.2.3. Average Monthly Income

Regarding average monthly income, more than half of husbands' (53.6%) reported that they earn an average monthly income of 5000 birr and above, while only 16.7% of wives' reported the same. While nearly 85% of husbands' reported earning an average monthly income of 3000 birr and above, only 48% of wives' reported earning a similar monthly income. The data also showed that significantly more wives' (18.8%) than husbands' (2.1%) reported earning no income or income of less than 1000 birr per month.

Table 4: *Average monthly income of study participants*

Variable	Group	Dyad	Frequency	Percentage	Total
Average monthly income	Less than 1000 birr	Husbands'	4	2.1%	40 (10.4%)
		Wives'	36	18.8%	
	1000-1999	Husbands'	9	4.7%	37 (9.6%)
		Wives'	28	14.6%	
	2000-2999	Husbands'	16	8.3%	237 (61.7%)
		Wives'	36	18.8%	
	3000-3999	Husbands'	29	12.5%	34 (8.9%)
		Wives'	34	15.1%	
	4000-4999	Husbands'	31	16.1 %	57 (14.8%)
		Wives'	26	13.5%	
	5000 and above	Husbands'	103	53.6%	135 (35.2%)
		Wives'	32	16.7%	
Total					**384 (100%)**

4.2.4. Religious Affiliation

Concerning religion, three-fourth (75.0%) of the study participants were Orthodox Christians,

followed by Protestants (15.1%), Muslims (9.1%), and Catholics (0.3%).

Table 5: *Religious Affiliation of Study Participants*

Variable	Group	Dyad	Frequency	Percentage	Total
Religion	Orthodox	Husbands'	146	76%	288 (75%)
		Wives'	142	74%	
	Muslim	Husbands'	18	9.4%	35 (9.1%)
		Wives'	17	8.9%	
	Catholic	Husbands'	0	0 %	1 (0.3%)
		Wives'	1	0.5%	
	Protestant	Husbands'	27	14.1%	58 (15.1%)
		Wives'	31	16.1%	
	Other	Husbands'	1	0.5 %	2 (0.5 %)
		Wives'	1	0.5%	
Total					**384 (100%)**

4.2.5. Ethnicity

The majority of the participants were ethnic Amhara (47% of husbands and 56.3% of wives) followed by ethnic Oromo (24.5% of husbands and 23.7% of wives). As Addis Ababa is the capital of Ethiopia, this distribution shows that almost all of the major ethnic groups available in Ethiopia are represented in this sample.

Table 6: *Ethnic Background of Study Participants*

Variable	Group	Dyad	Frequency	Percentage	Total
Ethnicity	Amhara	Husbands'	90	46.9%	198 (51.6%)
		Wives'	108	56.3%	
	Oromo	Husbands'	47	24.5%	91 (23.7%)
		Wives'	44	22.9%	
	Tigre	Husbands'	15	7.8%	27 (7.0%)
		Wives'	12	6.3%	
	Gurage	Husbands'	24	12.5%	45 (11.7%)
		Wives'	21	10.9%	
	Afar	Husbands'	1	0.5%	1 (0.3%)
		Wives'	0	0 %	
	Somali	Husbands'	1	0.5%	2 (0.5%)
		Wives'	1	0.5%	
	Other	Husbands'	14	7.3%	20 (5.2%)
		Wives'	6	3.1%	
Total					**384 (100%)**

4.2.6. Duration of Cohabitation before Marriage

The majority of the participants had cohabited before marriage for less than 36 months, while about 32% reported that they cohabited for less than 12 months before they got married. About 25 % had a cohabitation period of over 36 months (three years). A similar proportion of wives' and husbands' reported similar duration of cohabitation before marriage.

Table 7: *Duration of Cohabitation of the study participants*

Variable	Group	Dyad	Frequency	Percentage	Total
Duration of Cohabitation	3 months or less	Husbands'	6	3.1%	12 (3.1%)
		Wives'	6	3.1%	
	4-6 months	Husbands'	22	11.5%	44 (11.5%)
		Wives'	22	11.5%	
	7-12 months	Husbands'	32	16.7%	65 (16.9%)
		Wives'	33	17.2%	
	13-24 months	Husbands'	47	24.5%	95 (24.7%)
		Wives'	48	25.0%	
	25-36 months	Husbands'	36	18.8%	71 (18.5%)
		Wives'	35	18.2 %	
	37-48 months	Husbands'	10	5.2%	21 (5.5%)
		Wives'	11	5.7%	
	49-60 months	Husbands'	15	7.8%	31 (8.1%)
		Wives'	16	8.3%	
	More than 60 months	Husbands'	24	12.5%	45 (11.7%)
		Wives'	21	10.9%	
Total					**384 (100%)**

4.3. Descriptive Statistics of the Measuring Instruments for the Study Variables

As indicated in the table below, the mean score for neuroticism was higher among wives' (21.2) than husbands' (19.8), whereas both husbands' and wives' seem to have more or less a similar score when it comes to stress (18) and mutual problem-solving (40.1). The mean score for marital satisfaction among both husbands' and wives' also seems to be almost similar, 100.4 for wives' and 102.4 for husbands'. The main difference in mean score among husbands' and wives' was observed regarding negative relationship attribution. where wives' had a higher mean score (61.3) compared to husbands' (58.5).

Table 8: *Summary Descriptive Statistics of the Measuring Instruments on Main Study Variables*

Statistics	Neuroticism		Stressful Life Events		Negative Relationship Attribution		Mutual Problem-Solving		Marital Quality (Satisfaction)	
	Wives'	Husbands'	Wives'	Husbands'	Wives'	Husbands'	Wives'	Husbands'	Wives'	Husbands'
N	192	192	192	192	192	192	192	192	192	192
Cronbach's Alpha	0.56	0.53	0.81	0.82	0.92	0.91	0.79	0.83	0.76	0.72
Mean	21.188	19.781	18.188	17.948	61.276	58.489	40.255	40.104	100.412	102.417
Std. Deviation	5.616	5.527	15.529	14.309	21.099	20.953	8.893	8.986	30.066	26.895
Minimum	9.00	1.00	.00	.00	24.00	24.00	18.00	17.00	10.00	21.00
Maximum	38.00	34.00	87.00	74.00	129.00	126.00	55.00	55.00	148.00	147.00

4.4. Findings on the Research Questions and Hypotheses

4.4.1. Research Question 1: What is the nature of the relationship between neuroticism, stressful life events, mutual problem-solving, negative relationship attribution, marital satisfaction, and adjustment among a sample of newlyweds in Addis Ababa?

In order to answer this research question, dyadic correlation analysis using Pearson product-moment correlation was used. This section presents the results and main findings generated from this analysis based on the study hypotheses tested under this research question.

Hypothesis 1: The Relationship Between Neuroticism and Marital Satisfaction

Hypothesis 1 predicted a negative relationship between neuroticism and marital satisfaction among newlyweds in Addis Ababa. The analysis was carried out at the intrapersonal as well as interpersonal (dyadic) level, separately for both husbands' and wives'.

The intrapersonal analysis, as indicated in Table 9 below, showed that for wives', neuroticism is significantly negatively correlated with their own marital satisfaction as well as their own mutual problem-solving and negative relationship attribution score. Similarly, for husbands, as indicated in Table 10 below, their neuroticism is significantly negatively correlated

with their own marital satisfaction, as well as their own mutual problem-solving. Similarly, at the

interpersonal level, wives' neuroticism was significantly negatively correlated with husbands'

marital satisfaction, and husbands' neuroticism was significantly negatively associated with

wives' *marital satisfaction* (Table 11).

Table 9: *Means and Standard Deviations of Primary Study Variables and Intrapersonal Correlations for Wives'*

	Correlations						N	Mean	Std. Deviation
	Neuroticism	*Stressful Life Events*	*Negative Relationship Attribution*	*Mutual Problem-Solving*	**Marital Satisfaction**				
Neuroticism	1	.095	.342**	-.244**	-.286**	192	21.188	5.616
Stressful Life Events		1	.178*	-.037	-.153*	192	18.188	15.529
Negative Relationship Attribution			1	-.294**	-.483**	192	61.276	21.099
Mutual Problem Solving				1	.177*	192	40.255	8.893
Marital Satisfaction	*				1	192	100.411	30.066

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Table 10: *Means and Standard Deviations of primary study variables and Intrapersonal Correlations for Husbands'*

	Correlations					Statistics		
	Neuroticism	*Stressful Life Events*	*Negative Relationship Attribution*	*Mutual Problem-Solving*	**Marital Satisfaction**	N	Mean	Std. Dev
Neuroticism	1	.078	.097	-.213**	-.293**	192	19.781	5.527
Stressful Life Events		1	.012	-.138	-.171*	192	17.948	14.309
Negative Relationship Attribution			1	-.167*	-.337**	192	63.177	66.465
Mutual Problem Solving				1	.287**	192	40.104	8.986
Marital Satisfaction					1	192	102.417	26.895

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Table 11: *Interpersonal Pearson Correlations between Husbands' and Wives'*

	Husbands'						
		Neuroticism	*Stressful Life Events_*	*Negative Relationship Attribution*	*Mutual Problem-Solving*	Marital Satisfaction	Mean	St Deviation
Wives'	*Neuroticism*	.278**	.122	.048	-.192**	-.143*	21.187	5.616
	Stressful Life Events	.150*	.626**	-.001	-.062	-.159*	18.187	15.529
	Negative Relationship Attribution	.219**	.165*	.297**	-.231**	-.376**	61.276	21.099
	Mutual Problem-Solving	-.159*	-.033	-.123	.691**	.164*	40.255	8.893
	Marital Satisfaction	-.236**	-.116	-.273**	.219**	.699**	100.412	30.066
	Mean	19.781	17.948	63.177	40.104	102.417		
	Sta. Deviation	5.527	14.309	66.465	8.986	26.895		

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Hypothesis 2: The Relationship Between Stressful Life Events and Marital Satisfaction

Hypothesis 2 posited that stressful life events and marital satisfaction would have a negative relationship both for wives' and husbands'. The analysis, as indicated in Table 9 and Table 10 above, showed that at the intrapersonal level, wives' and husbands' stressful life events are significantly negatively correlated with their own marital satisfaction. At the interpersonal level, as indicated in Table 11 above, wives' stressful life event is significantly negatively correlated with husbands' marital satisfaction while husbands' stressful life events is only partially negatively correlated with wives' marital satisfaction.

Hypothesis 3: The relationship between Mutual Problem-Solving and Marital Satisfaction

Hypothesis 3 predicted a positive relationship between mutual problem-solving and marital satisfaction. The result showed that, at the intrapersonal level, wives' mutual problem-solving was significantly positively correlated with their own marital satisfaction, $r = .177$ ($p \leq .005$),

and husbands' mutual problem-solving was significantly positively correlated with their own marital satisfaction, r = .287 (p ≤ .001). At the interpersonal level, wives' mutual problem-solving was significantly positively correlated with husbands' marital satisfaction, r = .164 (p ≤ .005), and husbands' mutual problem-solving was significantly positively correlated with wives' marital satisfaction, r = .219 (p ≤ .001).

