

HAIGAZIAN UNIVERSITY

Courtship Length, Communication patterns and, Religiosity as Predictors of Marital Satisfaction
among a sample of Adults in Lebanon

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A Thesis submitted to the Faculty of Social and Behavioral Sciences in partial fulfillment of the
requirements for the Master of Art in Psychology – Emphasis: Clinical Psychology at Haigazian
University.

Beirut - Lebanon

December 2020

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Courtship Length, Communication patterns and, Religiosity as Predictors of Marital Satisfaction
of Adults in Lebanon

By Ayla Pasha

is accepted by the Graduate Thesis Committee as satisfying the thesis requirements for
the degree Master of Arts/ Clinical Psychology

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DEDICATION

I would like to dedicate this thesis to all the individuals who are curious enough to understand what makes a successful, healthy marriage. I hope that they will continue to move forward towards better well-being, partnership, happiness, and commitment in their marriages.

Acknowledgments

First, I would like to thank my parents who have always given me support and encouragement which has always pushed me to be and, do better.

Thank you to Helga Mokdad, not only a fellow colleague but a friend who was always there to bounce ideas, practise my thesis defense and proposal, debate prospective hypothesis and, aid not only in the emotional strain of my thesis but the 2020 year. You are a support system and constant ray of positivity which was severely needed throughout my thesis journey.

I would also like to thank my advisor Dr. Hanine Hout for accepting to work with me in spite of every unpredicted situation of 2020. Her prompt feedback, care and respect for her students, regular encouragement, constant support and, dedication to help, made the completion of this thesis and my graduation possible.

I thank Dr. Marwan Gharzeddine and Dr. Rana Zayek for their contribution and feedback in order to improve the outcome of the thesis.

Finally, I would like to thank my professors in Haigazian for truly providing the most supportive and warmest education environment I have ever experienced. Every professor ignited my love and passion for Psychology and for that I am truly grateful.

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Abstract

Although many studies have sought to investigate predictors of marital satisfaction, a majority of these studies have been done in the Western context (Alder, 2010; Marks, 2005; Rois, 2010). Therefore, the aim of the current study was to evaluate whether certain premarital and concurrent variables act as predictors of marital satisfaction in Lebanon. The predictor variables to be studied are: courtship length, communication patterns (the 4 Horseman of the Apocalypse theory) and, religiosity. The study was a quantitative survey design using a purposeful convenient sample consisting of 318 participants in heterosexual marriages lasting for more than one year and under 10 years. The questionnaire administered consisted of a demographic section, consent form, modified 4 Horseman of the Apocalypse questionnaire, Revised Intrinsic/Extrinsic Religious Orientation Scale (ROS) and the Quality Marital Index. It was hypothesized that religiosity and courtship length are positively correlated with marital satisfaction whereas negative communication patterns are negatively correlated with marital satisfaction. Results of the study showed that length of courtship, presence of the 4 horsemen of the apocalypse and religiosity were predictors of marital satisfaction.

Keywords: Marital Satisfaction, 4 Horseman of the Apocalypse, Religiosity, Courtship Length.

Courtship Length, Communication patterns and, Religiosity as Predictors of Marital Satisfaction among
a sample of Adults in Lebanon

Within the Arab culture marriage is considered to be "one of the most sacred traditions" (Al-Darmaki et al., 2014, p.2). Therefore it is inferred that every component of this "sacred tradition" has been examined excessively, including perhaps the most important characteristic: marital satisfaction. Although this topic has been heavily studied in the Western context (Alder, 2010; Marks, 2005; Rois, 2010) there is limited research pertaining to the Middle Eastern context. The definition of marriage in the western context is limited to a personal association between a man and a woman (Wimalasena, 2016). When comparing this definition to the Middle Eastern definition of marriage, there is a discrepancy. The Middle Eastern definition well exceeds the previous by stating that marriage is a social concept expressed as a "legal and religious legitimate relationship concerning shared goals, economic collaboration, intimacy, normative copulating, and reproducing" (Al-Othman, 2012, p. 217). A main difference is that the latter definition insinuates that marriage is a religiously required social union that joins two families, resulting in kinship ties and community belonging (Al-Darmaki et al., 2014) while the former does not.

Additionally, in the Middle Eastern cultural context marriage is frequently thought to be a religious responsibility. Subsequently it acts as a moral defense that works to fill the needs of society (Alqashan, 2008; Lev-Wiesel & Al-Krenawi, 1999). Following this mindset, in both Islam and Christianity, sex before marriage or having children out of wedlock is considered "haram" or a sin and thus, marriage is the solution. Thus, as the very essence of the description of marriage is inconsistent between these two contexts, it is of importance to study this topic in the Arab context. Part of the purpose of the current study was to evaluate if the variable of religiosity can predict marital satisfaction in Lebanon.

As seen above, the Middle Eastern definition of marriage is closely intertwined with religious undertones. It is important to provide some insight as to how exactly these undertones influence marital satisfaction. The purpose to evaluate this relationship is derived from two underlining components. First, there is an assumption that couples who are higher on religiosity and, practice together, use this time as "quality" time (Curtis and Ellison, 2002). For instance, in Islam couples would pray 5 times a day together and read the Quran together. In Christianity, couples who are high on levels of religiosity would attend church together which, is also considered quality and bonding time (Curtis & Ellison, 2002). Moreover, couples who are high in religiosity would also have a religious community that they belong to which acts as a support system for them individually and, most importantly as a couple (Curtis & Ellison, 2002).

A study in Iran sought to assess this very notion. The study examined the association amongst married couples' religiosity and its impact on their level of marital satisfaction (Ahmadi et al., 2008). Results showed that couples who were higher on religiosity also had a higher rate of marital satisfaction (Ahmadi et al., 2008). This study is supported by findings that conclude that religious spouses are more likely to experience stable and happy marriages, less prone to have occurrence's conflict and violence and, are less likely to divorce (Curtis & Ellison, 2002). These results are consistent throughout numerous different religions for instance: Muslims, Mormons, Christians, and Jewish (Marks, 2005).

Furthermore, given the plural nature of the Lebanese social fabric (18 registered religious sects, at least 3 ethnic groups) results could show a large discrepancy of religiosity which would provide a good array of results in regard to measures of marital satisfaction. For instance, there could be a spectrum ranging from low to high religiosity (Haykal, 2014). Additionally, it is not farfetched to infer that in relation with other Arab and Middle Eastern Arab countries, Lebanon as a whole is not as conservative in terms of traditions and practices (Haykal, 2014). Due to this, unlike many regional

counterparts, courtship in Lebanon is believed to be among the more "flexible" (World Population, 2019). For instance, Tinder (a social media dating site used in Lebanon) is blocked in the UAE (Writer, n.d.) and, in KSA it is illegal for unmarried individuals of opposite sex's to be in the same car (considered normal in Lebanon). This flexibility does have its limits, especially in regards to marital norms. For instance, interfaith couples or those who would just prefer a civil marriage face challenges in Lebanon because, the government only recognises civil marriages performed and registered outside Lebanon (Jefferson, 2006; Haykal, 2014). Even then, the process of registration in Lebanon is a lengthy process. Although there is a push to get civil marriage approved in Lebanon there is a vast number of religious authorities (15) and sects (18) against it. This has resulted in thousands of Lebanese couples to get married in neighbouring countries such as Greece, Cyprus and Turkey (Haykal, 2014).

Another component of this "flexibility" in Lebanon that is stated above offers different components of dating, one is courtship length, which is the second variable proposed to be studied in this study. A study comparing dating periods offers some insight as to what degrees courtship length may have on marriage (Alder, 2010). While evaluating the correlation between these two variables, Adler concluded the association between marital satisfaction and courtship length was not statistically significant (Alder, 2010). Yet, another study found that the likelihood for divorce drops by about 20% for couples who have been together for one to two years before a proposal (Francis-Tan & Mialon, 2015). Similarly, dating for three or more years has been found to decrease the likelihood of divorce even further to about 50 percent (Francis-Tan & Mialon, 2015). As it is not possible to infer that divorces are due to marital satisfaction or vice versa solely, further research is needed to examine the link between time spent dating and marital satisfaction.

For clarity, it is not primarily courtship length prior to getting married (or engaged) that may affect marital satisfaction but, components and factors that result from dating for an extended period of

time. For instance, courtship period has been shown to be the time when couples negotiate roles, collect information, and obtain advice in their relationship (Barelds & Barelds-Dijkstra, 2007). Moreover, it has been shown that as courtship length increases so does the probability that couples will have similar personality traits and views which, is correlated with greater marital satisfaction (Barelds & Barelds-Dijkstra, 2007). Another component which is of great interest to the current study is communication patterns between couples which have been shown to be adjusted with hard work and time and eventually affecting the couple relationship positively (Gottman, 2006).

Gottman assessed negative communication patterns in couples and their impact on marital satisfaction (Gottman, 2001). He found that within negative communication, there are four behaviors that are detrimental to the communication of couples and called them the "Four Horsemen of the Apocalypse" moreover, they are able to predict marital satisfaction and divorce with 93% accuracy (Gottman, 1999). Gottman also stated that although these factors of communication can be fixed it takes both time and effort (Gottman, 2006). The "Four Horsemen" consist of criticism, defensiveness, contempt, and stonewalling. Criticism is defined as statements which indicates that something is globally wrong with one's partner (Gottman, 1999). Defensive statements are those that defend oneself from a perceived attack. Contempt is any statement or nonverbal behavior that puts oneself on a higher plane than one's partner. Finally, stonewalling is withdrawing from the interaction. Among all the horsemen, Criticism and Contempt were the largest predictors of relationship dissatisfaction (Lute, 2015 & Murphy, 2011 & Gottman, 1999).

All these components of communication could cause conflict later on in marriage if they are new (or come as a surprise) and thus, may increase marital dissatisfaction (Stanley, Markham, & Whitton, 2002). Even the most successful relationships have conflict but Lute's study showed it's not the presence of conflict but, how it's managed and communicated that predicts the success of a relationship (Lute,

2015). Thus, knowing how to communicate effectively with one's partner prior to getting married may alter future fights and issues faced (Gottman, 2006). This is due to the premise that just by being able to identify the Four Horsemen present in a couple's conflict discussions is a necessary first step to eliminating them but, being aware of their presence is not sufficient enough for change. To diminish these destructive communication patterns, they must be substituted with healthy, productive ones (Gottman, 2006). This comes with time and practices and thus is related to courtship length.

A social aspect which is not exclusive to Lebanon but is found in abundance that can influence both courtship duration and communication is the strong sense of patriarchy and gender traditions which is passed down by generations (Hamieh & Usta, 2011). When evaluating these social aspects of the Lebanese population results show that parents groom male adolescents through reinforcement to be strong as adults and to control and protect women (Hamieh & Usta, 2011). In comparison, females are praised by their families if they aid in undertaking household tasks, are obedient, and are beautiful (Hamieh & Usta, 2011).

When looking at the principles in which men consider to be paramount for a "good marriage" they consider respect, obedience, and marital obligation from their wives as non-negotiable. Thus, does this instilled gender inequality that is considered both traditional and social, support negative communication? Statistics derived from the United Nations Economic and Social Commission for Western Asia shows that in regard to the divorce rate in Lebanon there has been an increase of 55 percent between the years of 2000 and 2013. With the newer generation of females seeking equality and the rise of feminism, they may not find traditional communication patterns suitable as they rely on traditionalized gendered roles which present an unequal power dynamic within the relationship, where men supersede women (Moughalian & Ammar, 2019). Female empowerment and the desire to move away from stereotyped gendered roles, may be a reason to explain the recent divorce trend as these types

of institutionalized marriages are no longer desirable. If so, it can be expected that higher levels of negative communication within couples may be prevalent thus, resulting in higher levels of marital dissatisfaction. Therefore, as gendered paradigms begin to shift, the traditional characteristics of a religious Lebanese marriage can be in conflict, especially if the couples do not share the same vision. That said, the examination of courtship length and communication styles prove to be valuable indicators of a successful union.

Rationale

Although studies have been conducted to assess how the length of courtship and level of religiosity affect marital satisfaction, according to my knowledge there has not been any studies in Lebanon that has looked at these particular factors. A recent MA thesis by Rosemary Charbetji (2019) done in Haigazian University evaluated stress and marital satisfaction. The researcher proposed that future studies of marital satisfaction should factor in communication and religiosity effects.

As indicated above, traits of negative communication patterns seem to overlap with the reinforced traditional gender norms that stem through patriarchy in Lebanon (Hamieh & Usta, 2011). Thus, attempting to study if Gottman's theory is applicable to the Lebanese population (which as to my knowledge has not been studied) may be beneficial as these communication patterns have been shown to effect marital satisfaction. For instance, females in relationships may be more avoidant and submissive in arguments when dealing with their partner because this is how they have learned to be due to cultural standards (Hamieh & Usta, 2011). As stated above, although this may have been the traditional norm in previous generations, many of the current generation now seek for equality and support some notion of feminism and thus, their patriarchal views are in direct conflict (Moughalian & Ammar, 2019.)

The variable of courtship length was also an important factor to look at because studies have shown that with an increase period of dating length, couples know how to better and effectively communicate with one another which will impact marital satisfaction (Gottman, 2006). Positive communication is perhaps among the most important factors in any relationship and thus, knowing how and if partners can properly communicate in an array of different situations is pivotal. Thus, with the high levels of patriarchy in Lebanon we can predict that we will see an increased risk of negative communication patterns which will affect marital satisfaction (Gottman, 1999). Moreover, Gottman has stated that negative patterns can be altered by time and effort (Gottman, 2006). At the same time, the variable of courtship length has yielded different, inconclusive results when correlated to marital satisfaction. Thus, testing the variable of courtship length in Lebanon was very important and offered some insight of marital satisfaction.

Furthermore, Lebanon is among the most heterogeneous (in terms of sects) countries in the Middle East region (World Population, 2019) allowing for more freedom in religious practicing and dating; thus, one would assume that it is a suitable country to test out how the variable of religiosity would predict marital satisfaction. Although similar studies have been conducted in Iran, UAE and, Saudi Arabia to test variables of courtship length and religiosity as predictors of marital satisfaction (Ahmadi et al., 2008 & Al-Darmaki et al., 2014 & Sorokowski et al., 2016) these countries are largely homogeneous in religion and practices and thus are different from the mix that Lebanon has (World Population, 2019). Thus, these results may not be generalizable to Lebanon. The underlined premises of why religiosity is important and may have an effect on marital satisfaction is the methods in which people who are high on religiosity and practice with spouses and the community support these practices offer (Ahmadi et al., 2008). For instance, religious spouses are less prone to have occurrence's conflict and violence and, are less likely to divorce (Curtis and Ellison, 2002).

