

Financial transparency: A scale development study

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## Abstract

Interpersonal aspects of a relationship (i.e., equality, trust, disclosure, etc.) as they relate to finances have important implications for marital satisfaction; however, emphasis on financial transparency, “the open and honest disclosure of one’s finances,” has yet to be researched. To increase our capacity to study the role of finances in the marital relationship, the purpose of this study was to develop the Financial Transparency Scale (FTS) to assess financial transparency between married partners.

A sample of 183 married individuals in their first 5 years of their first marriage completed an online survey, consisting of the FTS and four related scales. Principal components analysis (PCA) was conducted to determine the FTS is comprised of three components: financial partnership, financial secrecy, and financial trust and disclosure of the individual partner. The first component, financial partnership (eigenvalue = 10.909), consisted of 18 items and accounted for 41.96% of the variance and had a high internal reliability of ( $\alpha = .95$ ). Component 2, financial secrecy (eigenvalue = 2.845), consisted of three items and accounted for 10.94% of variance with an internal reliability of ( $\alpha = .93$ ). Component 3, financial trust and disclosure of the individual partner (eigenvalue = 1.76), consisted of five items and accounted for 6.77% of total variance with an internal reliability ( $\alpha = .83$ ). The FTS was positively correlated with four related scales: the Kansas Marital Satisfaction Scale, the Shared Goals and Values Scale, the Frequency of Financial Management Scale, and the Communication Patterns Questionnaire – Short Form, each of which are key behaviors of financial and marital satisfaction.

The FTS will benefit financial practitioners as they can use the scale to determine the level of financial transparency between married individuals, drawing attention to areas of concern such as financial secrecy between partners. For researchers, this scale provides a

measurement for a sophisticated perspective on the interpersonal factors that mediate financial transparency between married individuals.

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## Chapter 1 - Introduction

Not long ago, the nation was in a panic. “The Great Depression of 2008 began as an economic crisis of epic proportions, bad mortgage loans and foreclosures, free falling housing prices, failures of large and small businesses (including traditional and seemingly indestructible financial giants), and a subsequent rise in unemployment” (Cushman, 2015, p. 9). In the years leading up to 2008, Wall Street continued to push the market to all-time highs, while seemingly ignoring the historical inevitability of an economic downturn, and the market cycles of expansion and contraction (Cushman, 2015). The events of the greatest economic crisis since the Great Depression unfolded and families were left trying to pick up the pieces.

The Great Recession of 2007 – 2009 heightened scholarly and public awareness of the association between financial issues and adult romantic relationships, providing researchers an opportunity to investigate how contextual financial stressors affect marriages (Dew, Britt, & Huston, 2012; Wilmarth, Nielson, & Furtis, 2014). Academic journals published studies that linked negative financial well-being, declines in marital satisfaction, and financial arguments as strong predictors of divorce (Britt, Grable, Nelson Goff, & White, 2008; Britt, & Huston, 2012; Dew et al., 2012). Marital satisfaction has been found to decrease in conjunction with economic hardship, unemployment or underemployment, unexpected hospital bills, or slow economy (Dakin & Wampler, 2008). Many would agree that the recession did not discriminate, as most families experienced some form of economic stress or change in financial status because of the altering economic environment. However, Falconier (2015) suggested experiencing concerns about one’s finances is not only limited to those who are facing objective economic hardship, but it extends to any individual that perceives that his or her resources are insufficient or inadequate to meet his or her financial needs.

Over the last 60 years family structure has changed dramatically in the United States, leading many scholars to examine predictors of marital dissolution (Dew, 2016), particularly sex and finances. Among those studies, many have linked financial issues and sound financial management to marital satisfaction. Sound financial management behaviors, living within one's means, and having little to no debt were positively associated with marital and relationship happiness (Dew & Xiao, 2013; Skogrand, Johnson, Horrocks, & DeFrain, 2011). Inversely, financial issues such as income and economic pressures have been linked to financial conflict, and financial arguments are a strong predictor of divorce (Britt & Huston, 2012; Britt, Huston, & Durband, 2012; Dew et al., 2012; Dew & Stewart 2012).

### **Purpose of the Study**

Researchers are now explicitly examining the process through which the association between financial issues and relationship quality arises, looking closely at the “hows” and “whys” of the relationship between finances and marriage (Dew, 2016). Although researchers have looked at the role of financial decision making (Archuleta & Grable, 2012) and perceptions of unfairness in the marriage (Dew et al., 2012), both of which show positive associations with divorce and marital conflict, seemingly no research has been conducted on the relationship of financial transparency and the role it plays in marital satisfaction. Financial transparency, or the open and honest disclosure of one's finances, is particularly critical in the early years of marriage when the couple is pooling resources for the first time. Despite growing interest in financial stressors, financial behaviors, financial management, and financial problems as they relate to marital satisfaction, to my knowledge a quantitative instrument to measure financial transparency does not exist. To expand our knowledge on these existing financial issues related to marital

satisfaction I have developed a scale to assess the financial transparency between married partners.

## **Chapter 2 - Literature Review**

Money plays a prominent role in couples' lives (Anoil & Snyder 1997). While many researchers and practitioners have attempted to explore financial stressors, financial behaviors, financial management, and financial problems as they relate to relationship and marital satisfaction (Archuleta, Britt, Tonn, & Grable, 2011; Britt & Huston, 2012; Britt et al., 2008; Dakin & Wampler, 2008; Dew & Xiao, 2013; Falconier, 2015; Ferber & Lee, 1974; Goodwin & Carroll, 1986; Kerkmann, Lee, Lown & Allgood, 2000), little research has explored the connection between marital satisfaction and financial transparency.