Hypothesis 4: The Relationship between Negative Relationship Attribution and Marital Satisfaction

Hypothesis 4 predicted a negative relationship between negative relationship attribution and marital satisfaction. The results indicated that, at the intrapersonal level, both wives' and husbands' negative relationship attribution is significantly negatively correlated with their own marital satisfaction, r = -.483 (p ≤ .001) and r = -.337 (p ≤ .001), respectively. Similarly, at the interpersonal level, wives' negative relationship attribution is significantly negatively associated with husbands' marital satisfaction, r = -.376 (p ≤ .001) and husbands' negative relationship attribution is significantly negatively correlated with wives' marital satisfaction, r = -.273 (p ≤ .001).

Results under the above four sub hypotheses indicate that the null hypothesis which stated that there is no significant relationship between neuroticism, stressful life events, mutual problem solving, negative relationship attribution and marital satisfaction can be rejected.

4.4.2. Research Question 2: What is the actor (intrapersonal) and partner (interpersonal) effect of Neuroticism, Stressful Life Events, Mutual Problem-Solving, and Negative Relationship Attribution on Marital Satisfaction among a sample of newlywed couples in Addis Ababa?

The actor-partner interdependence model (Kenny et al., 1999) using structural equation modeling in AMOS 20.0 was used to estimate regression coefficients that represent the actor and partner effects. Table 12 below depicts the results of the analysis.

Table 12: *APIM Results for Neuroticism, Stressful Life Events, Mutual Problem-Solving, Negative Relationship Attribution, and Marital Satisfaction*

Independent Variable	Dependent Variable	Dyadic Interdependence	Actor Effect		Partner Effect	
			Wives'	Husbands'	Wives'	Husbands'
Neuroticism	Marital Satisfaction	0.278***	-0.239***	-0.274***	-0.169* (p=0.017)	-0.066 (p=0.357)
Stressful Life Events	Marital Satisfaction	0.626***	-0.132 (p=0.149)	-0.117 (p=0.199)	-0.033 (p=0.72)	-0.086 (p=0.347)
Mutual Problem-Solving	Marital Satisfaction	0.691***	0.049 (p=0.619)	0.332***	0.186 (p=0.057)	-0.066(p=0.489)
Negative Relationship Attribution	Marital Satisfaction	0.297***	-0.44***	-0.247***	-0.142*(p=0.03)	-0.303***

N =192.
Values are standardised regression coefficients. *$p<.05$, **$p<.01$, ***$p<.001$

Results and main findings generated from this analysis are described and discussed below for each of the study hypotheses tested under this research question.

Hypotheses 5: The Actor and Partner Effect of neuroticism on Marital Satisfaction

Hypothesis 5 predicted a significant actor and partner effect of neuroticism on marital satisfaction. As indicated in Table 12 below, both wives' and husbands' neuroticism significantly predicted their own marital satisfaction (actor β for wives' = –.23 and husbands' =–.27, both p <.001), but only husbands' neuroticism significantly predicted their partner's marital satisfaction

(partner β for wives'=-.17, p<.05). The partner effect of husbands' neuroticism was insignificant. This result showed that, even though neuroticism has a significant actor effect on the marital satisfaction of both spouses, husbands' neuroticism has a more significant effect on the marital satisfaction of their wives than the effect that wives' neuroticism has on the marital satisfaction of husbands'. Hypothesis 5 received partial support in that six of the eight predicted outcomes were achieved.

Hypothesis 6: The Actor and Partner Effects of Stressful life events on Marital Satisfaction

Hypothesis 6 predicted a significant actor and partner effect of stressful life events on marital satisfaction. As indicated in Table 12 above, none of the actor and partner effects, both for wives' and husbands', achieved significance.

Hypothesis 7: The Actor and Partner Effects of Mutual Problem-Solving on Marital Satisfaction

Hypothesis 7 predicted a significant actor and partner effect of mutual problem-solving on marital satisfaction. The results showed that only husbands' mutual problem-solving had a significant effect on own marital satisfaction (actor β for husbands' = .332, p<.001). This finding showed that engaging in mutual problem-solving is a strong predictor of husbands' own marital satisfaction, rather than wives' marital satisfaction. Furthermore, wives' and husbands' mutual problem-solving is not a strong predictor of their partner's marital satisfaction. This hypothesis was only partially supported in the sense that only one of the two predicted outcomes were achieved.

Hypothesis 8: The Actor and Partner Effects of Negative Relationship Attribution on Marital Satisfaction

Hypothesis 8 predicted a significant actor and partner effect of negative relationship attribution on marital satisfaction. As indicated in Table 12 above, negative relationship attribution is a significant predictor of actor's (actor β for wives'=-.44 and husbands' =-.247, p<.001), as well as partners' marital satisfaction (partner β for wives'=-.142, p<.05 and husbands' =-.303, p<.001). The results fully support this hypothesis, as all the predicted outcomes have been achieved.

4.4.3. Research Question 3: What is the direct and indirect effect of neuroticism and stressful life events on marital satisfaction through the mediation of adaptive process among a sample of newlyweds in Addis Ababa?

This research question aimed to investigate the direct and indirect effect of neuroticism and stressful life events on marital satisfaction through the mediation of mutual problem-solving and negative relationship attribution. In order to estimate the indirect effect of the independent variables (neuroticism and stressful life events) on the dependent variable (marital quality), regression analysis was carried out using the PROCESS module in SPSS Statistics 20.0, which generates bias-corrected confidence intervals around indirect effects. The results are organised as per the hypotheses tested under this research question and presented below.

Hypothesis 9: The Indirect Effect of Neuroticism on Marital Satisfaction through Mutual Problem-Solving

Hypothesis 9 predicted a significant indirect effect of neuroticism on marital satisfaction through the mediating role of mutual problem-solving.

First, analysis of the intrapersonal and interpersonal indirect effect of wives' and husbands' neuroticism on marital satisfaction through mutual problem-solving was carried out. As indicated in Table 13 below, both wives' and husbands' neuroticism has a significant indirect intrapersonal as well as interpersonal effect on their marital adjustment. While the interpersonal indirect effect of wives' neuroticism on their marital adjustment through mutual problem-solving was statistically significant at the .001 level, the interpersonal indirect effect of husbands' neuroticism was only statistically significant at .005 level. The intrapersonal indirect effect of wives' neuroticism on marital satisfaction through mutual problem-solving was found to be the most statistically significant effect among others.

Table 13: *Intrapersonal and Interpersonal Effect of Neuroticism on Marital Satisfaction through Mutual Problem-Solving*

Level	Variable	Direct Effects	Indirect Effects	Lower 95% CI	Upper 95% CI	p
Intrapersonal	Wives' *neuroticism*	-1.384	-.028***	-.078	.006	0.0001
	Husbands' *neuroticism*	-.0501	-.244**	-.114	-.008	0.0030
Interpersonal	Wives' *neuroticism*	-1.358	-.033**	-.083	-.002	0.0076
	Husbands' *neuroticism*	-1.331	-.019*	-.059	.004	0.0278

N= 194.
* p<.05, **p<.01, ***p<.001
Direct and Indirect effects are completely standardised regression coefficients.
The independent variable is neuroticism, the dependent variable is marital satisfaction, and the mediator is mutual problem-solving.

Hypothesis 10: The Indirect effect of Neuroticism on Marital Satisfaction through Negative Relationship Attribution

Hypothesis 10 predicted a significant indirect effect of neuroticism on marital satisfaction through the mediating role of negative relationship attribution. As can be referred from Table 14 below, analysis of the indirect effect of wives' and husbands' neuroticism on their own marital satisfaction through negative relationship attribution showed a significant indirect effect for both

wives and husbands', both at intrapersonal and interpersonal level. However, the indirect effect

of wives' and husbands' neuroticism on marital satisfaction through negative relationship

attribution was more statistically significant at the intrapersonal level than at the interpersonal

level. Furthermore, the interpersonal indirect effect of neuroticism was less significant for

wives', when compared to husbands'.

Table 14: *Intrapersonal and Interpersonal Effect of Neuroticism on Marital Satisfaction through*

Negative Relationship Attribution

Level	Variables	Direct Effects	Indirect Effects	Lower 95% CI	Upper 95% CI	p
Intrapersonal	Wives' *neuroticism*	-.735	-.149***	-.231	-.078	0.0000
	Husbands' *neuroticism*	--1.004	-.086***	-.157	-.033	.0003
Interpersonal	Wives' *neuroticism*	-1.367	-.031*	-.078	-.001	.0270
	Husbands' *neuroticism*	-1.075	-.072**	-.129	-.023	.0023

* p<.05, **p<.01, ***p<.001
N= 194.
Direct and indirect effects are completely standardised regression coefficients.
The independent variable is neuroticism, the dependent variable is marital satisfaction, and the mediator is negative relationship attribution.

Hypothesis 11: The Indirect Effect of Stressful life events on Marital Satisfaction through

Mutual Problem-Solving

Hypothesis 11 predicted a significant indirect effect of stressful life events on marital

satisfaction through the mediation of mutual problem-solving. First, the intrapersonal and

interpersonal indirect effect of stressful life events on marital satisfaction through mutual

problem-solving was analysed both for wives' and husbands'. As indicated in Table 15 below,

the intrapersonal indirect effect of husbands' stressful life events on marital adjustment through

mutual problem-solving was significant, while wives' stressful life events did not have a

significant indirect effect on their own marital satisfaction at intrapersonal level. At the

interpersonal level, wives' stressful life events had a significant effect on their own marital

satisfaction, while husbands' stressful life events did not have a significant indirect effect. Husbands' stressful life events had the strongest intrapersonal indirect effect on their own marital satisfaction.

Table 15: *Intrapersonal and Interpersonal Effect of Stressful Life Events on Marital Satisfaction through Mutual Problem-Solving*

Level		Direct Effects	Indirect Effects	Lower 95% CI	Upper 95% CI	p
Intrapersonal	Wives' *stressful life events*	-.284	-.006	-.039	.013	.0059
	Husbands' *stressful life events*	-.252	-.037***	-.086	-.003	.0000
Interpersonal	Wives' *stressful life events*	-.271	-.013*	-.051	.014	.0013
	Husbands' *stressful life events*	-.312	-.005	-.033	.016	.0051

* p<.05, **p<.01, ***p<.001
N= 194.
Direct and indirect effects are completely standardised regression coefficients.
The independent variable is stressful events, the dependent variable is marital satisfaction, and the mediator is mutual problem-solving.