Research Questions

Based on the above background and rationale of the study, the following research questions in regards to the Lebanese population were examined:

- 1) Is there a predictive relationship between courtship length and marital satisfaction?
- 2) Do different subcategories of religiosity predict marital satisfaction?
- 3) Do different communication patterns predict the level of marital satisfaction?

Eastern context?

Significance

There is not a lot of research or practicing clinicians that aid in couple therapy in Lebanon because light has not been shed on this issue. As stated above, marriage is thought to be "one of the most sacred traditions" (Al-Darmaki et al., 2014, page 2) and thus, discussing marital problems of dissatisfaction is considered taboo. Yet, with the strong patriarchy and strict gender roles between sexes, there is an inequality issue in couples that foster negative communication which has been shown to be positively correlated to marital dissatisfaction.

Theoretically, this study helped to promote the understanding of predictors of marital satisfaction and in what way negative communication, courtship length and religiosity are related to marital satisfaction. Therefore, research evaluating predictors of marital satisfaction can be of great value to the Lebanese community as an educational tool. For instance, Catholics, Liberal Protestants and Liberal Jewish individuals are required to attend premarital counseling for months prior to marriage. The results of this study can be used in situations like this to help pastors and couples understand and work on variables related to marital satisfaction, such as communication skills.

As stated above, Lebanon has an influx of divorces within the last decade (UNESCWA, 2016) yet, as to my knowledge there has not been a study evaluating why. The current study hoped to understand the factors related to marital satisfaction and hopefully allow for future research to look at factors related to divorce (marital satisfaction may be a factor).

Furthermore, Lebanon is a country that still stigmatizes divorce. A study by Shehadeh looked to evaluate the “fifteen Lebanese personal-status codes” in all their categories of marriage, divorce, guardianship, and custody of children, as well as inheritance. The study concluded that “once a woman gets married, she loses most of her natural and legal rights and the marriage contract emerges as a contract between two unequal parties, the husband who is head of the family and the wife who is his ward.” Laws, which are a reflection of society stigmatizes women after divorce (Shehadeh, 2010). The study showed that practices as a mahr, guardianship and custody of children, and the waiting period called Cidda are borrowed from the shariia. This adherence to the shariia could be attributed to a variety of reasons, including custom, acquired over centuries of Islamic rule, and fear of alienating the Lebanese Muslim community. Yet such practices as requiring a dowry (baiina) of the bride, or requiring a wife or her family to help her husband financially, or requiring a wife separated from her husband to reimburse him a monthly sum equivalent to the salary of a maid run counter to the shariia and Christian dogma. The only explanation extant is the direct influence of French law, which at the time was full of instances of discrimination against women (Shehadeh, 2010).”

Results of this study are the first of its kind to allow couples to see "red flags" in their relationships and thus this study can aid in decreasing this trend. Thus, by educating the younger population of individuals getting married on these factors and predictors, better understand the decision and reality of marriage. Moreover, by better understanding the risks and problems that are faced within

Lebanese couples, clinicians can further educate themselves and pinpoint ways to better treat couples and see the threats these dominant problems pose in the Lebanese culture. Perhaps, a better understanding of these variables as well as how to utilize them in able improve couples' outlooks on their marriages would serve to encourage clinicians to practice couple therapy.

Chapter 2

Literature Review

The following chapter will look at previous studies related to marital satisfaction done in Western and Middle Eastern cultures. The first studies we will evaluate are those related to different types of communication and their effects on marital satisfaction. In specific, those which sought to study the 4 horsemen of the Apocalypse (Gottman, 1994). Afterwards, we will focus on courtship duration which, is a variable that has conflicting findings in previous research. Due to these conflicting findings it is interesting to see what results pertain to the Middle Eastern, Lebanese context. Finally, the last set of studies to be examined pertains to religiosity in relation to marital satisfaction. As this variable has been heavily explored in both Western and Middle Eastern (but not in regards to marital satisfaction) both types of contextual studies are discussed along with differences between internal and external religiosity.

Overview of the 4 Horseman of the Apocalypse

The driving factor of why this theory was beneficial to the current study is due to the results derived from Gottman's (1994) extensive 30-year research with married couples. The overall aim was to explore which variables (if any) predict satisfaction and divorce. Results indicated that Dr. Gottman could predict with 90% accuracy if a marriage would fail or succeed based on communication traits known as The Four Horsemen of the Apocalypse— criticism, contempt, defensiveness, and stonewalling—in addition to a lack of effective repair mechanisms and a poor ratio of positive to negative interaction, to predict lower marital satisfaction and divorce (Gottman, 1994 & Murphy, 2011). Over the years various of researchers have shown that the methods of his predictions are valid (Lute, 2015; Murphy, 2011; Murphy, 2009; Walker, 2005). Furthermore, Gottman realized that it is not all negative communication behaviors in general that are able to predict satisfaction but, there are some which are superiorly destructive to relationships.

Gottman (1994) defines criticism as blaming or insulting a partner globally on his or her personality rather than addressing a specific action or fault. Criticism is different from complaining, and usually involves “you never” or “you always” comments (Gottman, 1994, p. 75). According to Gottman (1994), contempt usually involves talking down or negatively about one’s partner and includes insulting, mocking, name calling, embarrassing or humiliating (especially damaging in public settings), and using non-verbal communication such as eyerolling (Gottman, 1994). Gottman and Levenson (1992) define defensiveness as failing to take responsibility, making excuses, and “negative mind reading” (p. 224) in which a partner makes “assumptions about one’s partners private feelings, behavior, or motives” (Gottman, 1994, p. 86). Cross-complaining—responding to a complaint with a complaint—and turning a partner’s attack back on him or her are also defensive behaviors, as are whining and ignoring the other partner’s side while constantly stating his or her own side (Gottman, 1994). Gottman (1994) explains stonewalling as withdrawing and being unresponsive, verbally and non-verbally, when your partner is speaking or making an argument.

Communication and Relationship Satisfaction

Communication style, in specific those that are utilized during couple conflict, have been strongly associated with marital satisfaction (Lavner & Bradbury, 2016). Dissatisfied couples display more negative and fewer positive communication approaches during conflict resolution in comparison to satisfied couples (Carroll, Hill, Yorgason, Larson, & Sandberg, 2013; Lavner & Bradbury, 2016; Ledermann, Bodenmann, Rudaz, & Bradbury, 2010).

Furthermore, when evaluating research that has studied communication behaviors it has been found that most designs are focused on one-time point to predict later marital satisfaction (Lavner & Bradbury, 2016). To determine if more effective communication style leads to higher quality of martial

satisfaction, longitudinal data of communication behaviors at multiple time periods is needed to show that changes in communication would predict changes in satisfaction over time (as in Gottman's original theory).

Lavner and Bradbury (2016) sought to study newlyweds communication in an attempt to predict marital satisfaction. Furthermore, the study collected data four times over the course of the first three years of couples' marriages and assessed marital satisfaction (Lavner & Bradbury, 2016). Results showed that couples who used more positive and effective communication methods were higher on marital satisfaction in comparison to couples who were dissatisfied. Other longitudinal studies supported the findings of this study (Byers 2005 & Smith et al. 2008). Concluding results of Byers (2005) was that there is a positive correlation between destructive communication patterns and relationship dissatisfaction. In contrast, successful constructive communication was positively correlated relationship satisfaction (Smith et al., 2008).

In a one-year longitudinal study studying the correlation between conflict communication and relationship satisfaction, results indicated that gender plays a significant moderating role (Smith et al., 2008). When the female in the relationship used stonewalling communication styles, there was a decrease in both her own and her husband's marital satisfaction levels (Smith et al., 2008). In conjuncture to these findings, when males used stonewalling or avoidant communication style there was no detrimental effect on marital satisfaction (Smith et al., 2008).

Widening the scope of the effects of communication patterns on a couple's marital satisfaction, Lemmens et al. (2007) looked to evaluate psychological damage inflicted due to negative communication patterns. Couples who reported that they lower mutual constructive communication and higher mutual avoidance communication tended to be more clinically depressed in relation to their "healthy" counterparts (Samkar, 2010). Moreover, when studying depression in one or both spouses

Harper and Sandberg (2009) concluded that depression leads a further decline in healthy or positive communication when compared to non-depressed spouses.

As a majority of these findings were done in a western context, Christensen et al. (2006) undertook a cross-cultural study to see if these results of negative communication on marital satisfaction were generalizable to different contexts and cultural groups. The study was carried out in Italy, Taiwan, Brazil, and the United States with a total of 363 participants. Findings showed similar results to previous research and thus concluded that good communication both increased and improved relationship satisfaction. Furthermore, constructive communication was a predictor among all cross-cultured participants (Christensen et al., 2006).

Gottman's theory to similar Lebanese contexts

As to my knowledge, Gottman's theory has not been tested within the Lebanese context yet, theories with similar methodology has been shown to be generalizable to different contexts (Christensen et al., 2006). Furthermore, there have been studies done in the Middle East which have used Gottman's theory for couple therapy and, results have shown to be positive and significant (Rajaei et al., 2019; Lahiji et al., 2016; Davoodvandi et al., 2018; Mahmoudi, et al., 2015). When looking into research done in contexts similar to Lebanon (Turkey, Iran, Pakistan), results indicate that negative communication patterns lead to lower levels of marital satisfaction (Madahi et al., 2013; Habibi et al., 2018; Sakmar, 2010; Amiri, 2011; Sgeci & Gencoz, 2006). Although Gottman's theory has not been used in these Middle Eastern contexts, all of these studies do in fact measure similar if not the same traits of communication used in his theory (Madahi et al., 2013; Habibi et al., 2018; Sakmar, 2010; Amiri, 2011; Sgeci & Gencoz, 2006).

For instance, Sakmar (2010) studied the predictive role of communication on relationship satisfaction. Results concluded that higher relationship satisfaction was correlated with lower levels of destructive communication and higher levels of constructive communication in relationship statuses. These results are similar if not the same to Gottman's theory where a higher level of the horseman presence indicate lower levels of marital satisfaction while, lesser presence levels indicate higher levels (Gottman, 1994; Gottman, 1999; Gottman, 2005). The communication patterns measured in Sakmar's (2010) study were: demand-withdraw communication, demand/withdraw role and mutual constructive communication. Demand-withdrawal is when which one partner attempts to discuss a problem, while the other avoids the issue or ends the discussion this is similar to Gottman's stonewalling (Gottman, 1994). Demand/withdrawal is when one spouse lacks power in the relationship which is similar to Gottman's criticism (Gottman, 1994).

Al-Othman (2012) studied the couple communication of 1136 participants in Sharja Dubai. Results showed that communication was found to be a strong predictor of marital happiness. These results are explained by the premises that communication is the way humans create and share verbal and non-verbal meaning thus, if a close relationship is to be enjoyed then communication is an essential skill must be mastered (Al-Othman, 2012). Parallel results by Olson and Olson (2000) show that communication is an essential factor in maintaining a satisfying relationship and, positive communication is critical for both compromise and constructive conflict resolution and, developing realistic expectations (Olson & Olson, 2000). Thus, couple communication is as a cross – cultural predictor of marital happiness (Al-Othman, 2012).

A study in Iran sought to examine successfulness of couple therapy established from the Gottman method attempting reduce both couple conflict and instability among Iranian married individuals dealing with conflicts (Rajaei et al., 2019). This method focused on improving verbal-

nonverbal communication skills while also working towards decreasing emotional divorce (Rajaei et al., 2019). In specific, researchers focused on communication related to the four horsemen of the apocalypse while introducing therapy. Results indicated that the Gottman method was effective in enhancing couples verbal and nonverbal communication skills and reduced emotional divorce (Rajaei et al., 2019). Furthermore, this method was significant in reducing marital conflict and instability while improving marital and life satisfaction, adjustment and, physical and mental health. Findings concluded that there were positive and healthier changes in the positive interactions, emotional relationships, intimacy and, effective communication. These results are explained by Gottman's principles focusing on factors leading to marital success unlike other methods which focus on factors leading to marital dissolution (Lahiji et al., 2016). These findings support Davoodvandi et al., (2018) study which concluded that Gottman couple therapy approach was effective on improving marital satisfaction, marital adjustment and couple's intimacy (Davoodvandi et al., 2018) and are consistent with other studies (Shapiro, Gottman & Fink, 2015; Gottman, Coan, Carrere, Swanson, 1998; Babcock, Gottman, Ryan & Gottman, 2013; Gottman, 1994; Mahmoudi, et al., 2015; and Moharrami, 2013).

4 Horseman of the Apocalypse and Marital Satisfaction

There is little research relating criticism to marital satisfaction, besides Gottman's (1994) finding that it is a predictor of divorce and relationship dissatisfaction when used by the wife. Criticism, is the first horseman and are statements which indicates something is globally wrong with one's partner (Gottman, 1999). These statements are perceived as global problems because, they frequently begin with "you always" or "you never." To clarify, Gottman says that marital outcomes are not predicted from the presence of complaints (which are "normal" in any relationship) but, from the addition of words like

“always” or “never” which turns complains into criticism. Murphy (2009) studied individuals who were dating and did not find a significant relationship between criticism and relationship satisfaction.

Contrary to these findings, in Lutes (2015) study and Murphy’s (2011) study which both assessed criticism and relationship dissatisfaction, there was an effect and thus, validated results by Gottman’s previous work (Gottman 1994; Gottman 1999; Gottman 2005). To further this point, Gottman specifies that expressing displeasure within the relationship is both functional and healthy and thus, should not be stopped due to fear of negatively affecting one’s relationship (Gottman, 1999). Instead, couples should attempt to avoid or reduce criticism by making complaints free of blame and, focus on expressing a specific (not global) concern.

The second Horsemen commonly arises in reaction to criticism is, is defensiveness. Gottman definition of defensiveness is an effort to defend oneself from an apparent attack (Gottman, 1999) that occurs when confronted with a complaint. Defensiveness does not only include flipping the argument but also engaging in actions such as: counterattacks, shutting down and, denial. The self-affirmation theory states that people become defensive when their core evaluation of the self is challenged by an external threat (Sherman & Cohen, 2006). The individual is then placed in a state of alarm and is motivated to restore a positive sense of self which is accomplished by participating in these behaviors. Defensive statements are alarming in relationships because they deny any responsibility for the problem and instead shifts blame the other individual and “flip” the argument. Thus, an increase in defensive communication is correlated with higher levels of relationship dissatisfaction (Lute, 2015; Murphy, 2011; Murphy, 2009). Once again, Gottman studied how battle defensiveness. His studies show that defensiveness is combated by training spouses to acknowledge their own responsibility in creating problems. Moreover, research shows individuals are more willing to accept accountability for actions

only if their self-worth is boosted first which is another way to target reducing defensiveness (Sherman & Cohen, 2006).