Hypothesis 12: The Indirect Effect of Stressful life events on Marital Satisfaction through Negative Relationship Attribution

Hypothesis 12 predicted a significant indirect effect of stressful life events on marital satisfaction through the mediation of negative relationship attribution. The results, as indicated in Table 16 below, showed that wives' and husbands' stressful life events have a significant indirect effect on marital satisfaction through negative relationship attribution, both at intrapersonal and interpersonal levels. The indirect effect of wives' stressful life events on their marital satisfaction showed the highest significance both at the intrapersonal and interpersonal level, while the indirect effect of husbands' stressful life events on their marital satisfaction reached significance only at .05 level.

Table 16: *Intrapersonal and Interpersonal Effect of Stressful Life Events on Marital Satisfaction through Negative Relationship Attribution*

Level	Independent Variable	Direct Effects	Indirect Effects	Lower 95% CI	Upper 95% CI	p
Intrapersonal	Wives' *stressful life events*	-.134	-.084***	-.162	-.021	.0000
	Husbands' *stressful life events*	-.198	-.066*	-.132	-.009	.0138
Interpersonal	Wives' *stressful life events*	-.252	-.023***	-.073	.008	.0009
	Husbands' *stressful life events*	-.211	-.059*	-.118	-.013	.0225

* p<.05, **p<.01, ***p<.001
N= 194.
Direct and Indirect effects are completely standardised regression coefficients.
The independent variable is neuroticism, the dependent variable is marital satisfaction, and the mediator is negative relationship attribution.

4.4.4. Research Question 4: Do significant differences exist in marital satisfaction and adjustment between the different groups of biographical characteristics (gender, religion, ethnicity, employment status, educational level, months of cohabitation) among newlywed couples in Addis Ababa?

Independent t-test was used to analyse whether significant differences exist in marital satisfaction between two independent groups concerning basic sociodemographic variables such as gender, educational level, income level, months of cohabitation, availability of children and couples ethnic similarity. Furthermore, multiple regression modelling was used to estimate the role and contribution of these sociodemographic variables in predicting newlyweds' marital satisfaction. The main findings from the analysis are presented below under the specific hypothesis tested under this research question.

Hypothesis 13:   Marital satisfaction/adjustment as a function of socio-demographic characteristics

Hypothesis 13 predicted significant differences in marital satisfaction between different groups of spouses concerning sociodemographic characteristics such as gender, education,

income, months of cohabitation, availability of children, and couples' similarity in terms of ethnic identity. Regarding the association between gender and marital satisfaction, the t-test showed no statistically significant difference in mean marital satisfaction score between wives' (100.4) and husbands' (102.9). The analysis also found no significant difference in marital satisfaction mean scores between couples who cohabitated for two years or less (100.8), and those who cohabitated for more than two years (102.7).

All spouses who participated in this study had a minimum of secondary level education. For the purpose of analysis, spouses were categorized into two groups, namely those who completed college/university education, and those without college/university education. The t-test indicated a statistically significant difference in marital satisfaction mean score between couples who completed college/university education and couples without college/university education. As indicated in Table 17 below, couples with college /university education have higher marital satisfaction mean scores compared to those without college/university education.

Table 17: *The Relationship Between Educational Level and Marital Satisfaction*

Statistics	Marital Satisfaction
F value	6.678
t	2.584*
P-value	.010
Mean score for spouses without college education (N=147)	96.891
Mean score for spouses with college education (N=237)	104.591

N= 384
Dependent variable is marital satisfaction
Independent variable is education
*P<.05

The contrast test undertaken to see whether the marital satisfaction mean score of spouses with college education was significantly higher than those without college education also showed statistical significance. The study indicated that participants with higher monthly average income

(more than 5000 birr) have a higher marital adjustment mean score (105) than those with lower (less than 5000 birr) average monthly income (100). However, there was no statistically significant difference in marital satisfaction mean scores between participants with lower monthly average income and those with higher income. The study also showed that spouses who do not have children have lower marital satisfaction mean score (99) than participants who have children (104.7). However, having or not having children from current marriage did not predict statistically significant differences in marital satisfaction mean score between the two groups.

Analysis was also made to establish whether couples' similarities and differences in their ethnic identity predicted significant differences in marital satisfaction mean score. As indicated in Table 18 below, the results showed that couples with different ethnic identity have higher marital satisfaction mean scores than couples with similar ethnic identity.

Table 18: *The Relationship between Couples Similarity and difference in Ethnic Identity and Marital Satisfaction*

Statistics	Marital Satisfaction
F value	4.283
P-value	.040
Mean_ Couples with similar ethnic identity (N=117)	96.017
Mean_ couples with different ethnic identity (N=75)	105.320

The contrast test also showed that the marital satisfaction mean score of couples with different ethnic identity was significantly higher than that of couples with similar ethnic identity (P<.05). A multiple linear regression analysis was undertaken to assess which of the socio-demographic factors such as educational level, duration of cohabitation, level of income, couples' ethnic similarity or differences, availability of children and sex strongly predicts marital satisfaction. As indicated in Table 19 below, none of the socio-demographic variables predicted a statistically significant difference in spouses' marital satisfaction.

Table 19: *The comparative role of socio-demographic variables for marital satisfaction*

Model	Standardised Coefficients			Correlations			Collinearity Statistics	
	Beta	t	Sig.	Zero-order	Partial	Part	Tolerance	VIF
1 Constant		3.103	.002					
Educational level	.122	1.648	.101	.151	.121	.118	.935	1.070
Duration of Cohabitation	.019	.260	.795	.046	.019	.019	.944	1.060
Level of Income	.068	.885	.377	.109	.065	.063	.870	1.150
Couples Ethnic similarity/Difference	.125	1.735	.084	.149	.127	.124	.974	1.027
Availability of children	.138	1.903	.059	.138	.139	.136	.969	1.032
Sex	.003	.046	.963	-.018	.003	.003	.912	1.097

Dependent Variable: Marital satisfaction
Predictor Variables: Education, duration of cohabitation, level of income, couples ethnic similarity, having a child
from current marriage and gender

CHAPTER 5: DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1. Discussion of Results

This research followed the VSA model to examine the extent to which neuroticism, stressful life events, mutual problem-solving and negative relationship attributions contribute to marital satisfaction among newlywed couples in Addis Ababa. This section discusses the main findings of the current study pertaining to the component of the model focused in the study.

5.1.1. The Role of Enduring Vulnerabilities on Marital Satisfaction

The enduring vulnerability that was examined in this research was neuroticism. Neuroticism is one of the most robust predictors of dyadic maladjustment (Malouff, Thorsteinsson, Schutte, Bhullar, & Rooke, 2010). This trait reflects individual differences in the extent to which one perceives the world as threatening and problematic, and accounts for nearly 10% of the variability in marital satisfaction (Karney & Bradbury, 1995). This study indicated that wives' and husbands' neuroticism is significantly negatively associated with their own marital satisfaction. The study showed that actors' neuroticism also has a significant negative interpersonal association with partner's marital satisfaction for both wives and husbands'. Tests

of the APIM using SEM found that for both wives' and husbands', neuroticism significantly predict their own marital satisfaction, but only in the case of husbands' did neuroticism significantly predicted their partners' marital satisfaction. Even though neuroticism has a significant actor effect on marital satisfaction of both spouses, husbands' neuroticism has a greater effect on marital satisfaction of their wives than the effect that wives' neuroticism has on the marital satisfaction of husbands'.

This finding is in line with previous research, which indicates that neuroticism has both a direct and indirect effect on marital quality and satisfaction, and that individuals who rate themselves as high in neuroticism experience low levels of relationship quality (Lavee & Ben-ari, 2004), and have partners who have similar experiences (Karney & Bradbury, 1997). It is also consistent with Whisman (2001), which found that own neuroticism predicted lower levels of own marital satisfaction concurrently for wives' and husbands', where both husbands' and wives' neuroticism predicted lower levels of marital satisfaction in their partners concurrently.

Tests of indirect effects also showed that both wives' and husbands' neuroticism has a significant indirect intrapersonal as well as interpersonal effect on their own marital satisfaction through the mediation of mutual problem-solving. The intrapersonal indirect effect of wives' neuroticism on marital satisfaction through mutual problem solving was found to be the most statistically significant effect among others showing that wives' neuroticism significantly limits their capacity to engage in mutual problem-solving, which significantly contributes to their poor marital satisfaction. This finding is consistent with past research which reported that individuals high in neuroticism are more likely to engage in negative interactions, and less likely to exhibit adaptive behaviours, such as mutual problem-solving (Woszidlo & Segrin, 2013a).

Wives' and husbands' neuroticism also has a significant indirect effect on marital satisfaction through negative relationship attribution, both at an intrapersonal and interpersonal level. This shows that couples' neuroticism contributes to developing negative relationship attributions in themselves, and also on their partners, which in turn contributes to low marital satisfaction. The study also found that the interpersonal effect of neuroticism is higher for husbands' than it is for wives', showing that husbands' neuroticism strongly contributes to wives' negative relationship attribution, which in turn affects husbands' marital satisfaction. Similar studies also indicated that individuals high in neuroticism are inherently more dissatisfied individuals, who bring their negativity to their relationships (Caughlin et al., 2000). This negativity is then manifested in poor dyadic adjustment scores, due to their negative perceptions of their partner, their partner's behaviour, and the relationship in general.

5.1.2. The Role of Stressful life events on Marital Satisfaction

The study indicated that wives' and husbands' stressful life events are significantly negatively associated with their own marital satisfaction. This shows that husbands' and wives' with high-stress scores have lower marital satisfaction. However, at the interpersonal level, wives' stress was significantly negatively correlated with their husbands' marital satisfaction, while husbands' stress was only partially negatively correlated with wives' marital satisfaction. Tests of the APIM using SEM showed that none of the actor and partner effects for either wives' or husbands' achieved significance. This result supported the hypothesis at the individual level, but not at the dyadic level, in the sense that the dyadic interdependence was very high concerning the effect of stress on marital satisfaction. This finding is consistent with Woszidlo and Segrin (2013a) who found a negative relationship between intrapersonal effects of family-

related, work-related and job-home interference related stressful life events on marital quality; and that perception and experience of family-related stressful life events are key predictors of marital quality and satisfaction.

The study also indicated that husbands' stress has a significant indirect effect on their own marital satisfaction through mutual problem-solving, while wives' stressful life events did not have a significant indirect effect on their own marital satisfaction at intrapersonal level. This showed that the mediation effect of mutual problem-solving at intrapersonal level is higher for husbands than wives'; that husbands' with high levels of stress engage in lower mutual problem-solving, which in turn significantly affects their own marital satisfaction. However, at the interpersonal level, wives' stress had a significant indirect effect on their own marital satisfaction, through their husbands' mutual problem-solving, while husbands' indirect effect of stress was not significant. This finding indicates that the effect of wives' stress on their marital satisfaction mainly results from the high mediation effect of their husbands' limited mutual problem-solving as a result of the wives' stress. The findings are consistent with past research indicating that when levels of external stress are relatively high, partners may have less energy available for effective interaction, and so maybe more likely to engage in maladaptive behaviours (Frye & Karney, 2006). Similar studies also found that perception and experience of stressful life events have an indirect effect on marital quality and satisfaction, as wives' and husbands' with high perception of stressful life events reported lower levels of marital quality and satisfaction. This is partly because stressed spouses are more likely to have lower mutual problem-solving skills and perceive mutual problem-solving as impossible (Woszidlo & Segrin, 2013a).

The study also found that wives' and husbands' stressful life events have a significant indirect effect on marital satisfaction through negative relationship attribution both at intrapersonal and interpersonal levels. The indirect effect of wives' stressful life events on their marital satisfaction showed the highest significance, both at the intrapersonal and interpersonal level. This finding is in line with similar research, which examined the mediational role that marital attributions plays in the relationship between the occurrence of stressful life events and marital quality, and found that the marital quality of couples who make relationship-enhancing attributions about their spouses' negative behaviours is less prone to stress than those who make distress-maintaining attributions (Graham & Conoley, 2006).

5.1.3. The role of Adaptive Processes on Marital Satisfaction

The adaptive processes examined in this study were mutual problem-solving and negative relationship attribution. The study found that mutual problem-solving is significantly associated with marital satisfaction, both at the intrapersonal and interpersonal level. This shows that husbands' and wives' who engage in mutual problem-solving behaviours have higher own and partner marital satisfaction. Tests of the APIM using SEM found only husbands' mutual problem-solving had a significant effect on own marital satisfaction. This finding showed that engaging in mutual problem-solving is a stronger predictor of husbands' own marital satisfaction than it is of wives' marital satisfaction. Furthermore, wives' and husbands' mutual problem-solving is not a strong predictor of their partners' marital satisfaction. This finding was consistent with past research, which indicated that communication patterns were clearly linked to marital adjustment for both members of the couple and couples were more adjusted when they used more adaptive communication strategies, such as constructive communication and less non-adaptive communication strategies, such as demand withdrawal or disengagement (Rottmann et

al., 2015). The finding is also consistent with a recent study, which found that couples were more adjusted when they used more adaptive communication strategies (e.g., constructive communication) and less non-adoptive communication strategies (e.g., demand withdrawal or disengagement)(Pedro, Matos, Martins, & Costa, 2017).

The study also found a significant association between negative relationship attributions and marital satisfaction among newlyweds, both at the intrapersonal and interpersonal level. This shows that husbands' and wives' negative relationship attributions have lower levels of own and partner marital satisfaction. Tests of the APIM using SEM found that negative relationship attribution is a significant predictor of actors as well as partners' marital satisfaction for both wives and husbands'. This finding is in line with previous studies, which reported that spouses who make negative marital attributions are less able to maintain marital quality in the face of negative aspects of the relationship (McNulty & Karney, 2001). Similar studies also found that couples in distressed marriages make attributions that minimise their spouse's positive behaviours (by viewing their causes as unstable, specific, and external), and enhance their partners' negative behaviours (by viewing their causes as stable, global, and caused by their partners) (Graham & Conoley, 2006).

5.1.4. The Role of Socio-demographic Factors on Marital Satisfaction

The study predicted significant differences in marital satisfaction between different groups of spouses concerning socio-demographic characteristics, such as gender, education, income, months of cohabitation, having or not having children from their current marriage, and couples similarity in ethnic identity.

The study found that none of these variables predicted a statistically significant difference in marital satisfaction among newlyweds. However, predictor variables such as couples' ethnic similarity/difference and having or not having a child from their current marriage play a relatively heightened role in predicting marital satisfaction when compared to other socio-demographic factors considered. The study did not find a statistically significant difference in marital satisfaction mean score between wives' and husbands'. This finding is different from assumptions made by family scholars that women consistently experience significantly less marital satisfaction than men (Connides, 2001). Previous studies also found a statistically significant, yet very small, gender differences in marital satisfaction between wives' and husbands', with wives' slightly less satisfied than husbands' (Jackson, Miller,Oka, & Henry, 2014). According to Jackson et al. (2014), the lack of significant gender differences in community-based samples is reinforced by the additional finding that there were no significant gender differences when the level of marital satisfaction of husbands' and wives' in the same relationship (i.e., dyadic data) was compared.

The study found a statistically significant difference in marital satisfaction mean score between couples who completed college/university education and couples without college/university education. Couples with college/university education had higher marital satisfaction mean scores when compared to those without college/university education. This finding is in line with the findings of previous research, which found that a person's educational attainment is related to marital quality, and this significant association may be a result of the communication skills that one learns and cultivates at college or university (Woszidlo & Segrin, 2013b). The study also found no significant difference in marital satisfaction mean scores between couples who cohabitated for two years or less and those who cohabitated for more than

two years. This finding is in line with findings of the study by Kullik and Havusha-Morgenstern (2010), which revealed no significant differences in levels of marital adjustment between women who had cohabited before marriage, versus those who had not. However, a similar study carried out recently by Rosenfeld and Roesler (2018b) showed that pre-marital cohabitation affects marital quality in both short-term and long-term ways, in the sense that in the first year of marriage, couples who cohabited before marriage have a lower marital dissolution rate than couples who did not cohabit before marriage. However, after the first year of marriage, the couples who had not cohabited before marriage have caught up in the practical experience of living with their partner, and after that point, the hazard of marital dissolution is substantially higher for couples who cohabited before marriage, showing the short-term and long-term ways in which premarital cohabitation appears to affect marital stability.

The study indicated that participants with higher monthly average income have higher marital adjustment mean scores than those with lower average monthly income. However, the difference was not statistically significant. This finding was consistent with recent research which showed that income level was not related to marital satisfaction at the beginning of marriage, as both high-income and low-income groups reported higher levels of marital satisfaction in the first year of their marriage (Jackson, Krull, Bradbury and Karney 2017). Newlyweds who have children from their current marriage were found to have higher marital satisfaction mean scores than participants who do not have children. However, having or not having children from current marriage did not predict a statistically significant difference in marital adjustment mean score between the two groups. This finding is in line with past research, which found that greater reports of maternal stress during pregnancy were associated with a father's declining level of marital satisfaction (Don and Mickelson 2014). A similar study by

Trillingsgaard, Baucom, and Heyman (2014) also found that first pregnancy and birth of a first child is a key factor associated with marital satisfaction, such that a moderate decline of relationship satisfaction was reported by men and women during the second trimester of first pregnancy and up to 30 months after birth of the first child. The study also found that vulnerability factors during pregnancy, such as anxiety and depression, and less constructive communication patterns, were among the main predictors of greater decline in relationship satisfaction over time. Regarding couples' similarities and differences in ethnic identity and its association with marital satisfaction, the study found that the marital satisfaction mean score of couples with different ethnic identities was significantly higher than that of couples with similar ethnic identity.

5.2. Conclusions

Based on the discussion of the major findings of this study, the following conclusions are made in line with the research questions and hypothesis tested.

Conclusion 1

The first research question of the study examined the nature of the relationship between neuroticism, stress, mutual problem-solving, negative relationship attribution and marital satisfaction among a sample of newlyweds in Addis Ababa. Based on the findings of the study, it was concluded that neuroticism and stressful life events are significantly negatively associated with own marital satisfaction for both wives' and husbands' at the intrapersonal level. At an interpersonal level, wives' and husbands' neuroticism and only wives' stressful life events were significantly negatively associated with their partner's marital satisfaction. Mutual problem-solving was significantly positively associated with marital satisfaction for both wives' and

husbands', both at intrapersonal and interpersonal level, while negative relationship attribution

was significantly negatively associated with marital satisfaction for both wives' and husbands',

at both levels. Based on the conclusions made above, the following decisions, as indicated in

Table 20 below, are made about the hypotheses tested under research question one.

Table 20: *Decisions on hypotheses tested under Research Question One*

Hypothesis Tested	Decisions	Remark
Hypothesis 1: There is a significant negative relationship between wives' and husbands' neuroticism and marital satisfaction	Hypothesis accepted	Hypothesis accepted for wives' and husbands', both at intrapersonal as well as interpersonal level.
Hypothesis 2: There is a significant negative relationship between wives' and husbands' stress and marital satisfaction	Hypothesis partially supported	The hypothesis is accepted at the intrapersonal level. However, at the interpersonal level, only wives' stressful life events were significantly associated with husbands' marital satisfaction.
Hypothesis 3: There is a significant positive relationship between wives' and husbands' mutual problem solving and marital satisfaction	Hypothesis accepted	Hypothesis accepted for wives' and husbands' both at intrapersonal as well as interpersonal level.
Hypothesis 4: There is a significant negative relationship between wives' and husbands' negative relationship attribution and marital satisfaction	Hypothesis accepted	Hypothesis accepted for wives' and husbands' both at intrapersonal as well as interpersonal level.

Conclusion 2

The second research question examined the actor (intrapersonal) and partner (interpersonal) effect of neuroticism, stressful events, mutual problem-solving and negative relationship attribution on marital satisfaction among a sample of newlywed couples in Addis Ababa. Based on the findings of the study, it was concluded that both wives' and husbands' neuroticism significantly predicted their own marital satisfaction but only husbands' neuroticism significantly predicted their partner's marital satisfaction. The APIM using SEM also showed that stressful life events do not have a significant actor and partner effect for both wives and husbands' at the dyadic level. Among the two adaptive processes examined in this study, negative relationship attribution was a significant predictor of actors as well as partners' marital satisfaction for both wives and husbands', while only husbands' mutual problem-solving had a significant effect on their own marital satisfaction. Based on the conclusions made above, the following decision, as indicated in Table 21 below is made in relation to the hypotheses tested under research question two.

Table 21:

Decisions on hypotheses tested under Research Question Two

Hypothesis Tested	Decisions	Remark
Hypothesis 5: Neuroticism will have a significant actor (intrapersonal) and partner (interpersonal) effect on marital satisfaction.	Hypothesis partially supported	Hypothesis partially supported as wives' neuroticism did not significantly predict their partners' marital satisfaction, while other predicted outcomes were achieved.
Hypothesis 6: Stressful life events will have a significant actor (intrapersonal) and partner (interpersonal) effect on marital satisfaction.	Hypothesis not supported	Hypothesis not supported at the dyadic level as stressful life events did not predict significant actor or partner effect, even though significant relationships were found at the individual level.

Hypothesis Tested	Decisions	Remark
Hypothesis 7: Mutual Problem Solving will have a significant actor (intrapersonal) and partner (interpersonal) effect on marital satisfaction.	Hypothesis partially supported	No significant actor effects of stress were found for both spouses and only husbands' mutual problem-solving was a significant predictor of partner's marital satisfaction at the dyadic level.
Hypothesis 8: Negative relationship attribution will have a significant actor (intrapersonal) and partner (interpersonal) effect on marital satisfaction.	Hypothesis accepted	Negative relationship attribution was a significant predictor of actor's as well as partner's marital satisfaction.