The third Horsemen is contempt, which is defined as “any statement or nonverbal behavior that puts oneself on a higher plane than one’s partner” (Gottman, 1999). An example of the most used form of contempt is mockery which has a magnified effect when done in public. Ekman, Schwartz, and Friesen (1978) showed that contempt has a universal facial expression which is seen across multiple cultures and occurs when muscles pulls on the corners of the lip to the side which cause cheek dimples. In addition to this facial expression, eye rolls or glancing upwards is usually supplementary. This expression is perhaps the most damaging component to individuals within the marriage and the marital couple in general (Gottman, 1994). These same findings were later validated through the use of self-report measures on contempt and relationship satisfaction (Lute, 2015; Murphy, 2009). Results showed that contempt is significantly correlated with relationship satisfaction. Moreover, it is not only individuals who are subjected to contempt by their partners but, also those who engage in contemptuous communication patterns have lower relationship satisfaction (Murphy, 2011).

The final Horsemen is stonewalling, which is withdrawing from the interaction, in specific conflict situations (1999). An example of stonewalling that a majority of couples with this horseman face is that when conflict occurs, a partner leaves the room and thus ends the communication of said problem. A “healthy” way to deal with conflict is that the listener gives indication that they are listening and understanding the points of the speaker. This is conveyed by eye contact, mirroring, head nodding, expressing concern and other cues. Instead of doing any of these, individuals who do this may not react to the speaker, do not respond (or barely) to anything being said and, have no facial expressions.

Thus, it often seems that the content or concerns of the speaker is not important, of no concern to the listener, not worth the effort or, is of no interest. These feelings overtime have a grave effect on the

speaker. When comparing sexes men are more likely to stonewall than women (Gottman, 1994).

Murphy (2009 & 2011) validated these findings and found stonewalling significantly correlated to dating satisfaction.

Moreover, Murphy (2011) has found that even the individual who undertakes the stonewalling behavior reports lower levels of relationship satisfaction (Murphy, 2011). These findings were also validated later on in Lute's (2015) study. A method Gottman proposes to combat this horseman is to allow couples to take breaks as needed in arguments (not too long, around 20 minutes) as needed which will prevent or minimizing components of stonewalling.

Among these findings, Gottman also stated that having these components of communication are not the end of a marriage. He stated that happy and successful marriages do in fact have criticism, defensiveness, and stonewalling yet, they are less frequent (horsemen are outnumbered by positive interaction ration that is minimum 5:1 positive-to-negative) and often come hand in hand with successful repair attempts (which comes with time and effort) (Gottman, 1999) but contempt was not included in his findings (stable, successful relationships have essentially no contempt) (Gottman, 1999.) When treating couples with contempt in their relationship, it should be treated as a form of psychological abuse and thus, the aim of intervention would be to completely remove it from a couple's communication dynamic (Gottman, 2006). Hence, we can see exactly to what degree these communication patterns have on a relationship. Therefore, although some of these horsemen are not necessarily detrimental to a marriage, the intervention should focus on fixing all these components but focus predominantly on criticism and contempt.

Lute (2015) validated the findings of Gottman from (1999) and showed the four communication behaviors (stonewalling, contempt, criticism and defensiveness) do significantly negatively affect couple satisfaction (Lute, 2015). Moreover, further validating Gottman (1999) initial findings, a multiple linear

regression analysis by Lute (2015) supported that criticism and contempt are substantial predictors of relationship satisfaction with contempt being the most significant. Thus, in conclusion the findings drawn by Lute (2015) and Murphy (2011) run parallel to Gottman's (1999) in terms of the 4 Horseman and effect on relationship satisfaction.

Therefore, as stated above, there are methods of intervention to repair communication patterns within couple communication that is derived from both hard work and effort. These patterns of communication very rarely change on their own and thus require intervention. Therefore, using pre-marital communication (in specific measuring the presence of the 4 horseman) as a predictor of marital satisfaction is beneficial and can yield insight into future studies.

Courtship Length and Marital Satisfaction

Overview of processes in courtship length

The courtship period is a time when couples negotiate roles, collect information, and obtain advice in their relationship (Barelds & Barelds-Dijkstra, 2007). Studies have shown that the longer a couple courts, the more likely they have similar personality traits and views which is correlated with greater marital satisfaction (Barelds & Barelds-Dijkstra, 2007). These results are supported to findings of Bonds-Raacke (2008) who found that couples who partook in longer courtships were comparable in decision making while, those who dated for less time were not. Those who did not achieve similar styles of decision making either did not progress into marriage or, moved on to unsuccessfully marriages (Bonds-Raacke, 2008). In another study Knoblock and DonovanKicken (2006) found that as courtship length increases, couples enter a time of higher stress and discord. If they are able to negotiate roles and expectations, they are able to minimize stress and problems in their relationship and continue their relationship. If there is a chance that a couple did not undertake this step during the courtship period

then it will happen an extended chance to court did not happen, then this process occurs after marriage which leads and increase in marital dissatisfaction and may lead to divorce (Knoblock & Donovan, 2006).

Connecting Courtship Length to Marital Satisfaction

Hansen (2006) conducted a study involving 952 participants and found that the longer a couple courted for prior to marriage, the more satisfied they were with their marriage and less likely they were to get a divorce. In support of these findings, another study found that the likelihood for divorce drops by about 20% for couples who have been together for one to two years before a proposal (Francis-Tan & Mialon, 2015). Similarly, dating for three or more years has been found to decrease the likelihood of divorce even further to about 50 percent (Francis-Tan & Mialon, 2015). This trend between relationship duration and marital satisfaction is also seen later on in marriage: as years married increase, so does reported levels of marital satisfaction (Allendorf & Ghimire, 2013). For instance, in many cases couples with a minimum of 10 years of marriage were found to be more satisfied in their marriages when comparison to those who were married for shorter periods of time (Zainah et al., 2012;). This may be due to couples developing high levels of cohesion in marriage which aids them in: negotiate difficult periods of adjustment and, developing an increase of flexibility which aids in individuals being happy and satisfied with their marriage (Olson, Russell, & Sprenkle, 1983). Thus, as partners develop cohesion over time, marital satisfaction increases (Bulgan, Kemer & Yıldız, 2018). This developing cohesion may start during the dating period and thus, may be the reason courtship length may be a predictor of marital satisfaction.

Contrary to these results, Adler (2010) sought to evaluate courtship length, age of marriage and, education as predictors of marital satisfaction. The study used survey results from 60 participants (40

women, 20 men). Results from the study showed that age of marriage, education level, and courtship length were not significantly correlated with marital satisfaction. What was significant was that as engagement period increases, marital adjustment decreases (Adler, 2010). Since the study involved a small sample size, small effects would not be accounted for and could thus, explain results.

As seen above Adler's results (2010) directly contradict that of Hansen (2006) and Francis-Tan & Mialon (2015). A possibly to the rationale behind these disparities of results could be due to sample sizes. The studies who showed a correlation between courtship length and satisfaction used large samples (Over 600) while those who stated no significant used sample sizes less than 100. Thus, results could be due to not having a large enough sample size and thus, a small or medium effect not being noticed or picked up by the study.

Religiosity and Marital Satisfaction

Overview of Religiosity

Various studies conducted in the Arab World and the Middle East show that the greatest influence shaping individuals' perspectives on different social matters is derived from religion (Hamza, 2010 & Ahmadi et al., 2008 & Samad, 2013). These social matters include (but are not limited to): premarital relations, moral and legal values of what is right or wrong, organ donations, choices of consumption based on dietary preferences or prohibitions, and impacting life experiences such as marriage ceremonies, divorce, and funeral rites and services (Samad, 2013). Studies have also shown that long-term perspective and meaning to marriage stems from religious practices (Lambert & Dollahite, 2008; Weigel et al., 12 2006). Religiosity is defined as "the degree of an individual's commitment and adherence to their religion's values and beliefs, their effect on a person's day-to-day

activities” (Patel, 2012 p. 2). Furthermore, it is the degree in which an individual maintains and follows these values and ideals (Samad, 2013; Hazma, 2010).

Religiosity can be divided into two types: Extrinsic and Intrinsic. Furthermore, extrinsic orientation is usually divided into two subcategories: extrinsic social and extrinsic personal. Extrinsic personal orientation when an individual uses religion as a means of comfort while extrinsic social orientation is when religion is used for social gain (Kirkpatrick, 1989). Intrinsic religiosity is focused on a personal relationship with a higher power and is deeply personal to the individual (Allport, 1966; Allport & Ross, 1967; Botto, 2000). The sections below provide more information on the differences between the two orientations. Studies show that there is a positive correlation between religiosity and marital satisfaction strongest evidence being a positive correlation between intrinsic religiosity and marital satisfaction. For the purpose of this study we will be using the Revised Intrinsic/Extrinsic Religious Orientation Scale (ROS) which has strong psychometric properties and is considered the best measurement tool of religiosity (Judd, 2009) and measures both intrinsic (I) and extrinsic religiousness (E).

Allport and Ross’s (1967) Theory of Intrinsic and Extrinsic Religion

Sociologists define religion as “a set of shared beliefs and rituals that people use to transcend the material world and give meaning to important aspects of their lives” (Coakley, 2007, p. 530). Allport and Ross’s (1967) Theory states there are two motivations for religion. The first motivator is for the purpose of serve the believer (extrinsic religion). Research shows that these individuals are more prejudiced toward others because they aim to preserve social status and support (Allport & Ross, 1967). The second (intrinsic) is when the believer is to serve the religion and is motivated to live out their religion in every aspect of their life (Carson, 2017) studies show that these individuals are

compassionate, humble, and loving toward others (Allport & Ross, 1967). Thus, the theory states that a person's behavior is heavily reliant on their religious orientations or their motivations to serve their religion (Allport & Ross, 1967).

The theory works when studying marital satisfaction as, religious orientation influences behavior and how individuals will interpret situations (Clark et al, 2019). In their marriage, intrinsically religious individuals will behave in a way that will glorify God and religious teachings. Intrinsically religious individuals may use positive coping such as positive appraisals and see stressful events and conflicts as a way to bring glory to God no matter the outcome (Maltby & Day, 2003). In comparison, extrinsic individuals will use religion in order to accomplish their self-seeking goals (Brimhall & Butler, 2007). They may perceive stressful situations or conflict as a threat because they are not focused on a higher power but instead on the consequences of failure (Maltby & Day, 2003).

Orientation is still important to consider as religion has been found to influence individuals differently (Clark, 2019). Intrinsically religious individuals see marriage as both a privilege and, a method to glorifying God (Brimhall & Butler, 2007). This perception allows the individuals to focus on what they can control which alleviates the pressure as they have someone to rely on (Brimhall & Butler, 2007; Brimhall & Butler, 2007). Religious individuals are able to keep situations in perspective and they know that there is a higher power or God they can turn to if the situation becomes difficult to handle (Maranise, 2013; Brimhall & Butler, 2007).

Studies have shown that religion is a helpful coping mechanism even though this may not be the original intention. Religion provides a purpose as individuals use their (and consequences of ex. children) as a platform to honor their religion. There is perceived control as the athlete can control how they behave in their marriage. They are focused on what they can control and rely on a higher power to support them through the "good" and "bad" times.

Intrinsic Religiosity and the Individual

Intrinsic religiosity is focused on a personal relationship with a higher power and is deeply personal to the individual (Allport, 1966; Allport & Ross, 1967; Botto, 2000). They live their religion, and religion is where they get meaning for their life. Intrinsic religiosity shapes a person's decisions and goals. Other aspects in life may be important but they are not as important as following and living out one's faith (Allport & Ross, 1967). Intrinsic religious orientation has been shown to have positive effects on well-being.

Kuyel, Cesur and Ellison (2012) conducted a study with 341 Turkish undergraduate students to see if intrinsic religiosity was related to psychological well-being. The participants completed the Brief Symptom Inventory which measures psychological symptoms such as depression, anxiety, and hostility and the Age Universal Intrinsic- Extrinsic Scale which measures intrinsic and extrinsic religiosity. Though most of the correlations involved extrinsic religiosity and its negative relationship with psychological well-being, they did find that intrinsic religiosity had a negative relationship with hostility (Kuyel et al., 2012).

Other studies have shown that intrinsic orientation has a positive relationship with optimism, hope, self-esteem, meaning and purpose in life, internal locus of control, social support, and even marital satisfaction (Moreira-Almeida, Neto, & Koenig, 2006). These positive relationships are accomplished through the many foundational beliefs and ideas true to religious teachings. Intrinsic religiousness may impact well-being as religion gives meaning to one's life and puts life into perspective (Maranise, 2013). The belief in a higher power produces hope and optimism as there is unconditional love and a great plan for their life (Nesti, 2009).

Intrinsically religious individuals may have higher self-esteem due to the fact that they believe they were created for a purpose and they were created with unique gifts and talents (Brimhall & Butler, 2007).

Abdel-Khalek (2011) conducted a study with 499 Muslim adolescents from Kuwait. There was a significant positive relationship among Kuwaiti Muslim adolescents between religiosity, happiness, life satisfaction, healthier physical and mental health, as well as higher levels of self-esteem (Abdel-Khalek, 2011).

Extrinsic Religiosity and the Individual

Extrinsic religiosity is an outward expression of one's faith but its purpose is to serve the individual (Botto, 2000) which differs from intrinsic religiosity (uses religion to glorify God). Extrinsic orientation is usually divided into two sub-categories: extrinsic social and extrinsic personal. Extrinsic personal orientation when an individual uses religion as a means of comfort while extrinsic social orientation is when religion is used for social gain (Kirkpatrick, 1989).

Thus, extrinsic orientation can be summarised as one using religion as a source of protection, consolation, and social status; it is used more for ego defense (Allport, 1966; Allport & Ross, 1967). Individuals who are extrinsically religious do not completely practice their faith instead, they only adopt practices that are convenient, will increase their social desirability or those that will benefit them. In parallel to this, social recognition or praise are the focus of their practices as they expect their religion to reward them (Allport & Ross, 1967). Extrinsic religiosity has been linked to negative outcomes in over-well-being due to fear or negative consequences. For instance, one may feel guilt for not praying, not because they missed the opportunity to speak with God but rather, they fear there will be negative consequences for missing prayer.

Kuyel, Cesur and Ellison (2012) conducted a study with 341 Turkish undergraduate students to evaluate the relationship between extrinsic religiosity and psychological well-being. Results of the study determined that extrinsic religiosity was positively correlated with symptoms of anxiety, trait anxiety,

depression, and hostility (Kuyel et al., 2012). These results were validated later on by Butt (2014) who in addition found a negative relationship between extrinsic religiosity, well-being and positive affect (Butt, 2014). The suspected underlying rationale for these results is that anxiety and guilt increase due to the focus being on self instead of glorifying a higher power which is in direct conflict with religious teachings (Power & McKinney, 2014).