Conclusion 3

The third research question examined the indirect effect of neuroticism and stressful life events on marital satisfaction through the mediation of mutual problem-solving and negative relationship attribution. Based on the findings of the study, it was concluded that for both wives' and husbands', neuroticism had a significant negative intrapersonal and interpersonal indirect effect on marital satisfaction through mutual problem-solving and negative relationship attribution. Similarly, wives' and husbands' stressful life events had a significant negative intrapersonal and interpersonal indirect effect on marital satisfaction through negative relationship attribution. However, taking mutual problem-solving as a mediator, only husbands' stress had a significant negative indirect effect on marital satisfaction at an intrapersonal level, and only wives' stress had a significant indirect effect on marital satisfaction at an interpersonal level. Based on the conclusions made above, the following decisions indicated in Table 22 below are made about the hypotheses tested under research question three.

Table 22: Decisions on hypotheses tested under Research Question Three

Hypothesis Tested	Decisions	Remark
Hypothesis 9: Neuroticism will have a significant negative intrapersonal and interpersonal indirect effect on marital satisfaction and adjustment through mutual problem solving	Hypothesis accepted	Hypothesis accepted for wives' and husbands', both at intrapersonal as well as interpersonal level.
Hypothesis 10: Neuroticism will have a significant intrapersonal and interpersonal indirect effect on marital satisfaction and adjustment through negative relationship attribution	Hypothesis accepted	Hypothesis accepted for wives' and husbands' both at intrapersonal as well as interpersonal level.
Hypothesis 11: Stressful life events will have a significant intrapersonal and interpersonal indirect effect on marital satisfaction and adjustment through mutual problem solving	Hypothesis partially supported	Only husbands' stress had a significant negative indirect effect on marital satisfaction at the intrapersonal level, and only wives' stress had a significant negative indirect effect on marital satisfaction at the interpersonal level.
Hypothesis 12: Stressful life events will have a significant intrapersonal and interpersonal indirect effect on marital satisfaction and adjustment through negative relationship attribution	Hypothesis accepted	Hypothesis accepted for wives' and husbands' both at intrapersonal as well as interpersonal level.

Conclusion 4

Research Question Four examined whether significant differences exist in marital satisfaction between the different groups of demographic characteristics (gender, education, income, duration of cohabitation before marriage and ethnicity) among newlyweds in Addis Ababa. Based on the findings of the study, it was concluded that none of these demographic variables predicted a statistically significant difference in marital satisfaction among newlyweds. Demographic variables such as having or not having children from the current marriage and

couple similarity in ethnic identity played a higher role in predicting marital satisfaction, but lack

significance. Newlyweds who have children from their current marriage had a higher marital

satisfaction mean score than those who do not have children, but the difference was not

statistically significant. Similarly, the marital satisfaction mean score of couples with different

ethnic identities was significantly higher than couples with similar ethnic identities. Generally,

there was no statistically significant difference in marital satisfaction mean score between wives'

and husbands', and among those who cohabitated before marriage for short duration (less than

two years) and those who cohabitated for longer duration (more than two years). However,

couples with college/university education had a higher marital satisfaction mean score compared

to those without college/university education. Newlywed couples with higher monthly average

income have a higher marital adjustment mean score than those with lower average monthly

income, but the difference was not statistically significant. Based on the conclusions made

above, the following decisions indicated in Table 23 below are made about the hypotheses tested

under research question three.

Table 23: Decision on hypothesis tested Under Research Question Four

Hypothesis Tested	Decisions	Remark
Hypothesis 13: There are significant differences between different groups of demographic characteristics (gender, education, income, duration of cohabitation before marriage and ethnicity) on marital adjustment among newlywed couples in Addis Ababa.	Hypothesis not supported	Hypothesis rejected as there was no statistically significant difference between different groups of examined demographic characteristics and marital satisfaction.

5.3. Implications of the Current Research

This research resulted in several implications for theory, action, and further research. This section outlines the main implications.

5.3.1. Implications for Further Research

The research findings showed that neuroticism has a significant direct and indirect intra and interpersonal effect on marital satisfaction, through mutual problem-solving as well as negative relationship attribution. The fact that neuroticism has such a determining role implies that further research should focus on identifying the most important aspects and elements of negative affectivity that play a role, because understanding the dynamics of how neuroticism predicts marital satisfaction is crucial. Furthermore, the significant indirect effect of neuroticism through the mediation of both mutual problem-solving and negative relationship attribution calls for further research to analyse how neuroticism influences different types of marital interaction, and which elements of negative relationship attribution it mainly affects, and how. The study also indicated that compared to wives', husbands' mutual problem-solving plays a prominent role in mediating the indirect effect of stress on marital satisfaction for both spouses. This implies that further research needs to consider the specific ways through which mutual problem-solving differently mediated the indirect effect of stress on marital satisfaction for wives' and husbands'. Compared to mutual problem-solving, negative relationship attribution was found to be a more prominent mediator of the indirect effect of stress on marital quality. This implies that further research needs to explore as to why stress exerts its undesired effect on marital

satisfaction more through negative relationship attribution than through its effect on mutual problem-solving.

5.3.2. Practical Implications

The research findings showed that neuroticism has a significant direct and indirect intrapersonal and interpersonal effect on marital satisfaction through mutual problem-solving as well as negative relationship attribution. This implies that more focus ought to be given to helping counselors deal with negative affectivity and personality traits while providing counselling or premarital counselling. The research also found that the indirect effect of neuroticism through mutual problem-solving and negative relationship attribution is larger than its direct effect. This suggests that, to block the path from negative affectivity to marital distrust through poor mutual problem-solving and enhanced negative relationship attribution, couples' counselling and premarital counselling support should focus on effective communication, interaction and adaptive skills specifically targeting expressions of negative affectivity from a partner.

The research also showed that wives' negative relationship attribution strongly mediated the indirect effect of husbands' neuroticism on their own satisfaction, rather than husband's negative relationship attribution mediating the effect of wives' neuroticism on their own satisfaction. This implies that wives' negative relationship attribution in response to husbands' neuroticism is more predominant than husbands' negative relationship attribution in response to wives' neuroticism.

Regarding the mediation effect of mutual problem-solving, husbands' poor mutual problem-solving in response to wives' neuroticism more strongly mediates the effect of wives'

neuroticism on their own satisfaction than does wives' poor mutual problem-solving in response to husbands' neuroticism mediates the effect of husbands' neuroticism on their own satisfaction. This showed that in the interpersonal, indirect effect of neuroticism on marital satisfaction, husbands' mutual problem-solving has a greater effect than that of wives'; while wives' negative relationship attribution plays a more prominent mediation role than that of husbands'. This partially implies that programmes and interventions intended to improve marital outcomes need to be separately tailored to husbands' and wives', such that adaptive behaviour focusing on effective mutual problem-solving ought to target both spouses, with more emphasis on husbands' and negative relationship attribution-related programmes should target wives' more than husbands'. Future research should also focus on why wives' negative relationship attribution shows a greater relationship to husbands' marital satisfaction than the reverse, and why husband's mutual problem solving is more predictive of wives' satisfaction than of the marital satisfaction of husbands'. Wives' stress was significantly negatively correlated with husbands' marital satisfaction, while the associations between husbands' stress and wives' marital satisfaction were not significant. This implies the importance of equipping wives' with adaptive behaviours that help to control and manage stress, as wives' stress determines husbands' marital satisfaction to a greater extent than husbands' stress does on wives' marital satisfaction.

Comparison of the effect of neuroticism and stressful life events on marital satisfaction showed that the effect of stress on marital satisfaction is higher than the effect of neuroticism on marital satisfaction, suggesting the availability of wider opportunities for promoting marital adjustment, as interventions on stress-coping mechanisms which are feasible and cost-effective can benefit a lot in marital adjustment, while neuroticism, which is a stable trait that is not likely to change over time, and requires much more investment can be less emphasised. The results

also imply that it would be beneficial for newlywed couples to enter premarital counselling and have post-marital professional support to learn about the benefits of positive communication exchange, and the positive impact of making positive relationship attributions during marital interactions.

Analysis of the effect of adaptive processes on marital satisfaction showed that mutual problem-solving and negative relationship attribution had a stronger association with marital satisfaction for both wives' and husbands', and at both intrapersonal and interpersonal levels, compared to the other two components of the model, that is neuroticism and stressful events. The implication of this finding for action is that promoting adaptive behaviours ought to be at the centre of any effort intended at improving supporting and promoting marital satisfaction and quality. It also implies that promoting adaptive behaviours such as mutual problem-solving, effective and positive communication, positive interaction, and positive relationship attributions, ought to be integrated into formal and informal education curriculums, short-term training, as well as pre-marital and marital counselling and child and family-centered programmes.

5.3.3. Theoretical Implications for the VSA Model

The study found that mutual problem-solving more strongly mediated husbands' intrapersonal effect of stressful life events on marital satisfaction than it mediated wives' intrapersonal effect on their marital satisfaction. Furthermore, at the interpersonal level, husbands' mutual problem-solving more strongly mediated the indirect effect of wives' stress on marital satisfaction than did wives' mutual problem-solving. These findings indicated that compared to wives' mutual problem-solving, husbands' mutual problem-solving plays a prominent role in mediating the indirect effect of stressful life events on marital satisfaction for

both spouses. As an implication to the VSA theory, this finding implies that adaptive processes play a varying level of mediational role for wives' and husbands' in the indirect effect of stressful life events on marital satisfaction. Analysis of the effect of adaptive processes on marital satisfaction showed that mutual problem-solving and negative relationship attribution had a stronger association with marital satisfaction for both wives' and husbands' at both intrapersonal and interpersonal level when compared to the other two components of the model, that is neuroticism and stressful life events. The theoretical implication of this finding is that it supports the hypothesis of Karney and Bradbury (1995), stating that adaptive processes are perhaps the most powerful determinants of marital satisfaction, compared to neuroticism and stressful life events.

5.4. Contributions of the Current Research

One of the motivations for this study was the lack of scientific research and evidence explaining the role of enduring vulnerabilities, stressful life events, and adaptive processes on marital satisfaction and quality among newlyweds in Addis Ababa. This research followed the VSA model of marriage and established how these key variables operate in an integral way to determine marital satisfaction and quality among newlyweds in Addis Ababa and explained the possible mechanisms as to how newlyweds' marital satisfaction and quality are influenced. Thus, this research contributed to increased scientific knowledge, by means of which to better understand and explain the marital functioning and outcomes of newlyweds in Addis Ababa.