Individual Internalization & Religiosity in Lebanon

Lebanon has a diverse amount of registered religious sects, (18) with a minimum of three ethnic groups making Lebanon the most diverse religiously diverse Middle Eastern country (World Population, 2019). Thus, with such a wide array of different sects, there is the possibility that there will be a large discrepancy of religiosity which would provide a good framework for measuring this variable in relation to marital satisfaction. For instance, there could be a spectrum ranging from low to high religiosity. Due to these components, in relation to other Middle Eastern Arab countries, Lebanon as a whole is not as conservative or restrictive in practises on the contrary, it is believed to be among the more "flexible" counties in the Middle East (World Population, 2019). Thus, studying the variable of religiosity of individuals in marital relationships, especially in Lebanon provides insight into if these values and beliefs do have an effect on marital satisfaction.

Abouchedid (2007) examined gender role attitudes between Christian and Muslim college heatedly debated cliché students in Lebanon. Results indicated that females held less gendered attitudes than males. When looking at the gender interaction by religion it showed that Christian and Muslim females participants reported less traditionally constricting gender roles in social and public settings in comparison to Muslim males. Data also concluded that class was a weak predictor of gender beliefs in comparison to the role both gender and religion on gender role attitudes which were strong predictors.

The results which were most interesting and pertaining to this study is that there was a significant correlation between religiosity and associated gender roles (Abouchedid, 2007). This supports the notion that religiosity does affect an individual on a personal level in terms of behavior, ways of thinking and values.

Supporting the findings that religiosity does influence perception, cognition and interests, Samad (2013) studied religiosity in relation to how consumers perceive product advertisements in Lebanon. Data indicated that those high on religiosity in comparison to those who were not had different notions about what was considered offensive and off-putting (Samad, 2013).

Religiosity and Marital Satisfaction

Research has shown that there is a significant positive relationship between religiosity and marital satisfaction (Brimhall & Butler, 2007; Lambert & Dollahite, 2008; Ahmadi et al., 2008). Yet, lacking in research is how differences in nominal religious motivation impacts marital satisfaction. Brimhall & Butler (2007) studied 74 couples with the aim of evaluating the influence of religiosity on marital satisfaction. Results show that as intrinsic religiosity in the husband increases, so does the satisfaction for both partners. Moreover, as differences of religiosity within the couple increased, husband satisfaction decreased. In comparison, the satisfaction of wives increased as extrinsic motivation increased (Brimhall & Butler, 2007)

A study in Iran sought to assess the association amongst married couples' religiosity and its impact on their level of marital satisfaction (Ahmadi et al., 2008). Data was collected from 660 couples by using a questionnaire the researcher created and ENRICH marital satisfaction scale. The study showed couples who were higher on religiosity also had a higher rate of marital satisfaction (Ahmadi et al., 2008). "The rate and intensity of religiosity and marital satisfaction was between 0.17-0.29. This rate

was 0.29 in Communication, 0.26 in Parenting and of Religious Orientation, 0.24 in Leisure Activities, 0.23 in Personality Issues and Friends and Family, 0.22 in Conflict Resolution and 0.17 in Sexual Relationship” (Ahmadi et al., 2008). As seen, the coefficients were statistically positive and significant. Therefore, regarding a couple’s relationship religiosity improves, reinforces and, promotes parental duties (Ahmadi et al., 2008). This study is supported by findings that conclude that religious spouses are more likely to experience stable and happy marriages, less prone to have occurrence's conflict and violence and, are less likely to divorce (Curtis and Ellison, 2002). These findings could be due higher levels of religious participation and thus, being more exposed to religious scriptures which reinforce and emphasises (on the individual and interpersonal level) that couples should think of the needs of others, be respectful, loving and forgiving, and strive to resolve conflict (Dudley & Kosinski, 1990). These virtues are rooted and increase with church attendance and are correlate with couple ability resolve conflict.

Aman et al. (2019) examined the influence of spirituality and religiosity on marital satisfaction in 508 Pakistani Muslim couples. They also sought to study how religious commitment and practices strengthen the relationship. Findings concluded that religious commitment and religious practice are vital for: a happy marital life, strengthened marital satisfaction and, promoted marital satisfaction (Aman et al, 2019). These results are supported by a study undertaken by Jafar et al., (2015) which also concluded a significant positive correlation among religious commitment and adherence to religion and marital satisfaction.

Butler et al. undertook studying this very correlation and thus, further support the basis of why using religiosity as a predictor in the current study would be beneficial. They found that prayer and an increase of religiosity is correlated with an increase of empathy, self-changing behaviors for the "better", and responsibility for reconciliation and problem solving. In short, all these factors aid in promoting

healthy open communication, acceptance and commitment (Butler et al., 2002) which are advantageous traits within a marriage. Furthermore, virtues like selflessness are advocated in religious scriptures are fundamental to intimacy in marriages (Wallerstein & Blakeslee, 1995). This same study discovered that an increase of joint participation in worship activities (etc. attendance of church or prayer) yields a higher result of couples being happier, satisfied and content within their marital relationship (Wallerstein & Blakeslee, 1995).

As stated above, Butler et al. tested commitment of couples high on religiosity and results showed that the high levels of this factor may be influenced (in some part) to religious practices. This is because couples are taught to resolve and work through conflict when they occur because their religion (and beliefs) persuades them not to view divorce as a solution but, to work on work their relationships (Butler et al., 2002). Yet, while commitment to the relation is vital for survival through conflict and aids in the process of resolution of conflict, the willingness to forgive is vital for healing within a relationship which, has also been shown to increase as religiosity does (Butler et al., 2002). Holeman (2003) found that the willingness to forgive is significant in religious couples and is motivated out of gratitude to God. Thus, as all these factors stem from frequency of attendance in religious institutes and practices, all increase as extrinsic religiosity increases (Butler et al., 2002; Lambert & Dollahite, 2008).

Aim of the Study

The aim of the current study was to evaluate independent variables of courtship length, communication patterns (in specific those in the 4 Horseman of the Apocalypse theory), and religiosity in relation to the dependent variable of marital satisfaction. Moreover, it sought to evaluate if these independent variables acted as predictors of marital satisfaction. Although similar studies have been done in the Western contexts, few, if any, have been done in the Arab World, including studies to assess

the 4 Horseman of the Apocalypse. The sample included 318 individuals who have been in heterosexual marriages for over one year and under 10 years.

Hypotheses

1. The higher the level of intrinsic religiosity as measured by the Revised Intrinsic/Extrinsic Religious Orientation Scale, the higher the level of marital satisfaction as measured by Quality Marriage Index.
2. All subcategories of religiosity (intrinsic religiousness, extrinsic socially oriented religiousness and extrinsic personally oriented religiousness), as measured by the Revised Intrinsic/Extrinsic Religious Orientation Scale, are significant predictors of marital satisfaction as measured by the Quality Marriage Index with intrinsic religiosity being the highest predictor.
3. The longer the courtship length (the period of dating and engagement in a relationship), the higher the level of marital satisfaction as measured by Quality Marriage Index.
4. All the Horsemen, which are measured by the updated 4 Horsemen of the Apocalypse Scale, are significant predictors of marital satisfaction which is measured by the Quality Marriage Index. Contempt and criticism are assumed to be the highest predictors of marital dissatisfaction.

Chapter 3

Methods

Participants

This survey quantitative study is based on a convenience sample that used 318 participants who are at a minimum age of 25 and who have been married for a minimum of 1 year to 16 years. Based on previous research participants were 25 years and older. The rationale for including a variety of ages allowed for an increase in the external validity of the study and provided insight regarding the possible similarities of the different age groups in the issue of marital satisfaction (Bulgan, Kemer & Yıldız, 2018; Zainah et al., 2012). Furthermore, as the study was focused on including individuals who have been married for a minimum of 1 year, and so that by itself indicated that they were married at a minimum age of 24.

The rationale for using participants who have been married for over a year is because the first year of marriage is usually when the adjustment period takes place which has been shown to be a difficult year for couples and thus, may have lower results of marital satisfaction (Schramm, 2003). Thus, by excluding individuals who are in the adjustment period, the internal validity is strengthened. The limit of 16 years was decided on because Gottman's 4 horseman questionnaire is used in retrospect of marriage (dating and engagement period) and thus, based on previous studies on memory, is accounting for the upper limit of the accuracy of memory (Catal & Fitzgerald, 2004 & Zelinski & Burnight, 1997). The study had one retrospective questionnaire asking about pre-marital communication patterns. Longitudinal studies evaluating the accuracy of memories (including both recognition and recall) are fairly accurate for 20 years (Catal & Fitzgerald, 2004) but accuracy tends to decrease after the 16th year (Zelinski & Burnight, 1997). Thus, to increase internal validity of the results, we included individuals who have been married for no more than 16 years. Furthermore, studies show recall of

explicit memory declines throughout late adulthood thus cutting off participant age at 45 in attempt to control for this (Ward et al., 2013).

Furthermore, participants were in heterosexual marriages (as homosexual marriages are not allowed and still stigmatized in Lebanon and thus, results of satisfaction can be due to external variables stemming from stigma and discrimination. Lastly, participants are Lebanese to attempt to account for any extraneous variables. Exclusion criteria included individuals who are either separated, in the process of or are divorced.

Materials

The current study sought to evaluate if 3 independent variables act as predictor variables for marital satisfaction. Apart from the tools that were developed to test these variables, the questionnaire included different materials for participants. These were: participant information form (appendix A), an informed consent form (Appendix B), a demographics questionnaire (Appendix C). Following these forms, participants started the questionnaires which were: 4 Horseman of the Apocalypse (Appendix D), Quality of Marital Index (Appendix E) and, Revised Intrinsic/Extrinsic Religious Orientation Scale (Appendix F). Finally, at the end of the questionnaire was a form which provided contact information for a marriage therapist in Lebanon. The purpose of this form was to provide for participants who may have felt emotional burdens due to their participation (Appendix G).

Courtship Length. The first variable to be discussed is courtship length. This variable does not require a scale to measure it and thus, was asked within the demographic section.

Demographic Section. The demographic section was mainly closed ended questions in the format of nominal scales (that are mutually exclusive). Age, length of marriage, length of courtship, If

the courtship period was long distance, level of education, and number of children were assessed using nominal scales, whereas gender was assessed using multiple choice consisting of: Female or Male.

Religiosity. Religiosity was measured using the Revised Intrinsic/Extrinsic Religious Orientation Scale (ROS). ROS has strong psychometric properties and is considered the best measurement tool of religiosity (Judd, 2009). For these reasons it was chosen instead of other tools (Spiritual Experience Index for instance) for the purpose of this study. ROS measures both intrinsic (I) and extrinsic religiousness (E). Reliability of intrinsic dimension has Cronbach's $\alpha = 0.83$, extrinsic personally has Cronbach's $\alpha = 0.57$, extrinsic social Cronbach's $\alpha = 0.58$, and overall extrinsic dimension has Cronbach's $\alpha = 0.65$. When looking to evaluate the E subscales, it has been found they have moderate internal consistency reliability (social .63 and personal .64). Item examples of this tool include: "prayer is for peace and happiness", "I enjoy reading about my religion" and, "my whole approach to life is based on my religious beliefs". Moreover, as this tool has been previously used in Jordan and Lebanon (Hamza, 2010, Samad, 2013) it has been shown to be culturally appropriate in terms of item and construct validity for the Lebanese population. These factors increase the internal validity of any perspective results and thus strengthen the power of the study.

Four Horseman of the Apocalypse. To measure the presence of the Four Horsemen, Gottman developed a questionnaire in The Marriage Clinic (1999). The questionnaire consists of 33-items which participants are asked to answer by means of true or false. Each item on the scale acts to assesses the presence contempt, criticism, stonewalling and defensiveness with a higher score indicating a greater presence of the Horsemen. The questionnaire has been shown to be both valid and reliable in multiple studies across time (Gottman, 2012; Lute, 2015; Walker, 2005).

While Lute (2015) assessed the Four Horsemen of the Apocalypse Questionnaire through analysis of data and literature of multiple studies, it was discovered that Questionnaire does not have a method of indicating which items are included in each subscale. Therefore, a secondary aim of the study was to assess which items fall on respective subscales. Thus, the original 33 items scale was modified to produce a 28-item version which has good internal consistency, strong reliabilities for each subscale and, strong reliability for the overall measure. For the purpose of this study the modified version by Lute (2015) was used which allowed pinpointing of which horseman (subscales) were present prior to marriage and the individual correlation of each on marital satisfaction. Using this updated tool was also significantly beneficial for the measuring of criticism and contempt as these factors have been shown to be significant in predicting a couple's dissatisfaction.

The modified scale (Lute, 2015) consisted of 28 items that are answered by true/false. This was considered beneficial because, although the scale was a long method of true and false items as a means to answering, it was straight to the point. For instance, it was assumed that it will take less time to answer true/false than using a rating on the Likert scale. Moreover, as participants were asked, in retrospect of getting married, restricting answer choices “true or false” may minimized risk of not being able to recall to what extend the statements were true. The questionnaire evaluated the occurrence of the Four Horseman. The subscales within the questionnaire detected criticism, contempt, defensiveness, and stonewalling and have shown to be adequately reliable and valid in an array of diverse studies (Walker, 2005; Gottman, 2012; Lute, 2015). Included in the scale are: 8-items Criticism subscale ($\alpha = .701$), 8-items Defensiveness subscale ($\alpha = .800$), 7-items Contempt subscale ($\alpha = .780$), and 5-items Stonewalling subscale ($\alpha = .654$). Item examples include: “I feel attacked or criticized when we talk”, “I often feel underappreciated by my partner”, “I feel basically disrespected” and, “many of our issues are

not just my problem” (Lute, 2015). Every subscale correlated with the other subscales and the total score. Overall, the reliability for the questionnaire is $\alpha = .912$.

Marital Satisfaction. Marital satisfaction was evaluated using the Quality Marriage Index. Although the ENRICH Inventory tool was considered due to its wide use and psychometric properties (good reliability and validity) the QMI was chosen instead. Item examples from the QMI include: “we have a good marriage”, “my relationship with my partner makes me happy” and, “I really feel like part of a team with my partner.” The reason for choosing the QMI is because it was used in a study at the American University of Beirut where it was found to be reliable and valid (Bawab & Kazarian, 2012). As stated above, disclosing information about problems in one’s marriage may be off-putting for individuals and thus, the scale assessing Marital satisfaction must be culturally appropriate. Therefore, a benefit of using the QMI is that as it was used within the Lebanese population, questions have been found to be culturally appropriate. Another benefit to using this scale is that it consisted of 6-item measures that are rated on a 7-point scale. This is beneficial because is it short and thus can be completed in a brief amount of time.

Procedure

The current study is a quantitative survey design. After receiving ethics approval from the Social and Behavioral Sciences Ethics committee at Haigazian University, initial screening questions were asked, such as, “Are you currently married,” “How long have you been in your marriage,” to determine the eligibility of individuals. Only individuals who indicated that they are currently married for over a year and intended to continue being married were eligible for participation in the study.

Prior to starting the study, a group of 15 individuals that fit the inclusion and exclusion criteria underwent participation in a pilot study. The purpose of the pilot study was to ensure the following:

items are properly understood, detect any common problems faced when answering questions, construct validity and, to get information about the psychological effects of participation. Thus, individuals in the pilot study were given all forms and questionnaires and then by means of a cognitive interview were asked about each individual form and questionnaire. The pilot study was of importance to detect to what extent participants felt uncomfortable answering the questionnaire since disclosure about marriage is still a taboo subject within many groups in the Arab world (Hamza, 2010).

As for the actual study, a video explaining the questionnaire along with a short text summarizing the study was sent out on two different social media platforms: (1) WhatsApp where it was delivered as a broadcast to the full contact list from various individuals, and (2) Instagram where the video was promoted to users living in Lebanon. Both messages had the link embedded in the message and, participants clicked on the link to be directed to the questionnaire. To avoid people refilling out the survey, IP tracking by SurveyMonkey was implemented.

As stated above, questions of “Are you married?” and “How long have you been married for?” were asked as screening questions as it was challenging to predict who is married and the status of their marriage prior to data collection. Individuals who were considered eligible for participation (based on screening questions) were directed to a link on SurveyMonkey which took them to the questionnaire. The survey contained the following components: an informed consent form, a demographics questionnaire, three questionnaires, and finally a debriefing form. Participants were told in the consent form that they were able to leave the study at any time, that their participation is completely anonymous and, it will take roughly 15 minutes to complete the questionnaire. To control for any carryover or sequencing effects, counterbalancing of the scales was done.

Statistical Analysis

Data were analyzed using SPSS statistics 27; multiple regression analysis was employed because most of the variables and demographics were entered at the nominal/ordinal level with more than two categories. Furthermore, t-tests and ANOVAs were conducted as extra analyses to check the relation between demographics and quality of marriage index. This model showed if the independent variables explained a statistically significant amount of variance of the Dependent Variable (DV) after accounting for all other variables. Doing so was important because there are variables that could have impacted the analysis of results and, hence, holding them constant ensured the internal validity of the study. Thus, it was of interest to put variables shown to have an effect on marital satisfaction and those suspected to, in different blocks to determine their influence. Beyond this, regression analysis also allowed for an investigation to see if a combination or, interaction of different independent variables could also predict marital satisfaction. For instance, if a higher level of destructive communication combined with high lever extrinsic religiosity have more of an effect on marital satisfaction.

For instance, communication is related to several individual and relationship variables, such as age (e.g. Yelsma, 1986; as cited in Dwyer, 2007), gender (e.g. Gottman & Krokoff, 1989; Malkoç, 2001) number of children (e.g. Malkoç, 2001), attachment (e.g. Pistole, 1994; Collins & Read, 1990), psychological problems (e.g. Lemmens et al., 2007), relationship satisfaction (e.g. Byers, 2005; Malkoç, 2001; Doohan & Manusov, 2004), sexual satisfaction (e.g. Byers, 2005; Litzenger & Gordon, 2005) and stability of relationship (Karney & Bradbury, 1995). Analysis controlled for variables of age, gender, time married, presence of children and, if the couple belonged to the same religion. By controlling for these variables, we eliminated their effects and therefore, were able to determine with greater confidence if the independent variables chosen do in-fact correlate with the dependent variable. This is because they may have acted as confounding variables in the present study and thus, controlling for them would increase internal validity. For instance, it was expected that couples of different religions may have had

less extrinsic joined religiosity participation which could have affected the results of the study if these participants were included in the current study.

Chapter 4

Results

Preliminary Analyses

Preliminary analyses were conducted to study missing value analysis, reliability analysis, inspection of univariate, multivariate outliers, outliers in the solution and influential cases and normality analysis.

Missing value analysis was conducted on the sample of $N = 318$ participants. The results of missing value analysis revealed that all variables have less than 5% of missing values except for civil marriage (5.7%). Next, was to check whether the data on civil marriage was missing completely at random (MCAR) or not. Thus, a Little's MCAR test was conducted. The results of the Little's MCAR test was not significant; $X^2(34) = 20.75, p = .964$; indicating that the data were missing completely at random and, there is no pattern to missing values.

The reliability analysis of the Apocalypse Questionnaire revealed that the total scale had excellent reliability with $\alpha = .94$ and, the subscales had good reliability as well (Criticism $\alpha = .82$; Defensiveness $\alpha = .76$, Contempt $\alpha = .77$, and Stonewalling $\alpha = .70$). Furthermore, the intrinsic religiosity scale, extrinsic personal religiosity and extrinsic social religiosity had good reliability¹ with $\alpha = .75$, $\alpha = .80$ and $\alpha = .81$ respectively. Finally, the Quality of Marital Index had excellent reliability ($\alpha = .97$)² (Table 1).

¹ It is important to note that items 1,5,6,7,8,9,10,11,12,13 and 14 were reverse coded so that higher scores indicate higher levels of religiosity

² It is important to note that the six items on the quality of marital index were reverse coded so that higher scores indicate higher levels of quality of marriage

Table 1
Reliability Analysis of the Scales and Subscales

Scales and Subscales	Cronbach's Alpha α	Number of Items	Previous Cronbach's Alpha
Apocalypse Questionnaire	.97	32	.91
Criticism	.82	8	.70
Defensiveness	.76	8	.80
Contempt	.77	7	.78
Stonewalling	.70	5	.65
Religiosity			
Intrinsic Religiosity	.75	8	.83
Extrinsic Personal	.80	3	.57
Religiosity			
Extrinsic Social Religiosity	.81	3	.65
Quality of Marital Index	.97	6	.85

Univariate outliers were examined using z-scores on the scale variables (Criticism, Defensiveness, Contempt, Stonewalling, Intrinsic Religiosity, Extrinsic Personal Religiosity, Extrinsic Social Religiosity, and Quality of Marriage Index). Any case with z-score $> |3.29|$ is considered to be univariate outlier. The results revealed that there were no univariate outliers on the variables (Apocalypse total, Criticism, Defensiveness, Contempt, Stonewalling, Intrinsic Religiosity, Extrinsic Personal Religiosity, and Quality of Marriage Index) with all z-scores $< |3.29|$. However, results revealed that the variable Extrinsic Social Religiosity had three cases of univariate outliers (#61, #72, and #301).

Multivariate outliers were inspected using Mahalanobis distances with the criterion that any Mahalanobis Distance > 24.32 is considered to be multivariate outlier. The results revealed that there were two multivariate outliers (#72 and #277); $X^2(7) = 40.56, p < .001$. It is important to note that case #72 were excluded as it was found to be both univariate and multivariate outlier while cases #61, #277

and #301 were kept in the final analysis as they were not found to be both univariate and multivariate outliers (Field, 2013).

Outliers in the solution were inspected using standardized residuals with the criterion that any standardized residual $> |3.29|$ is considered to be an outlier in the solution. The results revealed that standardized residuals ranged between -4.30 and 2.50 with one case of outlier in the solution (#265).

Influential cases were inspected using Cook's distances with the criterion that any case with Cook's distance > 1 is considered to be an influential case. The results revealed that Cook's distances ranged between .00 and .13 with no cases > 1 . As such, the data did not have any influential case. Since #265 was found to be an outlier in the solution but not an influential case, then it was kept in the final analysis (Field, 2013).

Normality analysis of the variables (Apocalypse total, Criticism, Defensiveness, Contempt, Stonewalling, Intrinsic Religiosity, Extrinsic Personal Religiosity, Extrinsic Social Religiosity, and Quality of Marriage Index) was conducted using KS-test. The results revealed that the variables (Apocalypse total, Criticism, Defensiveness, Contempt, Stonewalling, Intrinsic Religiosity, Extrinsic Personal Religiosity, Extrinsic Social Religiosity, and Quality of Marriage Index) were not normally distributed; $D(317) = 0.09, p < .001$, $D(317) = 0.13, p < .001$, $D(317) = 0.13, p < .001$, $D(317) = 0.14, p < .001$, $D(317) = 0.16, p < .001$, $D(317) = 0.08, p < .001$, $D(317) = 0.17, p < .001$, $D(317) = 0.19, p < .001$ and $D(317) = 0.16, p < .001$ respectively.

The initial sample of the study was $N = 318$. After removing the common univariate and multivariate outlier (#72), the final sample of the study became $N = 317$ (% females = 69.4% and % males = 30.6%). When looking at the age of participants, around half (55.2%) were between 25 and 34 years old, 28.4% were between 35 and 44 years old, 13.2% were between 45 and 54 years old, 2.2% were between 54 and 65 and 0.9% were above 65 years old. It is important to note that for subsequent

analysis, the two age groups (54-65 and 65 years and above were grouped together to form one group (55 and above with 3.2%). Concerning years of marriage, 45.4% of participants were married for 2 to 5 years, 12.9% were married for 5.1-7 years, 11% were married for 7.1-10 years, 11% were married for 10.1-13 years and 19.6% were married to 13.1-16 years. It is also important to note that for subsequent analysis the two groups (5.1-7 and 7.1-10) were grouped together to form one group (5.1-10 with 24%) and the two groups (10.1-13 and 13.1-16) were grouped together to form one group (10.1-16 with 30.6%).

Concerning the length of dating before getting engaged, 53.9% of participants dated for 1 year, 13.2% dated for 2 years, 11.7% dated for 3 years, 5.4% dated for 4 years and 15.8% dated for 5+ years. It is important to note that for the subsequent analysis the two groups (3 years and 4 years) were grouped together to form one group (3-4 years with 17%). Concerning the length of engagement before getting married, 64% were engaged for 1 year, 20.2% were engaged for 2 years, 7.6% were engaged for 3 years, 5% were engaged for 4 years and 3.2% were engaged for 5+ years. It is important to note that for the subsequent analysis the two groups (3 years and 4 years) were grouped together to form one group (3-4 years with 12.6%). The length of courtship was calculated by adding the two variables (length of dating and length of engagement). 38.2% of participants had 2 years of courtship, 14.2% had 3 years, 23% had 4 years of courtship, 14.5% had 5-6 years of courtship, 6.3% had 6-8 years and 3.8% had 8 years and above.

Concerning long distance relationship, 40.1% of participants had long distance relationship. Furthermore, 42.6% of participants saw their spouses daily while dating, 40.7% saw their spouses few times a week, 6.9% saw their spouse few times a month, 0.9% every month, 5.7% every six months and 1.3% saw their spouses every year. In addition, 53.9% of participants were sexually active with their partners before marriage. To add, the majority of participants (84.2%) were of the same religion and sect

as their spouses and only 13% of participants had civil marriage. Finally, around three quarter of participants (72.9%) have children.

Table 2
Sample Descriptives

		N	%
Gender	Male	97	30.6%
	Female	220	69.4%
Age	25-34	175	55.2%
	35-44	90	28.4%
	45-54	42	13.2%
	55-64	7	2.2%
	65+	3	0.9%
Years of Marriage	2 - 5 years	144	45.4%
	5.1 - 8 years	41	12.9%
	7.1 - 10 years	35	11.0%
	10.1 - 13 years	35	11.0%
	13.1 - 16 years	62	19.6%
Length of Dating Before Engagement	1 year	171	53.9%
	2 years	42	13.2%
	3 years	37	11.7%
	4 years	17	5.4%
	5+ years	50	15.8%
Length of Engagement before Marriage	1 year	203	64.0%
	2 years	64	20.2%
	3 years	24	7.6%
	4 years	16	5.0%
	5+ years	10	3.2%
Length of Courtship	2 years	121	38.2%
	3 years	45	14.2%
	4 years	73	23.0%
	5-6 years	46	14.5%
	6-8 years	20	6.3%
	8 years and above	12	3.8%
Long Distance Relationship	Yes	127	40.1%
	No	190	59.9%
How often did you see your spouse while dating	Daily	135	42.6%
	few times a week	129	40.7%
	Few times a month	22	6.9%
	Every month	3	0.9%
	Every few months	18	5.7%
	Every 6 months	6	1.9%
	Every year	4	1.3%

Sexual Activity with your partner before marriage	Yes	171	53.9%
	No	146	46.1%
Same Religion	Yes	267	84.2%
	No	50	15.8%
Civil Marriage	Yes	39	13.0%
	No	260	87.0%
Children	No	86	27.1%
	yes	231	72.9%

Table 3 below depicts scale descriptives with minimum, maximum, means and standard deviations. Concerning the Apocalypse scale, on average, participants reported low levels of criticism ($M = 45.94$, $SD = 32.54$)³, contempt ($M = 44.79$, $SD = 31.89$), stone walling ($M = 45.68$, $SD = 32.81$) and apocalypse total ($M = 47.35$, $SD = 28.83$)⁴. Participants, however, on average, reported relatively moderate levels of defensiveness ($M = 51.66$, $SD = 30.28$). Concerning the religiosity subscales, on average participants reported high levels of intrinsic religiosity ($M = 25.05$, $SD = 5.88$)⁵ and extrinsic personal religiosity ($M = 11.23$, $SD = 2.99$). Participants, however, reported low levels of extrinsic social religiosity ($M = 5.03$, $SD = 1.94$)⁶. Finally, participants, on average, have high levels of quality of marriage ($M = 34.76$, $SD = 10.37$)⁷.

⁴ The midpoint of the apocalypse total and subscales = $(0 + 100)/2 = 50$.

⁵ The midpoint of the Intrinsic Religiosity subscale = $(8 + 40)/2 = 24$

⁶ The midpoint of the extrinsic personal and extrinsic social subscales = $(3 + 15)/2 = 9$

⁷ The midpoint of the quality of marriage index = $(6 + 45)/2 = 25.5$

Table 3*Descriptive of the Scales*

	N	Minimum	Maximum	Mean	Standard Deviation
Criticism	317	.00	100.00	45.94	32.54
Defensiveness	317	.00	100.00	51.66	30.28
Contempt	317	.00	100.00	44.79	31.89
Stone Walling	317	.00	100.00	45.68	32.81
Apocalypse total	317	.00	100.00	47.35	28.83
Intrinsic	317	10.00	40.00	25.05	5.88
Extrinsic Personal	317	3.00	15.00	11.23	2.99
Extrinsic social	317	3.00	12.00	5.03	1.94
Quality of Marital Index	317	6.00	45.00	34.76	10.37
Valid N (listwise)	317				

Testing Hypotheses 1, 2 and 4

The three hypotheses 1, 2 and 4 below, were tested using the Spearman's Rho correlation test and multiple regression analysis:

Hypothesis 1: The higher the level of intrinsic religiosity as measured by the Revised Intrinsic/Extrinsic Religious Orientation Scale, the higher the level of marital satisfaction as measured by Quality Marriage Index.