This research also identified the variables that more strongly influence newlyweds' marital satisfaction than others, indicating which ones should be focused on short-term interventions, and which ones on long-term interventions of efforts aimed at promoting marital quality, satisfaction, and adjustment among newlyweds. Thus, the other practical contribution of

this research is that it came up with findings that guide the prioritisation, design, and implementation of services, programmes, policies aimed at protecting marital wellbeing and quality among newlyweds in the Ethiopian context. The responsible government bodies, civil society organisations, training, and academic institutions, and others could make use of these findings to design their respective interventions to promote marital wellbeing among newlyweds.

The findings of this research also contributed by informing the design and implementation of family and social development programmes, such as pre-marital and marital education and counselling, targeting protection and support for marriage and preparing couples for better marital relationship and coping mechanisms. Furthermore, the research informed family support programmes and marriage counselling interventions and services provided by counselling and support centres in Addis Ababa regarding the key topics and issues that they need to prioritise while providing counselling and other social support services to newlyweds.

The research also made a theoretical contribution to the VSA model, by indicating that adaptive processes play a varying mediational role for wives' and husbands' in the indirect effect of stress on marital satisfaction. This could be considered an addition to the VSA model in confirming that effects for wives' and husbands' ought to be analysed separately while undertaking mediational analysis within the VSA model. The research also made a theoretical contribution to the VSA model by confirming that adaptive processes such as mutual problem-solving and negative relationship attribution play a more prominent role in affecting marital quality and satisfaction than the other two components of the model, that is neuroticism and stressful life events.

5.5. *Recommendations for Action*

Based on the main findings of the research and the conclusions made, the following recommendations are forwarded for action and further research to promote marital quality and stability among newlyweds and other married couples in Ethiopia.

- Couples in a premarital relationship need to be cautious about the role that enduring vulnerabilities, stressful life events, and adaptive behaviours play in newlywed time marital functioning and outcome and consider these qualities carefully during mate selection and premarital relationship functioning.

- Couples in premarital relationships need to consider use of available relationship counselling and pre-marital education and support programmes to understand the surprises, excitements as well as challenges commonly faced in the first few years of marriage and make psychological as well as behavioural preparation to deal effectively with the experiences of new married life.

- Newlyweds need to seek marital counseling and support services aimed at promoting and enhancing their adaptive processes and skills such as effective marital communication, problem-solving skills, and conflict handling skills.

- Academic institutions, such as colleges and universities, need to consider integrating into their preservice education curriculum topics related to adaptive and life skills required for better marital functioning and quality so as to help prepare young men and women with effective adaptive behaviours and techniques for positive marital functioning and outcomes.

- Training institutions need to design and provide tailored pre-marital and post-marital marriage training programmes to enhance the adaptive skills necessary for better marital functioning and outcomes for married couples, and those in a premarital relationship.

- Marriage counselling centers need to understand the key determinants of marital satisfaction and stability, as identified in this research, and tailor their marriage counseling support and interventions accordingly, by prioritising the variables that play a dominant role in influencing marital satisfaction and stability in the Ethiopian context.

- Marriage counselling and training provided by institutions and centers should be designed in a way that targets husbands' and wives' with greater specificity, as marital satisfaction and functioning are differently understood and experienced by wives' and husbands'.

- Promoting adaptive behaviours such as mutual problem-solving, effective and positive communication, positive interaction, and promoting positive relationship attribution ought to be integrated into formal and informal education curriculums, short-term training, as well as pre-marital and marital counseling and child and family-centered programmes.

- Civil society organisations engaged in child and family wellbeing activities need to integrate tailored and gender-sensitive interventions, such as marriage education and marital communication skills, that support and protect marriage.

- Responsible government ministries, bureaus, and offices need to consider the underlying factors associated with newlyweds marital satisfaction and adjustment in Addis Ababa, as identified in this research and introduce policy measures that ensure the design and implementation of tailored pre-marital as well as post-marital interventions to support and protect marriage in Ethiopia. These interventions need to center around the prominent role of enhancing adaptive behaviours and skills for better marital functioning and outcomes.

5.6. Limitations of Current Research

As with any empirical research, this research has limitations. This research followed a cross-sectional approach. Thus, establishing a causal relationships among the variables examined, which would have been possible with longitudinal approaches, cannot be made in this research with absolute certainty.

Another limitation of this research stems from the fact that it was undertaken in a country where disclosure and open discussion about marital issues is largely considered a taboo. Even though utmost efforts were made to ensure quality of data by conducting face-to-face supervision while couples completed the self-administered data collection instruments, participants might have provided socially desirable responses that protect their spouses and their marriage, instead of their genuine feelings and experiences regarding their marriage. Furthermore, there has been very limited research undertaken on the issues related to marital quality and satisfaction in the Ethiopian context. This has limited the opportunity to compare the findings of this research with similar local studies, and to substantiate the findings accordingly. Thus, most of the comparisons of the findings were made with other research, carried out globally.

The fact that this research was undertaken in Addis Ababa, the capital city of Ethiopia, provided an opportunity to ensure representation of participants from the predominant religions, ethnic identities and other socio-economic contexts in the country. However, due to the very urban nature of the city, all the findings may not be generalisable to other parts of the country, especially the rural areas, which may present with a different context concerning factors that influence marital quality and satisfaction.

5.7. Recommendations for Further Research

Husbands' mutual problem-solving more strongly mediate the indirect effect of wives' neuroticism on their own marital satisfaction than wives' mutual problem-solving mediates the effect of husbands' neuroticism on own marital satisfaction. On the other hand, wives' negative relationship attribution more strongly mediates the indirect effect of husbands' neuroticism on their own satisfaction than husbands' negative relationship attribution mediates the effect of wives' neuroticism on their own satisfaction. Thus, future research ought to be directed towards investigating why husbands' mutual problem-solving is more detrimental to wives' marital satisfaction than it is to husbands', and why wives' negative relationship attribution is more detrimental to husbands' marital satisfaction than it is to that of wives'.

Further research ought to focus on identifying and explaining the aspects of neuroticism that play a crucial role in influencing couples' marital satisfaction and analyse the mechanisms through which neuroticism influences the specific mutual problem-solving elements and techniques. Further research should also look at how neuroticism contributes to couples' development of negative relationship attributions, and which aspects of negative attribution that it mainly affects. Identifying and analysing the specific ways through which mutual problem-solving differently mediates the indirect effect of stress on marital satisfaction for wives' and husbands', and exploring why stressful life events negatively affect marital satisfaction more through negative relationship attribution than through mutual problem-solving, should also receive further attention in the field.

REFERENCES

AAU. (2008). Impact of divorce. *Ethiopian Social Policy Reader*, *3*.

Amato, P. R., & Cheadle, J. (2005). The long reach of divorce : Divorce and child well-being across three generations. *Journal of Marriage and Family*, *67*(February), 191–206.

Barelds, D. P. H. (2005). Self and partner personality in intimate relationships. *European Journal of Personality*, *19*(November), 501–518. https://doi.org/10.1002/per.549 Self

Bertoni, A., & Bodenmann, G. (2010a). Positive and negative dimensions, conflict styles, and relationships with family of origin. *Journal of European Psychologist*, *15*(3), 175–184. https://doi.org/10.1027/1016-9040/a000015

Bertoni, A., & Bodenmann, G. (2010b). Satisfied and dissatisfied couples : Positive and negative dimensions, conflict styles, and relationships with family of origin. *European Psychologist*, *15*(3), 175–184. https://doi.org/10.1027/1016-9040/a000015

Bodenmann, G., & Cina, A. (2005). Stress and coping and separated/divorced swiss couples : A 5-year prospective longitudinal study. *Journal of Divorce and Remarriage*, *44*(1/2), 71–90. https://doi.org/10.1300/J087v44n01

Bodenmann, G., Pihet, S., & Kayser, K. (2006). The relationship between dyadic coping and marital quality : A 2-year longitudinal study, *20*(3), 485–493. https://doi.org/10.1037/0893-3200.20.3.485

Bolger, N., DeLongis, A., Kessler, R. C., & Wethington, E. (1989). The contagion of stress: Actors multiple roles. *Journal of Marriage and the Family*, *51*, 175–183.

Borkenau, P., Mauer, N., Spinath, F. M., Angleitner, A., & Riemann, R. (2004). Thin slices of behaviour as cues of personality and intelligence. *Journal of Personality and Social Psychology*, *86*(4), 599–614. https://doi.org/10.1037/0022-3514.86.4.599

Bowen, M. (1978). Family therapy in clinical practice. New York: Jason Aronson.

Bradbury, T. N., Fincham, F. D., & Beach, S. R. (2000). Research on the nature and

determinants of marital satisfaction : A decade in review. *Journal of Marriage and the*

Family, *62*, 964–980.

Bramlett, M. D., & Mosher, W. D. (2001). *First marriage dissolution, divorce, and remarriage:*

United States. Department of Health and Human Services, Centers for Disease Control and

Prevention.Advance Data No. 323

Brock, R. L., & Lawrence, E. (2014). Intrapersonal, interpersonal, and contextual risk factors for

overprovision of partner support in marriage. *Journal of Family Psychology*, *28*(1), 54–64.

https://doi.org/10.1037/a0035280

Cano, A., & Vivian, D. (2003). Are life stressors associated with marital violence ? *Journal of*

Family Psychology, *17*(3), 302–314. https://doi.org/10.1037/0893-3200.17.3.302

Caughlin, J. P., Huston, T. L., & Houts, R. M. (2000). How does personality matter in marriage?

An examination of trait anxiety, interpersonal negativity, and marital satisfaction. *Journal of*

Personality and Social Psychology, *78*(2), 326–336. https://doi.org/10.1037/0022-

3514.78.2.326

Cohan, C. L., & Bradbury, T. N. (1997). Negative life events, marital interaction, and the

longitudinal course of newlywed marriage. *Journal of Personality and Social Psychology*,

73(1), 114–128.

Conger, R. D., Rueter, M. A., & Elder, G. H. (1999). Couple resilience to economic pressure.

Journal of Personality and Social Psychology, *76*(1), 54–71. https://doi.org/10.1037/0022-

3514.76.1.54

Cook, W., & Kenny, D. A. (2005). The actor-partner interdependence model: A model of

bidirectional effects in developmental studies. *International Journal of Behavioural Development*, *29*(2), 101–109. https://doi.org/10.1080/01650250444000405

CSA. (2016). *Ethiopia Demographic and Health Survey 2016*.

Don, B. P., & Mickelson, K. D. (2014). Relationship satisfaction trajectories across the transition to parenthood among low-risk parents. *Journal of Marriage and Family*, *76*, 677–692. https://doi.org/10.1111/jomf.12111

Doumas, D. M., Margolin, G., & John, R. S. (2003). The relationship between daily marital interaction, work, and health-promoting behaviours in dual-earner couples. *Journal of Family Issues*, *24*(1), 3–20. https://doi.org/10.1177/0192513X02238518

Federal Democratic Republic of Ethiopia. Constitution of the federal democratic republic of Ethiopia (1994). Addis Ababa: Author.