Hypothesis 2: All subcategories of religiosity (intrinsic religiousness, extrinsic socially oriented religiousness and extrinsic personally oriented religiousness), as measured by the Revised Intrinsic/Extrinsic Religious Orientation Scale, are significant predictors of marital satisfaction as measured by the Quality Marriage Index, with intrinsic religiosity being the highest predictor.

Hypothesis 4: All the Horsemen, which will be measured by the updated 4 Horsemen of the Apocalypse Scale, are significant predictors of marital satisfaction which will be measured by the Quality Marriage Index. Contempt and criticism are assumed to be the highest predictors of marital dissatisfaction.

Since the normality of the variables was not met, Spearman's rho correlation test was used to study the correlation between the predictor variables (Criticism, Defensiveness, Contempt, Stonewalling, Intrinsic Religiosity, Extrinsic Personal Religiosity, Extrinsic Social Religiosity) and the outcome variable (Quality of Marriage Index).

Spearman Rho's correlation test revealed that the four apocalypse subscales (criticism, defensiveness, contempt and stonewalling) were significantly and negatively correlated with quality of marriage with large effect size; $r_s = -.61, p < .001$, $r_s = -.61, p < .001$, $r_s = -.60, p < .001$ and $r_s = -.61, p < .001$, respectively. These results indicated that participants who had higher levels of criticism, defensiveness, contempt and stone walling were more likely to have lower levels of quality of marriage.

Spearman Rho's correlation test also revealed that intrinsic religiosity was significantly and positively correlated with quality of marriage with small to medium effect size; $r_s = .14, p = .007$. This indicated that participants who had higher levels of intrinsic religiosity were more likely to have higher levels of quality of marriage. However, Spearman Rho's correlation test revealed that extrinsic social religiosity was significantly and negatively correlated with quality of marriage with small to medium effect size; $r_s = -.11, p = .022$. This indicated that participants who had higher levels of extrinsic social religiosity were more likely to have lower levels of quality of marriage. Finally, Spearman Rho's correlation test revealed that there was no significant correlation between extrinsic personal religiosity and quality of marriage; $r_s = .08, p = .084$.

Table 4

Spearman Rho's Correlation Matrix of all the scales and sub-scales

	Quality of Marriage
Criticism	-.61***
Defensiveness	-.61***
Contempt	-.60***
Stonewalling	-.61***
Intrinsic	.14**
Extrinsic Personal	.08
Extrinsic Social	-.11*

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

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

***. Correlation is significant at the 0.001 level (one-tailed).

Multiple Regression Analysis

Before conducting main regression analysis, the assumptions of multiple regression were conducted as per below:

a- Assumption of no Multicollinearity

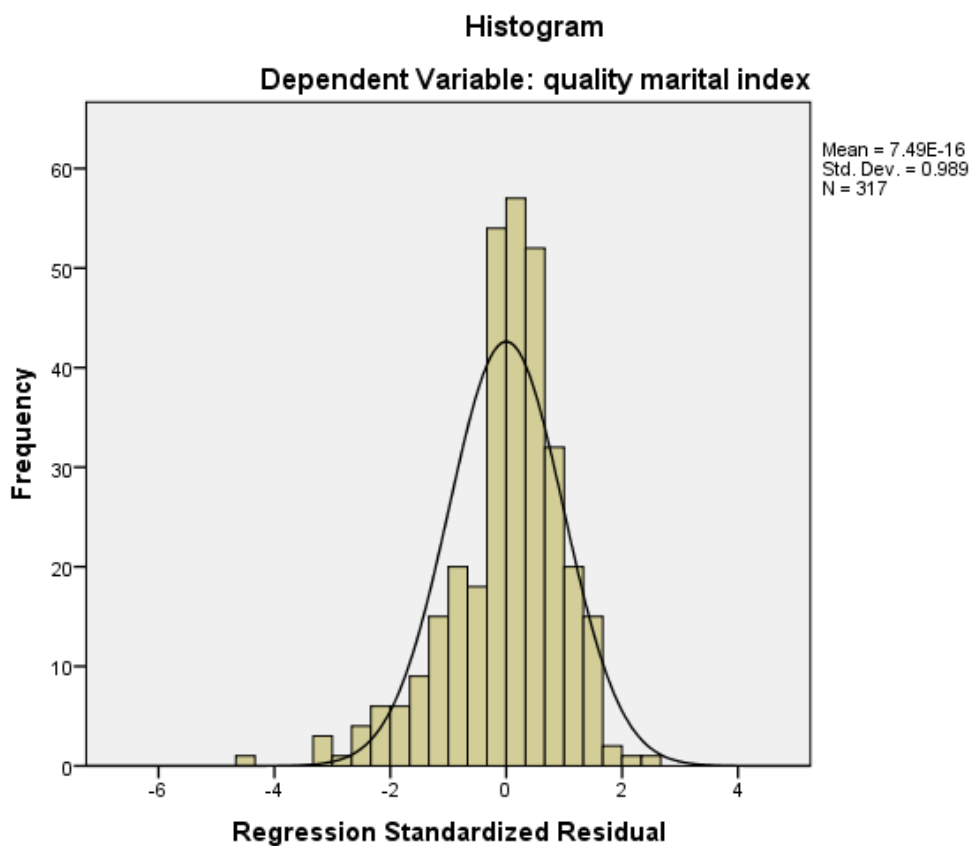
Tested using Variance Inflation Factor (VIF) scores. VIF values above 10 indicate that the assumption of no-multicollinearity was not met. In this analysis, the VIF scores were less than 10 which indicated that the assumption of no-multicollinearity was met.

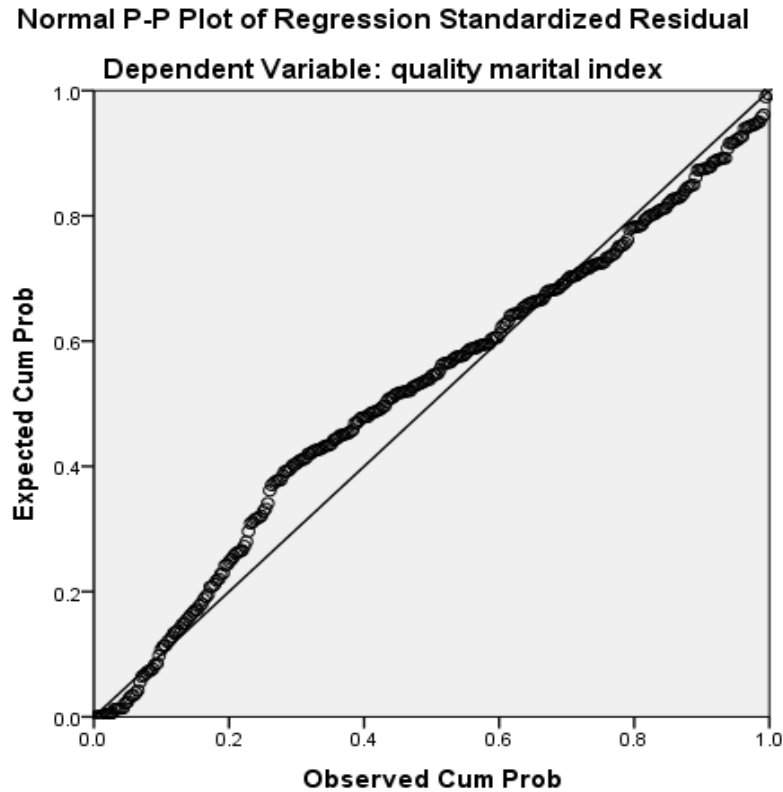
b- Independence of Errors

Tested using Durbin Watson with the criterion that any score between 1 and 3 indicates that the assumption of independence of errors is met. In this analysis, the independence of errors score was 1.90 which is between 1 and 3, indicating that the assumption of independence of errors was met.

c- Normality of Residuals

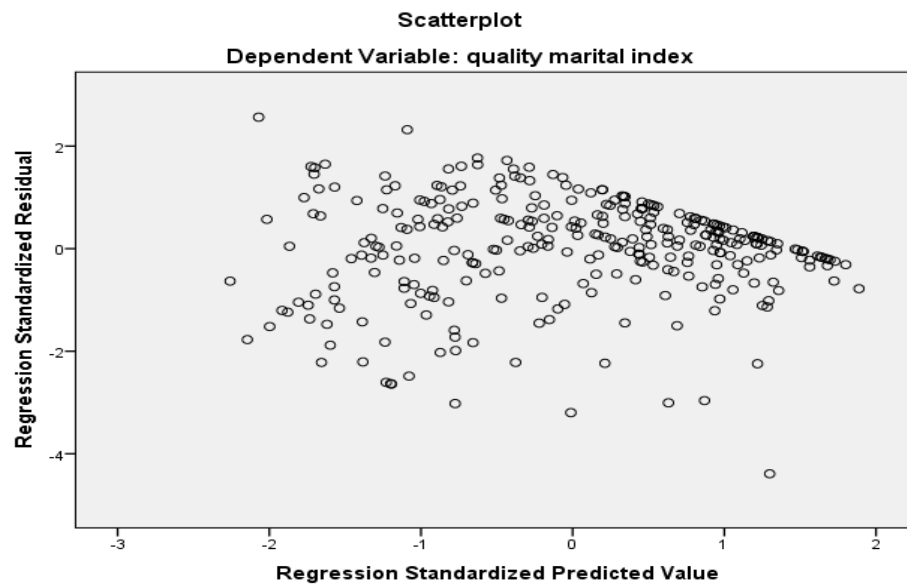
Inspected using the histogram and the P-P plot which revealed that the normality of residuals was not met (negatively skewed) and leptokurtic (positive kurtosis). This finding is verified with the P-P plot which showed that the expected cumulative probability does not coincide with the observed cumulative probability (forming an S-shape).





d- Assumption of Homoscedasticity of Regression Slopes

Tested by inspecting the scatterplot (ZRESID versus ZPRED), results show that homoscedasticity of regression slopes was not met. Since the two assumptions (normality of residuals and homoscedasticity of regression slopes) were not met, then the main analysis was carried using bootstrapping.



Main Regression Main Analysis

A multiple regression analysis was conducted to study the effect of the predictor variables (criticism, defensiveness, contempt, stonewalling, intrinsic religiosity, extrinsic personal religiosity and extrinsic social religiosity) on the outcome variable (quality of marriage).

The F-test revealed that the regression model which contained the variables (criticism, defensiveness, contempt, stonewalling, intrinsic religiosity, extrinsic personal religiosity and extrinsic social religiosity) was a significant regression model in predicting the outcome variable (quality of marriage); $F(7, 309) = 37.42, p < .001$.

Table 4*Spearman Rho's Correlation Matrix*

	Quality of Marriage
Criticism	-.61***
Defensiveness	-.61***
Contempt	-.60***
Stonewalling	-.61***
Intrinsic	.14**
Extrinsic Personal	.08
Extrinsic Social	-.11*

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

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

***. Correlation is significant at the 0.001 level (one-tailed).

This regression model explained 45.9% of the variance of the outcome variable (quality of marriage) at the sample level ($R^2 = .459$) and 44.7% of the variance of the outcome variable (quality of marriage) at the population level ($R^2_{adj} = .447$). When moving from the sample to the population, the shrinkage $\Delta R^2 = 1.2\%$, indicating that the sample is representative of the population.

By inspecting the table of bootstrap for coefficients, out of the seven predictor variables (criticism, defensiveness, contempt, stonewalling, intrinsic religiosity, extrinsic personal religiosity and extrinsic social religiosity) only criticism, defensiveness, stonewalling and intrinsic religiosity were found to be significant predictors of the outcome variable (quality of marriage).

Specifically, stonewalling was the highest predictor of quality of marriage (with negative and low to medium effect size); $b = -.07$, $Bias = .000$, $SE = .022$, $\beta = -.24$, $p = .001$ (one-tailed), 95%CI [- .12, -.03], followed by defensiveness (with negative and low to medium effect size); $b = -.07$, $Bias = -.001$, $SE = .029$, $\beta = -.21$, $p = .007$ (one-tailed), 95%CI [-.13, -.01], followed by criticism (with negative and low to medium effect size); $b = -.05$, $Bias = .002$, $SE = .029$, $\beta = -.16$, $p = .040$ (one-tailed), 95%CI [-.11, .01]. Finally, intrinsic religiosity was the lowest predictor of quality of marriage (with positive and

small to medium effect size); $b = .21$, $Bias = -.004$, $SE = .091$, $\beta = .12$, $p = .012$ (*one-tailed*), $95\%CI$ [.029, .378]. This indicated that participants who had higher levels of stonewalling, defensiveness and criticism were more likely to have lower levels of quality of marriage. Moreover, participants who had higher levels of intrinsic religiosity were more likely to have higher levels of quality of marriage. Finally, contempt, extrinsic personal religiosity and extrinsic social religiosity were not found to be significant predictors of quality of marriage (see Table 6).

Table 5
R, R Square, Adjusted R Square

Model R	R	Adjusted R	Std. Error	Change Statistics					Durbin-Watson	
	Square	Square	of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change		
1	.677	.459	.447	7.72	.459	37.42	7	309	.000	1.89

Table 6
Regression Bootstrap for Parameters

Model		B	Bias	SE	Sig. (one-tailed)	95% CI	
						Lower	Upper
1	(Constant)	41.012	-.051	2.275	.001	36.512	45.212
	Criticism	-.051	.002	.029	.040	-.106	.009
	Defensiveness	-.071	-.001	.029	.007	-.127	-.012
	Contempt	-.038	-.001	.029	.089	-.102	.017
	Stone Walling	-.074	.000	.022	.001	-.118	-.028
	Intrinsic	.205	-.004	.091	.012	.029	.378
	Extrinsic Personal	.077	.013	.169	.329	-.230	.451
	Extrinsic social	-.231	-.007	.243	.171	-.727	.267

Note: For model 1, $R^2 = .459$, $\Delta R^2 = .012$

Hypothesis 1, which stated that the higher the level of intrinsic religiosity, the higher the level of marital satisfaction was fully supported. Intrinsic religiosity was found to be a significant positive correlate and predictor of quality of marriage (Tables 4 and 6)

Hypothesis 2, which stated that intrinsic religiosity, extrinsic personal and extrinsic social religiosity are significant predictors of quality of marriage, with intrinsic religiosity being the highest predictor, was partially supported. As indicated in hypothesis 1, intrinsic religiosity was found to be a significant positive correlate and predictor of quality of marriage. Extrinsic social religiosity was only found to be a negative correlate (but not a predictor) of quality of marriage. Extrinsic personal religiosity, however, was not found to be significant correlate/predictor of quality of marriage (Tables 4 and 6).

Hypothesis 4, which stated that all horsemen subscales (criticism, defensiveness, contempt and stonewalling) are found to significantly predict quality of marriage with contempt and criticism are assumed to be highest predictors was partially supported. Criticism, defensiveness, stone walling was found to be significant negative correlates/predictors of quality of marriage with stonewalling as the highest predictor followed by defensiveness. Contempt, however, was only found to be significant negative correlate/not predictor of quality of marriage (Tables 4 and 6).

Hypothesis 3: Courtship length and marital satisfaction are positively correlated as measured Quality Marriage Index. This hypothesis was tested using three Analysis of Variance (ANOVAs) tests.

One-way analysis of variance (ANOVA) was conducted to study the relation between Length of Dating and Quality of Marriage. Levene's test of homogeneity of variance revealed that the variances of quality of marriage were significantly different between the four groups (1 year, 2 years, 3-4 years, and 5+ years); $F(3, 313) = 7.11, p < .022$, indicating that the homogeneity of variance assumption was not met.

Table 1

	1 year		2 years		3-4 years		5+ years		ANOVA	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	F- Welch	Sig.
Quality of Marriage	32.54	11.18	37.33	9.32	35.78	9.72	39.08	6.51	9.35	.000

One-way analysis of variance (ANOVA) was conducted to study the relation between Length of Engagement and Quality of Marriage. Levene's test of homogeneity of variance revealed that the variances of quality of marriage were not significantly different between the four groups (1 year, 2 years, 3-4 years, and 5+ years); $F(3, 313) = 2.29, p = .079$, indicating that the homogeneity of variance assumption was met. Thus, homogeneity of variance assumption was met. ANOVA F-test was conducted to test the relationship between length of engagement and quality of marriage. The results revealed that there was no significant relation between length of engagement and quality of marriage; $F(3, 313) = 1.11, p = .346$ (Table 8)

Table 2

Analysis of Variance on dating period

		1 year		2 years		3-4 years		5+ years		ANOVA	
										Sig.	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	F		
Quality											
of	34.20	10.75	36.80	8.68	34.75	10.35	33.10	12.37	1.11	.346	
Marriage											

One-way analysis of variance (ANOVA) was conducted to study the relationship between Courtship Length and Quality of Marriage. Levene's test of homogeneity of variance revealed that the variances of quality of marriage were significantly different between the six groups (2 years, 3 years, 4 years, 5-6 years, 6-8 years, 8+ years); $F(5, 311) = 3.13, p = .009$, indicating that the homogeneity of variance assumption was not met.

Since the homogeneity of variance assumption was not met, F-Welch was conducted to test the relationship between courtship length and quality of marriage. The results revealed that there was significant relation between courtship length and quality of marriage; $F\text{-Welch}(5, 70.70) = 3.31, p = .010$. Games-Howell post hoc test was used to study the differences on quality of marriage across the six groups of courtship (2 years, 3 years, 4 years, 5-6 years, 6-8 years, 8+ years). The results revealed that participants who had 5-6 years ($M = 37.20, SD = 8.39$) of courtship and those who had 8+ years ($M = 39.33, SD = 6.31$) of courtship had significantly higher quality of marriage compared to those who had 2 years of courtship ($M = 32.09, SD = 11.48$); $Mean\ Difference = 5.10, SE = 1.62, p = .025, 95\%CI [0.41, 9.80]$, and $Mean\ Difference = 7.24, SE = 2.10, p = .027, 95\%CI [0.61, 13.87]$, respectively. The Games-Howell post hoc test revealed that there were no other significant differences on quality of marriage across other groups of courtship length (table 9).

Table 3

Analysis of Variance on overall courtship length

2 years		3 years		4 years		5-6 years		6-8 years		8+years		ANOVA		
Mean		Mean		Mean		Mean		Mean		Mean		F Sig		
SD		SD		Mean	SD	SD		SD		SD		-Welch		
QMI														
2.09	1.48	6.04	.21	5.75	0.09	7.20	.39	6.00	0.12	39.33	.31	.31	.010	

Hypothesis 4, which stated that the longer the length of courtship length (dating and engagement), the higher the quality of marriage was partially supported. The results revealed that participants who had 2 years of dating and those who had 5+ years of dating had significantly higher

quality of marriage compared to those who had 1 year of dating. Moreover, the results revealed that participants who had 5-6 years of courtship and those who had 8+ years of courtship had significantly higher quality of marriage compared to those who had 2 years of courtship. The results revealed, however, that there was no significant relation between length of engagement and quality of marriage.

Additional Findings

An independent t-test was conducted to study the relation between religious background and quality of marriage. The Levene's test of homogeneity of variance revealed that the variances of Quality of marriage were significantly different between participants who are from same religion as their spouses and those who are from different religion; $F(1, 315) = 10.08, p = .002$, indicating that the homogeneity of variance assumption is not met (Table 10, Appendix H). The independent t-test revealed that participants from different religions than their spouses ($M = 37.40, SD = 7.18$) had significantly higher quality of marriage compared to participants who are from the same religion as their spouses ($M = 34.26, SD = 10.80$); $t(96.15) = -2.59, p = .006$ (*one-tailed*).

An independent t-test was conducted to study the relation between long distance relationship and quality of marriage. The Levene's test of homogeneity of variance revealed that the variances of Quality of marriage were not significantly different between participants who had long distance relationships with their spouses and those who didn't have long distance relationships with their spouses; $F(1, 315) = 2.55, p = .111$ thus, homogeneity of variance assumption is met (Table 11, Appendix H). The independent t-test revealed that participants who had long distance relationship ($M = 36.13, SD = 9.54$) had significantly higher quality of marriage compared to participants who didn't have long distance relationship ($M = 33.84, SD = 10.82$); $t(315) = 1.94, p = .027$ (*one-tailed*).

An independent t-test was conducted to study the relation between having children and quality of marriage. The Levene's test of homogeneity of variance revealed that the variances of Quality of marriage were significantly different between participants who have children and those who don't have children; $F(1, 315) = 17.62, p < .001$, indicating that the homogeneity of variance assumption is not met (Table 12, Appendix H). The independent t-test revealed that participants who don't have children ($M = 38.10, SD = 7.82$) had significantly higher quality of marriage compared to participants who have children ($M = 33.51, SD = 10.93$); $t(212.18) = 4.15, p < .001$ (*one-tailed*).

An independent t-test was conducted to study the relation between civil marriage and quality of marriage. The Levene's test of homogeneity of variance revealed that the variances of Quality of marriage were significantly different between participants who had civil marriage and those who didn't have civil marriage; $F(1, 297) = 13.96, p < .001$, indicating that the homogeneity of variance assumption is not met (Table 13, Appendix H). The independent t-test revealed that participants who had civil marriage ($M = 37.77, SD = 6.50$) had significantly higher quality of marriage compared to participants who didn't have civil marriage ($M = 34.02, SD = 10.83$); $t(74.34) = 3.03, p = .002$ (*one-tailed*).

One-way analysis of variance (ANOVA) was conducted to study the relation between Age and Quality of Marriage. Levene's test of homogeneity of variance revealed that the variances of quality of marriage were significantly different between the four age groups (25-34, 35-44, 45-54 and 55 and above); $F(3, 313) = 9.24, p < .001$, indicating that the homogeneity of variance assumption was not met. Thus, F-Welch was conducted to test the relation between age and quality of marriage. The results revealed that there was significant relation between age and quality of marriage; $F\text{-Welch}(3, 36.98) = 5.59, p = .003$. Games-Howell post hoc test was used to study the differences on quality of marriage across the four groups of age (25-34, 35-44, 45-54 and 55 and above). The results revealed that

participants who were 25-34 years old ($M = 36.67$, $SD = 8.75$) had significantly higher quality of marriage compared to those who were 45-54 years old ($M = 29.33$, $SD = 13.43$); *Mean Difference* = 7.34, $SE = 2.18$, $p = .008$, $95\%CI [1.55, 13.12]$.

One-way analysis of variance (ANOVA) was conducted to study the relation between years of marriage and Quality of Marriage. Levene's test of homogeneity of variance revealed that the variances of quality of marriage were significantly different between the three years of marriage groups (2-5, 5.1-10, and 10.1-16); $F(2, 314) = 21.34$, $p < .001$, indicating that the homogeneity of variance assumption was not met (Table 14, Appendix H).

Since the homogeneity of variance assumption was not met, F-Welch was conducted to test the relation between years of marriage and quality of marriage. The results revealed that there was significant relation between years of marriage and quality of marriage; $F\text{-Welch}(2, 158.01) = 15.70$, $p < .001$. Games-Howell post hoc test was used to study the differences on quality of marriage across the three years of marriage groups (2-5, 5.1-10, and 10.1-16). The results revealed that participants who were married for 2-5 years ($M = 36.67$, $SD = 8.75$) had significantly higher quality of marriage compared to those who were married for 5.1-10 years ($M = 29.33$, $SD = 13.43$) and those who were married for 10.1-16 years ($M = 36.67$, $SD = 8.75$); *Mean Difference* = 4.55, $SE = 1.33$, $p = .002$, $95\%CI [1.39, 7.72]$, *Mean Difference* = 7.17, $SE = 1.41$, $p < .001$, $95\%CI [3.83, 10.50]$, respectively. The Games-Howell post hoc test showed that there were no other significant differences on quality of marriage across other groups of years of marriage (table 8).

Chapter 5

Discussion

The goal of this quantitative study was to assess whether courtship length, religiosity and communication patterns are predictors of marital satisfaction among a sample of Lebanese adults. In this chapter, a discussion of the results is presented with an attempt to see if they are in line with previous studies or not.

Hypothesis 1, which stated that the higher the level of intrinsic religiosity, the higher the level of marital satisfaction, was fully supported. This is in line with previous literature where intrinsic religiosity was found to be a significant positive correlate and predictor of quality of marriage (Brimhall & Butler, 2007; Lambert & Dollahite, 2008). For instance, our results are supported by a study in Iran which sought to investigate the relationship between personality traits, religious orientation, locus of control and marital satisfaction of 130 older women (Ashoori, 2015). Their findings showed a positive and significant relationship between extroversion, agreeableness, conscientiousness, intrinsic religious orientation and internal locus of control and marital satisfaction.

Hypothesis 2, stated that intrinsic religiosity, extrinsic personal and extrinsic social (religiosity are significant predictors of quality of marriage, with intrinsic religiosity being the highest predictor, was partially supported. As previously mentioned, the differences of religiosity subcategories are aimed at differentiating why individuals believe or practice their religion. Individuals who are intrinsically religious focus on a personal relationship with a higher power. These individuals practice their religious beliefs out of gratitude to God. Intrinsic religiosity was found to be a significant positive correlate and predictor of quality of marriage. Extrinsic religiosity has two sub-categories: extrinsic social and extrinsic personal. Individuals who fall under the category of being extrinsic social follow and perform religious practises or social gain. The current study found that higher levels of an extrinsic social religiosity negatively correlated to quality of marriage, whereas higher on levels of Extrinsic personal

religiosity was not found to be significant correlate/predictor of quality of marriage. Whereas some of these studies showed a negative relationship (Huges & Dickenson, 2009), others concluded with a positive correlation between the two variables (Brimhall & Butler, 2007).

Dickson (2009) explained these results by stating that spousal intrinsic religiosity is associated with constructive communication and, is negatively correlated with demand-withdrawal communication. This can be due to individuals acting in a way that reflects their religious beliefs and, would appease God. While looking to evaluate extrinsic religiosity, it was not only negativity correlated with marital satisfaction but also directly associated with demand-withdrawal communication (Huges & Dickenson, 2009). Thus, a plausible explanation is that religious orientation may influence marital satisfaction and stability “through moral guidance and social, emotional, and spiritual support (Robinson, 1994)” which is why intrinsic religious individuals are more adjustable in their marriages than extrinsic or non-religious spouses (Ahmadi et al., 2008).

The third hypothesis stated that the courtship length is positively correlated to marital satisfaction. This hypothesis was confirmed and in line with previous research. Results of the current study revealed the overall period of courtship length is positively correlated with marital satisfaction. Results showed that participants who had a courtship period for 5+ years had higher marital satisfaction levels than individuals who dated for 2+ years. Furthermore, individuals who courted for 2 years has higher marital satisfaction then those who courted for 1 year and less. These findings are parallel to a study by Randal (2006) who found there was not only a positive correlation between courtship length and marital satisfaction but also, a negative correlation between courtship length and divorce. Randal (2006) explained this phenomenon by stating the latter is based on the proposition that individuals in the height of romantic infatuation are more likely to make a blind choice in compatibility which leads to more variance in marital satisfaction (Hanson, 2006). An interesting aspect to courtship length is, when

separated into the dating period and the engagement period, the current study found that there was no relationship between engagement period and marital satisfaction. This went against Adler's (2010) study which found a negative relationship between the variables.

Hypothesis 4, which stated that all horsemen subscales (criticism, defensiveness, contempt and stonewalling) are found to significantly predict quality of marriage with contempt and criticism are assumed to be highest predictors was partially supported. Criticism, defensiveness, stone walling was found to be significant negative correlates/predictors of quality of marriage with stonewalling as the highest predictor followed by defensiveness. Contempt, however, was only found to be a significant negative correlate/not predictor of quality of marriage. Contempt which derives from long-simmering negative thoughts about one's partner, arises in the form of attack on someone's sense of self which, long term, puts spouses on different levels of platitude. The difference in platitude which results in superior/inferior positions of a couple is damaging to relationships but, as previously discussed Lebanon has long rooted gender norms and traditions that are generationally reinforced (Samad, 2013; Hazma, 2010). If this is true, then findings that contempt is not the most damaging 4 horsemen is rationalized. Especially if it is the husband being contemptuous to his spouse. Instead, defensiveness, has replaced contempt in being one of the most damaging horsemen to relationships. Defensiveness in relationships usually stem from one main factor; because individuals anticipate or perceive a threat in their environment (in this case, relationship) and thus, prepare for the attack. Now, if individuals have in fact been conditioned in the Lebanese society for contemptuous and critical remarks, defensiveness could be their automatic reaction. The problem with defensiveness is firstly why it starts, because individuals do not feel safe. If an individual does not feel safe in their relationship nor with their partner and reverts to defencing themselves from this this is a clear problem. Secondly defensiveness, which automatically shrugs off any blame or responsibility on self in an argument and shifts these to their spouse results in

two things; a halting for change in the relationship (for the better) and a withdrawal or ineffective communication of problems. Thus, without a partner taking responsibility of a problem or issue, this issue cannot be fixed and will be sure to repeat creating a cycle. This cycle aids in the formation of the worst horseman, stonewalling. Stonewalling has been found to be the most damaging of the horsemen in both the current study and previous literature (Gottman, 1994 & Lute, 2015). This is because spouses who are stonewalled often feel demeaned or abused. They may even begin to question their own self-worth. Furthermore, it means that one's partner is unwilling to work on resolution problems central to sustaining the relationship and completely cuts off communication.