Federal Negarit Gazetta of the Federal Democratic Republic of Ethiopia (FDRE). The revised family code Proclamation No. 213/2000 (2000). Addis Ababa: Author.

Fincham, F. D. (1998). Child development and marital relations. *Child Development*, *69*(2), 543–574.

Fincham, F. D., & Beach, S. R. H. (1999). Conflict in marriage: Implications for working with couples, 47–77.

Fincham, F. D., Beach, S. R. H., & Davila, J. (2004). Forgiveness and conflict resolution in marriage. *Journal of Family Psychology*, *18*(1), 72–81. https://doi.org/10.1037/0893-3200.18.1.72

Fincham, F. D., & Bradbury, T. N. (1992a). Assessing attributions in marriage: The relationship attribution measure. *Journal of Personality and Social Psychology*, *62*(3), 457–468.

Fincham, F. D., & Bradbury, T. N. (1992b). Assessing attributions in marriage: The relationship

attribution measure.pdf. *Journal of Personality and Social Psychology*, *62*(3), 457–468.

Fincham, F. D., Harold, G. T., & Gano-phillips, S. (2000). The Longitudinal association between attributions and marital satisfaction: Direction of effects and role of efficacy expectations. *Journal of Family Psychology*, *14*(2), 267–285. https://doi.org/10.1037//0893-3200.14.2.267

Fink, B. C., & Shapiro, A. F. (2013). Coping mediates the association between marital instability and depression, but not marital satisfaction and depression, *2*(1), 1–13. https://doi.org/10.1037/a0031763

Finn, C., Mitte, K., & Neyer, F. J. (2015). Recent decreases in specific interpretation biases predict decreases in neuroticism : Evidence from a longitudinal study with young adult couples. *Journal of Personality*, *83*(3). https://doi.org/10.1111/jopy.12102

Fisher, T. D., & Mcnulty, J. K. (2008). Neuroticism and marital satisfaction: The mediating role played by the sexual relationship. *Journal of Family Psychology*, *22*(1), 112–122. https://doi.org/10.1037/0893-3200.22.1.112

Frye, N. E., & Karney, B. R. (2006). The context of aggressive behaviour in marriage: A longitudinal study of newlyweds. *Journal of Family Psychology*, *20*(1), 12–20. https://doi.org/10.1037/0893-3200.20.1.12

Gana, K., Saada, Y., Broc, G., Koleck, M., & Untas, A. (2016). Dyadic cross-sectional associations between depressive mood, relationship satisfaction, and common dyadic coping. *Marriage & Family Review*. https://doi.org/10.1080/01494929.2016.1247759

Gonzaga, G. C., Campos, B., & Bradbury, T. (2007). Similarity, convergence, and relationship satisfaction in dating and married couples. *Journal of Personality and Social Psychology*, *93*(1), 34–48. https://doi.org/10.1037/0022-3514.93.1.34

Gottman, J. M. (1994). what predicts divorce? The relationship between marital processes and marital outcomes.Hillsdale, NJ US: Lawrence Erlbaum Associates, Inc.

Gottman, J. M., Coan, J., Carrere, S., & Swanson, C. (1998). Predicting marital happiness and stability from newlywed interactions. *Journal of Marriage and the Family*, *60*, 5–22.

Gottman, J. M., & Levenson, R. W. (2000). The timing of divorce: Predicting when a couple will divorce over a 14 year period. *Journal of Marriage and the Family*, *62*(August), 737–745.

Gottman, J., Swanson, C., & Murray, J. (1999). The mathematics of marital conflict: Dynamic mathematical nonlinear modeling of newlywed marital interaction. *Journal of Family Psychology*, *13*(1), 3–19. https://doi.org/10.1037/0893-3200.13.1.3

Graham, J. M., & Conoley, C. W. (2006). The role of marital attributions in the relationship between life stressors and marital quality. *Journal of Personal Relationships*, *13*, 231–241.

Hammen, C., Adrian, C., Gordon, D., Burge, D., Jaenicke, C., & Hiroto, D. (1987). Children of depressed mothers : Maternal strain and symptom predictors of dysfunction. *Journal of Abnormal Psychology*, *96*(3), 190–198.

Hanzal, A., & Segrin, C. (2009). The role of conflict resolution styles in mediating the relationship between enduring vulnerabilities and marital quality. *Journal of Family Communication*, *9*, 150–169. https://doi.org/10.1080/15267430902945612

Huston, T. L., Caughlin, J. P., Houts, R. M., Smith, S. E., & George, L. J. (2001). The connubial crucible : Newlywed years as predictors of marital delight, distress, and divorce. *Interpersonal Relations and Group Process*, *80*(2), 237–252. https://doi.org/10.1037//O022-3514.80.2.237

Iveniuk, J., Waite, L. J., Laumann, E., McClintock, M. K., & Tiedt, A. D. (2014). Marital conflict in older couples: Positivity, personality, and health. *Journal of Marriage and*

Family, *76*, 130–144. https://doi.org/10.1111/jomf.12085

Jackson, J.B., Miller, R.B.,Oka, M. & Henry, R.G. (2014).Gender differences in marital

satisfaction: A meta-analysis.Journal of Marriage and Family,76,105-129.

DOI:10.1111/jomf.12077

Jacobson, N. S., Follette, W. C., & Mcdonald, D. W. (1982). Reactivity to positive and negative

behaviour in distressed and nondistressed married couples. *Journal of Consulting and*

Clinical Psychology, *50*(5), 706–714.

John, O. P., & Srivastava, S. (1999). The Big-Five Trait Taxonomy: History, measurement, and

theoretical Perspectives.

Johnson, M. D., & Anderson, J. R. (2015). Temporal ordering of intimate relationship efficacy

and conflict. *Journal of Marriage and Family*, *77*(August), 968–981.

https://doi.org/10.1111/jomf.12198

Johnson, M. D., Cohan, C. L., Davila, J., Lawrence, E., Rogge, R. D., Karney, B. R., …

Bradbury, T. N. (2005). Problem-solving skills and affective expressions as predictors of

change in marital satisfaction. *Journal of Consulting and Clinical Psychology*, *73*(1), 15–

27. https://doi.org/10.1037/0022-006X.73.1.15

Johnson, M. D., Horne, R. M., Hardy, N. R., & Anderson, J. R. (2018). Temporality of couple

conflict and relationship perceptions, *Journal of Family Psychology*, *32*(4), 445–455.

https://dx.doi.org/10.1037/fam0000398

Kanner, A. D., Coyne, J. C., Schaefer, C., & Lazarus, R. S. (1981). Comparison of two modes of

stress measurement: Daily hassles and uplifts versus major life events. *Journal of*

Behavioural Medicine, *4*(1).

Karney, B. R., & Bradbury, T. N. (1995). The longitudinal course of marital quality and stability:

    A review of theory, method, and research. *Psychological Bulletin*, *118*(1), 3–34.

    https://doi.org/10.1037/0033-2909.118.1.3

Karney, B. R., & Bradbury, T. N. (1997). Neuroticism, marital interaction, and the trajectory of

    marital satisfaction, Journal of Personality and Social Psychology*, 72*(5), 1075–1092.

Karney, B. R., & Bradbury, T. N. (2000). Attributions in marriage: State or trait ? A Growth

    curve analysis. *Personality Process and Individual Differences*, *78*(2), 295–309.

    https://doi.org/10.1037//0022-3514.78.2.295

Karney, B. R., & Gauer, B. (2010). Cognitive complexity and marital interaction in newlyweds.

    Journal of the International Association for Relationship Research, *17*, 181–200.

Kelley, H. H., Holmes, J. G., Kerr, N. L., Reis, H. T., Rusbult, C. E., & Van Lange, P. A. M.

    (2003). An atlas of interpersonal situations. New York: Cambridge University Press.

Kenny, D. A. (1995). The effect of nonindependence on significance testing in dyadic research.

    Personal Relationships, 2, 67–75.

Kouros, C. D., & Cummings, E. M. (2011). Transactional relations between marital functioning

    and depressive symptoms. *American Journal of Orthopsychiatry*, *81*(1), 128–138.

    https://doi.org/10.1111/j.1939-0025.2010.01080.x

Kurdek, L. A. (1991). Marital stability and changes in marital quality in newlywed couples: A

    test of the contextual model. *Journal of Social and Personal Relationships*, *8*, 27–48.

Kurdek, L. A. (1994). Areas of conflict for gay, lesbian, and heterosexual couples: What couples

    argue about influences relationship satisfaction. Journal of Marriage and the Family,56 (4),

    923-934

Kurdek, L. A. (1997). The link between facets of neuroticism and dimensions of relationship

    commitment : Evidence from gay, lesbian, and heterosexual couples. *Journal of Family*

    Psychology, *11*(4), 503–514.

Kurdek, L. A. (1998). The nature and predictors of the trajectory of change in marital quality for

    husbands' and wives' over the first 10 years of marriage. *Journal of Family Psychology*,

    12(4), 494–510. https://doi.org/10.1037/0012-1649.35.5.1283

Langdridge, D. (2004).Introduction to research methods and data analysis in psychology.

    Pearson Education Limited 2004

Langer, A., Lawrence, E., & Barry, R. A. (2008). Using a vulnerability-stress-adaptation

    framework to predict physical aggression trajectories in newlywed marriage. *Journal of*

    Consulting and Clinical Psychology, *76*(5), 756–768. https://doi.org/10.1037/a0013254

Lavee, Y., & Ben-ari, A. (2004). Emotional expressiveness and neuroticism : Do they predict

    marital quality ? *Journal of Family Psychology*, *18*(4), 620–627.

    https://doi.org/10.1037/0893-3200.18.4.620

Lavner, J. A., & Bradbury, T. N. (2010). Patterns of change in marital satisfaction over the

    newlywed years. *Journal of Marriage and Family*, *72*(October), 1171–1187.

    https://doi.org/10.1111/j.1741-3737.2010.00757.x

Lavner, J. A., & Bradbury, T. N. (2012). Why do even satisfied newlyweds eventually go on to

    divorce? *Journal of Family Psychology*, *26*(1), 1–10. https://doi.org/10.1037/a0025966

Lavner, J. A., & Bradbury, T. N. (2016). Does couples ' communication predict marital

    satisfaction, or does marital satisfaction predict communication? *Journal of Marriage and*

    Family, *78*, 680–694. https://doi.org/10.1111/jomf.12301

Lavner, J. A., Lamkin, J., Miller, J. D., Campbell, W. K., & Karney, B. R. (2016). Narcissism

and newlywed marriage: Partner characteristics and marital trajectories. *Personality disorders: Theory, research, and treatment*, *7*(2), 169–179. https://doi.org/10.1037/per0000137

Lavner, J. A., Weiss, B., Miller, J. D., & Karney, B. R. (2018). Personality change among newlyweds: Patterns, predictors, and associations with marital satisfaction over time. *Developmental Psychology*, *54*(6), 1172–1185. https://doi.org/10.1037/dev0000491

Ledermann, T., Bodenmann, G., Rudaz, M., & Bradbury, T. N. (2010). Stress, communication, and marital quality in couples. *Journal of Family Relations*, *59*(April), 195–206. https://doi.org/10.1111/j.1741-3729.2010.00595.x

Levinger, G. (1976). A social psychological perspective on marital dissolution. *Journal of Social Issues*, *32*(1),21-47.