Additional Findings

When evaluating the variable of age in relation to marital satisfaction participants aged 25-34 had higher quality compared to those who were 45-54 and 55 and above. Moreover, participants who were 35-44 years old had higher marital satisfaction compared to those who had 45-54 years old. Thus, as the age of an individual increases, so does marital dissatisfaction.

A similar trend follows for time married and marital satisfaction. Individuals who were married for 2-5 years had higher quality of marriage compared to those who were married for 5.1-10 years and 10.1-16 years. Thus, as marital time increases so does marital dissatisfaction.

An interesting aspect regarding the courtship period were the results pertaining to those who had long distance relationships prior to marriage. Before undertaking the study, it was assumed that those who did long distance would have lower marital satisfaction due to: not being able to see their future spouse frequently, not achieve the same level of bonding and thus, would not know their partner as well when compared to couples who frequently saw one another. Results from the study showed the opposite. Participants who had long distance relationship were more likely to have higher marital satisfaction and,

surprisingly how often spouses saw each other during the courtship period did not have a relationship with marital satisfaction. A possible explanation to these results can be that individuals who did long distance for years are more committed and appreciative of their relationship as it may have been more difficult to make a long distant relationship work (Kelmer et al., 2013). It would require a higher level of trust, sacrifice, commitment, good communication to make the relationship succeed (Dainton & Aylor, 2009).

Clinical Implications

Results obtained in this study can promote the understanding of predictors of marital satisfaction. They can allow individuals to comprehend in what way negative communication, courtship length and religiosity are related to marital satisfaction. These results should be used as an educational tool to better educate couples about red flags in their relationships and, be aware and understand prospective areas of weaknesses in their relationships. It should be known that individuals who court for a period for 3 years and more are significantly more satisfied in their marriages. Furthermore knowing the weakness and strengths in their communication, such as presence of defensiveness and stonewalling can allow couples to work on these factors to improve satisfaction. Thus, by educating couples on these predictors prior to getting married, they can better understand the decision and reality of marriage.

Another aspect in of this study clinical implications relates to the professional psychology field. Having research derived from the Lebanese population allows clinicians to further understand the interplay of variables present in our society. This interplay of variables not only predict but affect marital satisfaction. This increased knowledge allows practitioners to pinpoint problems that lead to marital dissatisfaction that may be present in their clients. Furthermore success of treatment may be seen by incorporating techniques aimed increasing positive predictor variables while decreasing the negative

ones. For instance, focusing on decreasing defensiveness and stonewalling in communication. Or, decreasing social religiosity ideologies and working to increase intrinsic religiosity. In short, by practitioners gaining a better understanding of the interplay of these variables they will be able to better utilize techniques aimed to improve marriages.

Future Research Recommendations

As all the participants were from online social media platforms in Lebanon, the investigator recommends additional research be conducted with random sampling and Arabic tools to increase external validity. Furthermore, future research should use random sampling of all Lebanon's regions to ensure an increased generalizability. Furthermore, future researchers should consider expanding to various denominations within other Middle Eastern populations. Finally, upcoming research could evaluate predictors of divorce to see if courtship length, religiosity and communication are predictors.

Limitations of the Study

As the study used a convenience sampling via social media outlets, thus the results are not generalizable to all individuals living in Lebanon. To correct this issue, the study could have used a random sampling technique to get a better representative but, this was not feasible due to COVID-19 pandemic quarantine. Furthermore, as the questionnaires were not translated into Arabic and only English reading participants were used, it is not generalizable to participants who only speak Arabic.

In relation to the sample used for the study, the size was determined based on previous literature and accounting for medium effect size. To be safe, it would have been beneficial to account for small effects instead of medium and thus, increasing the sample size.

Furthermore, as the questionnaire was taken during a global pandemic, results may be somewhat influenced by unknown stressors.

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Appendix A

Participant Information Letters

Dear Ms./Mr.

I am Ayla Pasha, a student at Haigazian University from the Department of Social and Behavioral Sciences. I am currently carrying out a research study titled **Courtship Length, Religiosity and Communication Patterns as Predictors of Marital Satisfaction** advised by Dr. Hanine Hout.

You are being asked to take part in this study since you are Living in Lebanon and are married. Kindly read the below information to decide whether you would like to participate in this research study.

Purpose of the Research Project

This research aims to study predictors of marital satisfaction using the variables of: courtship length, religiosity and communication. As this is the first study of its kind studying predictors of marital satisfaction, it may offer insight to the Lebanese population and begin to fill the gap in this research topic. Moreover, it will aid clinical psychologists in dealing with these cases. This study will contribute towards the partial fulfillment of my academic study requirements at Haigazian University.

What will I be asked to do?

- If you choose to participate in this research study, you will be asked to fill in a questionnaire. Your participation will involve completing a survey that entails statements that you will have to rate based on agreement, a demographic form for approximately 10 minutes.
- Participation in this project is voluntary and are free to withdraw anytime without having to give any reason for your withdrawal.

What are my rights?

- Participation in this study is completely voluntary, anonymous and confidential. Your name or any other identifying information will not be asked.
- Data you provide along with data from all participants in the present research will be stored in a password protected external harddrive. The data will be analysed and reported in aggregate. Only the principal investigators of this study will have access to the compiled data which will be stored for a period of 10 years post data. During this time, you have the right to inspect the data.
- You have the right to withdraw your consent or discontinue participation at any time for any reason. Your decision to refuse participation or withdraw will not involve any penalty or loss of benefits to which you are entitled. Discontinuing participation in no way affects your relationship with Haigazian University.
- This research study has been reviewed and has received clearance from Dr. Hanine Hout. If you have any further concerns about your rights as a research participant, please, do not hesitate to contact Dr. Hanine Hout of Haigazian University.

What are the risks and benefits of participation?

- Participation in this study does not involve any physical risk but may involve emotional beyond the risks of daily life.
- You will receive no direct benefits from participating in this research; however, your participation does help researchers better understand predictors of marital satisfaction in the Lebanese population.

Contact information

If you have any questions or concerns about the research you may contact:

Ayla Pasha, Principal Investigator
Haigazian University
Apasha@students.haigazian.edu.lb

Dr. Hanine Hout, Thesis Advisor
Haigazian University
(961) 349-239 ext.331
Hanine.hout@haigazian.edu.lb

Ethical Committee
sbs.ethics@haigazian.edu.lb

Appendix B

Participant Consent Form

Courtship Length, Religiosity and Communication Patterns as Predictors of Marital Satisfaction

Please read the following statements:

I have volunteered to participate in this research project conducted for purposes of study. My participation is voluntary and does not involve payment of any kind.

I agree to participate in this research project conducted for purposes of study. My decision is voluntary and does not involve payment of any kind.

I know that I can choose to withdraw from participation any time without any penalties or consequences whatsoever. I also hold the right to decline to respond to any question(s) that I may feel uncomfortable with.

My participation involves answering a questionnaire taking a test for approximately 10 minutes.

I have been assured that the researcher will maintain my identity confidential.

I have been assured that the information from this survey will be used for the purpose of academic study only.

I have received the assurance that this research study has been duly reviewed and approved by the Haigazian University ethics committee.

I agree that the data gathered be kept in a secure location under the care of the study investigators for a period of 10 years.

I have read, listened and fully understand the explanation given to me. All my questions have been satisfactorily answered.

I, therefore, choose to voluntarily participate in this research study.

Do you agree to the statements above and, give your consent to participate in the study?

☐ Yes

☐ No

Appendix C

Demographics Questionnaire

Please check the box that applies to you.

What is your gender?

Female

Male

Are you and your Spouse of the same religion and sect?

Yes

No

What is your Age?

25-34

35-44

45-54

55-64

65+

How long have you been married for?

2 - 5 years

5.1 - 8 years

7.1 - 10 years

10.1 - 13 years

13.1 - 16 years

How long did you date before getting engaged?

1 Year

2 Year

3 Year

4 Year

5+ Year

How long were you engaged before getting married?

1 Year

2 Year

3 Year

4 Year

5+ Year

Did you and your partner have a long-distance relationship before getting married?

Yes

No

Approximately how often did you see your spouse when you were dating?

- Daily
- Few times a week
- Few times a month
- Few times a week
- Few times a month
- Every few months
- Every 6 months
- Every Year

Do you have any children?

- Yes
- No

Were you sexually active with your partner before marriage?

- Yes
- No

Did you have a Civil Marriage?

- Yes
- No

Appendix D

4 Horsemen of the Apocalypse Questionnaire

These questions are for the time prior to getting married (during the dating period OR engagement period. Read each statement and place a check mark in the appropriate TRUE or FALSE box.

When we discuss our relationship issues:

Response:

I feel attacked or criticized when we talk	True	False
I usually feel like my personality is being assaulted	True	False
In our disputes, at times, I don't even feel like my partner likes me very much.	True	False
I have to defend myself because the charges against me are so unfair.	True	False
I often feel unappreciated by my partner.	True	False
My feelings and intentions are often misunderstood.	True	False
I don't feel appreciated for all the good I do in this relationship	True	False
I often just want to leave the scene of an argument.	True	False
I get disgusted by all the negativity between us.	True	False
I feel insulted by my partner at times.	True	False
I sometimes just clam up and become quiet.	True	False
I can get mean and insulting in our disputes.	True	False
I feel basically disrespected.	True	False
Many of our issues are not just my problem.	True	False
The way we talk makes me want to just withdraw from the whole relationship.	True	False
I think to myself, "who needs all this conflict?"	True	False
My partner never really changes.	True	False
Our problems have made me feel desperate at times.	True	False
My partner doesn't face issues responsibly and maturely.	True	False
I try to point out flaws in my partner's personality that need improvement.	True	False
I feel explosive and out of control about our issues at times.	True	False
My partner uses phrases like "you always" or "you never" when complaining.	True	False
I often get the blame for what are really our problems.	True	False
I don't have a lot of respect for my partner's position on our basic issues.	True	False
My partner can be quite selfish and self-centered.	True	False
I feel disgusted by some of my partner's attitudes.	True	False
My partner gets far too emotional.	True	False
I am just not guilty of many of the things I get accused of.	True	False
Small issues often escalate out of proportion.	True	False
Arguments seem to come out of nowhere.	True	False
My partner's feelings get hurt too easily.	True	False
I often will become silent to cool things down a bit.	True	False
My partner has a lot of trouble being rational and logical.	True	False

Appendix E**Marital Quality Index**

Choose the Option that Best Fits your response:

We have a Good Relationship

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

I really Feel like a part of my team with my partner

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

My Relationship with my partner is strong

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

My relationship with my partner makes me happy

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

My relationship with my partner is very stable

- Strongly agree
- Agree
- Somewhat agree

Neither agree nor disagree
 Somewhat disagree
 Disagree
 Strongly disagree

All things considered; what degree of happiness best describes your relationship

Extremely high quality
 High
 Somewhat high
 Slightly high
 Undecided
 Neither high nor low
 Slightly low
 Somewhat low
 Low
 Extremely low

|

Appendix F

Revised Intrinsic/ Extrinsic Orientation Index

Read the following statements and rate them according to the scale below by choosing the choice that best matches your opinion.

I enjoy reading about my religion

- Strongly agree
- Agree
- Undecided
- Disagree
- Strongly disagree

It is important to me to spend time in private thought and prayer.

- Strongly agree
- Agree
- Undecided
- Disagree
- Strongly disagree

I have often had a strong sense of God's presence.

- Strongly agree
- Agree
- Undecided
- Disagree
- Strongly disagree

I pray mainly to gain relief and protection.

- Strongly agree
- Agree
- Undecided
- Disagree
- Strongly disagree

I try hard to live all my life according to my religious beliefs.

- Strongly agree
- Agree
- Undecided
- Disagree
- Strongly disagree

Prayer is for peace and happiness.

- Strongly agree
- Agree
- Undecided

Disagree
Strongly disagree

I go to church/mosque because it helps me make friends.

Strongly agree
Agree
Undecided
Disagree
Strongly disagree

I go to church/mosque mostly to spend time with my friends.

Strongly agree
Agree
Undecided
Disagree
Strongly disagree

My whole approach to life is based on my religion.

Strongly agree
Agree
Undecided
Disagree
Strongly disagree

I go to church/mosque mainly because I enjoy seeing people I know there.

Strongly agree
Agree
Undecided
Disagree
Strongly disagree

What religion offers me most is comfort in times of trouble and sorrow.

Strongly agree
Agree
Undecided
Disagree
Strongly disagree

Although I am religious, I don't let it affect my daily life

Strongly agree
Agree
Undecided
Disagree
Strongly disagree

Although I believe in my religion, many other things are more important in life.

Strongly agree
Agree
Undecided
Disagree
Strongly disagree



Appendix G

Concluding Page of Study

Thank you for taking the time to participate in the study.

If you are experiencing any negative feelings, distress or know someone close to you who needs help, contact the Nawfal Clinics.

You may contact them for more information about the clinics and if you need assistance in obtaining care, you may reach them at:

Phone: +9613919889

Email: info@nawfalclinics.com

Appendix H

Tables of Additional Findings

Table 4*Independent Sample t-test on Religion*

	Same Religion		Different Religion		t-test	Sig.
	M	SD	M	SD		
Quality of Marriage	34.26	10.80	37.40	7.18	-2.59	.006

Table 5*Independent Sample t-test on Distance in courtship period*

	Long Distance		Not Long Distance		t-test	Sig.
	M	SD	M	SD		
Quality of Marriage	36.13	9.54	33.84	10.82	1.94	.027

Table 6

Independent Sample t-test on presence of children

	No children		Have Children		t-test	Sig.
	M	SD	M	SD		
Quality of Marriage	38.10	7.82	33.51	10.93	4.15	.000

Table 7

Analysis of Variance on Age

	25-34		35-44		45-54		55 and above		ANOVA	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	F-Welch	Sig.
Quality of Marriage	36.67	8.75	34.41	10.28	29.33	13.43	27.20	12.51	5.59	.003

Table 8

Analysis of Variance on years of marriage

	2-5 years	5.1-10 years	10.1-16 years	ANOVA
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	Mean	SD	Mean	SD	Mean	SD		
							F-Welch	Sig.
Quality of	38.04	7.65	33.49	10.22	30.88	12.36	15.70	000
Marriage								