Li, T., & Fung, H. H. (2011). The Dynamic goal theory of marital satisfaction. *Review of General Psychology*, *15*(3), 246–254. https://doi.org/10.1037/a0024694

Li, X., Zhou, N., Cao, H., & Ju, X. (2018). Daily communication, conflict resolution, and marital quality in Chinese marriage: A three-wave, cross-lagged analysis. *Journal of Family Psychology*, *32*(6), 733–742.

Locke, H. J., & Wallace, K. M. (1959). Short marital adjustment and prediction tests : Their reliability and validity. *Marriage and Family Living*, 251–256.

Lwanga, S. K., & Lemeshow, S. (1991). *Sample size determination in health studies*. Geneva: World Health Organization.

Malouff, J. M., Thorsteinsson, E. B., Schutte, N. S., Bhullar, N., & Rooke, S. E. (2010). The Five-Factor Model of personality and relationship satisfaction of intimate partners: A meta-analysis. *Journal of Research in Personality*, *44*(1), 124–127.

https://doi.org/10.1016/j.jrp.2009.09.004

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. https://doi.org/10.1037/a0019481

Marshall, A. D., Jones, D. E., & Feinberg, M. E. (2011). Enduring vulnerabilities, relationship attributions, and couple conflict: An integrative model of the occurrence and frequency of intimate partner violence. *Journal of Family Psychology*, *25*(5), 709–718. https://doi.org/10.1037/a0025279

Martin, T. C., & Bumpass, L. L. (1989). Recent trends in marital disruption. Demography: Population Association of America, *26*(1), 37–51. https://doi.org/10.2307/2061492

Mcnulty, J. K., & Karney, B. R. (2001). Attributions in marriage: Integrating specific and global evaluations of a relationship. *Personality and social psychology bulletin*, *27*(8), 943–955.

Miller, G. E., & Bradbury, T. N. (1995). Refining the association between attributions and behaviour in marital interaction. *Journal of Family Psychology*, *9*(2), 196–201.

Mueller, B. U., Pabst, T., Osato, M., Asou, N., Johansen, L. M., Minden, M. D., … Tenen, D. G. (2002). Heterozygous PU.1 mutations are associated with acute myeloid leukemia. *Blood*, *100*(3), 998–1007. https://doi.org/10.1111/j.1741-3737.2010.00757.x

Mund, M., Finn, C., Hagemeyer, B., & Neyer, F. J. (2016). Understanding dynamic transactions between personality traits and partner relationships. *Current directions in psychological silence*, *25*(6), 411–416. https://doi.org/10.1177/0963721416659458

Nakonezny, P. A., & Denton, W. H. (2008). Marital relationships : A social exchange theory perspective. *The American Journal of Family Therapy*, *36*, 402–412. https://doi.org/10.1080/01926180701647264

Neff, L. A., & Karney, B. R. (2004). How does context affect intimate relationships ? Linking

external stress and cognitive processes within marriage. *Personality and Social Psychology

Bulletin*, *30*(2), 134–148. https://doi.org/10.1177/0146167203255984

Neff, L. A., & Karney, B. R. (2007). Stress crossover in newlywed marriage: A longitudinal and

dyadic perspective. *Journal of Marriage and Family*. https://doi.org/10.1111/j.1741-

3737.2007.00394.x

Norton, R. (1983). measuring marital quality: A critical look at the dependent variable. *Journal

of Marriage and the Family*, 141–151.

Pedro, J., Matos, P. M., Martins, M. V., & Costa, M. E. (2017). Marital adjustment in the context

of female breast cancer: A systematic review, (February 2017), 2019–2029.

https://doi.org/10.1002/pon.4432

Polenick, C. A., Zarit, S. H., Birditt, K. S., Bangerter, L. R., Seidel, A. J., & Fingerman, K. L.

(2017). Intergenerational support and marital satisfaction: Implications of beliefs about

helping aging parents. *Journal of Marriage and Family*, *79*(1), 131–146.

https://doi.org/10.1111/jomf.12334

Randall, A. K., & Bodenmann, G. (2009). The role of stress on close relationships and marital

satisfaction. *Clinical Psychology Review*, *29*(2), 105–115.

https://doi.org/10.1016/j.cpr.2008.10.004

Rehman, U. S., & Holtzworth-munroe, A. (2007). A Cross-cultural examination of the relation of

marital communication behaviour to marital satisfaction, *21*(4), 759–763.

https://doi.org/10.1037/0893-3200.21.4.759

Repetti, R. L. (1989). Effects of daily workload on subsequent behaviour during marital

interaction : The roles of social withdrawal and spouse support. *Journal of Personality and*

Social Psychology, *57*(4), 651–659.

Rogge, R. D., Bradbury, T. N., Hahlweg, K., Engl, J., & Thurmaier, F. (2006). Predicting marital

distress and dissolution : Refining the two-factor hypothesis. *Journal of Family Psychology*,

20(1), 156–159. https://doi.org/10.1037/0893-3200.20.1.156

Ross, C. E., Mirowsky, J., & Goldsteen, K. (1990). The impact of the family on health : The

decade in review. *Journal of Marriage and Family*, *52*(4), 1059–1078.

Rottmann, N., Hansen, D. G., Larsen, P. V., Nicolaisen, A., Flyger, H., Johansen, C., &

Hagedoorn, M. (2015). Dyadic coping within couples dealing with breast cancer : A

longitudinal, population-based study. *Health Psychology*, *34*(5), 486–495.

Sanford, K. (2005). Attributions and anger in early marriage : Wives' are event-dependent and

husbands' are schematic. *Journal of Family Psychology*, *19*(2), 180–188.

https://doi.org/10.1037/0893-3200.19.2.180

Sanford, K. (2006). Communication during marital conflict: When couples alter their appraisal,

they change their behaviour. *Journal of Family Psychology*, *20*(2), 256–265.

https://doi.org/10.1037/0893-3200.20.2.256

Sarason, I. G., Johnson, J. H., & Siegel, J. M. (1978). Assessing the impact of life changes:

Development of the life experiences survey. *Journal of Consulting and Clinical

Psychology*, *46*(5), 932–946.

Schneewind, K. A., & Gerhard, A. (2002). Relationship personality, conflict resolution, and

marital satisfaction in the first 5 years of marriage*. *Journal of Family Relations*, *51*(1), 63–

71.

Schramm, D. G. (2003). An assessment of marital satisfaction, marital adjustment, and

problematic areas during the first few months of marriage among a sample of newlyweds in

Utah. All graduate Theses and Dissertations.2740.https://digitalcommons.usu.edu/etd/2740

Smith, D. A., Breiding, M. J., & Papp, L. M. (2012). Depressive moods and marital happiness: Within-person synchrony, moderators, and meaning. *Journal of Family Psychology*, *26*(3), 338–347. https://doi.org/10.1037/a0028404

Solomon, B. C., & Jackson, J. J. (2014). Why do personality traits predict divorce ? Multiple pathways through satisfaction. *Personality Process and Individual Differences*, *106*(6), 978–996. https://doi.org/10.1037/a0036190

Spanier, G. B. (1976). Measuring dyadic adjustment: New scales for assessing the quality of marriage and similar dyads. *Journal of Marriage and the Family*, 38 (1), 15-28

Sullivan, K. T., Pasch, L. A., Johnson, M. D., & Bradbury, T. N. (2010). Social support, problem-solving, and the longitudinal course of newlywed marriage. *Journal of Personality and Social Psychology*, *98*(4), 631–644. https://doi.org/10.1037/a0017578

Sutton, T. E., Simons, L. G. S., Simons, R. L., & Cutrona, C. (2017). Psychological distress, couple interactions, and parenting : A dyadic analysis of African American couples. *Journal of Marriage and Family*, *79*(June), 850–864. https://doi.org/10.1111/jomf.12352

Tesser, A., & Beach, S. R. H. (1998). Life events, relationship quality, and depression : An investigation of judgment discontinuity in vivo. *Journal of Personality and Social Psychology*, *74*(1), 36–52.

Timmons, A. C., Arbel, R., & Margolin, G. (2017). Daily patterns of stress and conflict in couples : Associations with marital aggression and family-of-origin aggression, *31*(1), 93–104.

Trillingsgaard, T., Baucom, K. J. W., & Heyman, R. E. (2014). Predictors of change in relationship satisfaction during the transition to parenthood. *Family Relations*, *63*, 667–679.

https://doi.org/10.1111/fare.12089

Volling, B. L., Gonzalez, R., & Kuo, P. X. (2015). Patterns of marital relationship change across the transition from one child to two, *4*(3), 177–197.

Watson, D., Clark, L. A., & Harkness, A. R. (1994). Structures of personality and their relevance to psychopathology. *Journal of Abnormal Psychology*, *103*(I), 18–31.

Whisman, M. A. (2001). Marital adjustment and outcome following treatments for depression, *69*(1), 125–129.

Whisman, M. A., & Uebelacker, L. A. (2009). Prospective associations between marital discord and depressive symptoms in middle-aged and older adults. *Psychology and Aging*, *24*(1), 184–189. https://doi.org/10.1037/a0014759

Williamson, H. C., Ju, X., Bradbury, T. N., Karney, B. R., Fang, X., & Liu, X. (2012). Communication behaviour and relationship satisfaction among American and Chinese newlywed couples. *Journal of Family Psychology*, *26*(3), 308–315. https://doi.org/10.1037/a0027752

Williamson, H. C., Karney, B. R., & Bradbury, T. N. (2013). Financial strain and stressful life events predict newlyweds' negative communication independent of relationship satisfaction. *Journal of Family Psychology*, *27*(1), 65–75. https://doi.org/10.1037/a0031104

Woszidlo, A., & Segrin, C. (2013a). Direct and indirect effects of newlywed couples ' neuroticism and stressful life events on marital satisfaction through mutual problem-solving. *Journal of Marriage and Family Review*, *49*(6), 520–545. https://doi.org/10.1080/01494929.2013.772933

Woszidlo, A., & Segrin, C. (2013b). Negative affectivity and educational attainment as predictors of newlyweds problem-solving communication and marital quality. *Journal of*

Psychology: Interdisciplinary and Applied, *147*(1), 49–73.

https://doi.org/10.1080/00223980.2012.674069