Transparent is defined as being honest and open; not secretive (Merriam-Webster, 2016), and financial transparency relates to the open and honest disclosure of one's finances. For instance, are finances discussed openly and honestly by the couple? Is there a set protocol in place for the married couple indicating specific transactions that must be discussed prior to purchasing? Are financial statements reviewed together? Is financial management discussed together? Each of these practices would allow for financial transparency.

### **Marriage and Money**

Knowledge of spousal money preferences is a valuable proficiency for the couple to develop (Britt & Huston, 2012). It is suggested that financial management skills may reduce the chance for marital disagreements, which would increase marital satisfaction, while the lack of such skills may actually create crisis situations due to the couple's conflicting perceptions of financial behavior (Britt et al., 2008; Dew et al., 2012; Kerkmann et al., 2000). Marital conflict has also been predicted by differences in spousal preferences in terms of spending behavior (Rick, Small, & Finkel, 2009), and a lack of communication between spouses has a negative impact on the marital relationship (Gottman & Notarius, 2000; Stanley, Markman, & Whitton,

2002). Although researchers have investigated the importance of spending behaviors, management, and communication on the marital relationship, further examination of the level of transparency used during couples' communication to develop the financial management and spending behaviors as it relates to marital satisfaction is needed. The greater understanding of financial transparency used in developing financial management strategies we have, the better able we will be to assess its contribution to marital satisfaction.

### **Length of Marriage**

Length of marriage has been noted to be related to marital quality and marital satisfaction (Archuleta & Grable, 2012). Approximately 40% of first marriages end in divorce, and one-fifth of first marriages will end within 5 years (Bramlett & Mosher, 2001; Cherlin, 2010).

Marital quality, which includes marital satisfaction, appears to be high in the first 5 years of marriage, but then declines until midlife, and finally rises again with increased age and length of marriage, taking on a U-shaped curve over the lifespan (Glenn, 1990; Orbuch, House, Mero, & Webster, 1996). It is important to note, however, that Ferber and Lee (1974) reported that decision making tended to shift after the first 5 years of marriage from joint to individual.

Grable et al. (2007) proposed couples, especially those comprised of young partners who have regular disagreements, will tend to be those that dissolve early. The first 5 years of marriage prove to be a crucial time period for many couples.

Marriage is often the first opportunity couples have to pool their resources with a joint utility function objective and the uncertainty associated with joint money management is high (Britt & Huston, 2012). Money is a central issue to couple relationships from the earliest years of partnership (Papp, Cummings, & Goeke-Morey, 2009). In a study completed by Risch, Riley, and Lawler (2003), a sample of newlywed couples married 5 years or less ranked financial issues

third among 10 possible content areas as a source of conflict within their marriage. Risch et al. (2003) suggested that financial issues have the potential to grow as sources of conflict for couples. Kerkmann et al. (2000) conducted a study with recently married university students, and cited that 15% of marital satisfaction was predicted by financial factors, specifically perceived quality of financial management and financial problems. Being able to control a portion of married life, such as managing finances and feeling effective at it, may help explain the relationship between perceived and actual financial management and how satisfied the primary family money manager feels about their marriage (Kerkmann et al., 2000).

Money arguments may lead to marital instability as they are associated with dissolution via ineffective communication strategies and reduced relationship satisfaction (Dew et al., 2012). Further research and scale development, as suggested by this study, will allow for greater clarification for researchers, financial counselors and planners, and therapists alike, to facilitate conversations with couples to establish open and honest communication about finances and financial management and to increase and sustain satisfaction in both their relationship and financial situation.

### **Marital Conflict**

“It would be difficult to imagine other marital issues that as easily stress couples as money” (Dew, 2016). Financial stressors have been found to influence how couples interact with one another and, in turn, how couples interact affects marital outcomes (Gottman & Notarius, 2000). Higher frequency of financial conflict during the marriage is associated with decreased marital satisfaction (Britt & Huston, 2012), and money tensions have been shown to predict marital distress (Dew, 2007). Although some findings have shown couples did not rate

money as the most frequent source of marital conflict, it remained a pervasive and unresolved issue.

Papp et al. (2009) studied the most discussed topics during marital conflict and found that money ranked sixth for husbands and fifth for wives. However, couples also reported that the conflict about money was more intense and significant than non-money conflicts. Marital conflicts dealing with money were longer, especially recurrent, and held higher present and long-term significance to partners' relationships than other conflicts (Papp et al.). These conflicts continued to persist even with implementation of problem solving behaviors. Papp et al. found that the marital conflicts regarding money were less resolved than conflict not dealing with money as indicated by both partners agreeing to continue the discussions with their spouse later.

Dew et al. (2012) found financial disagreements were the only husband-reported disagreement type to predict divorce, and among wife-reported disagreement types, financial disagreements most strongly predicted divorce. Sex was the only other significant disagreement type. Consequently, as the frequency of financial arguments increases, it will be more difficult for couples to meet their marital expectations, remain satisfied with the relationship, and ultimately stay married (Dew, 2016.). Dew (2016) found disagreements over finances on an almost daily basis had a predicted increase of 69% in the hazard of divorce relative to those who reportedly almost never fought about financial related issues. Bluestein and Schwartz (1983) suggested that couples who are arguing about money are really arguing about how to manage the money.

### **Financial Management**

Financial management was defined by Goodwin (1990) as the “planning, implementing, and evaluating by family members that are involved in the allocation of their current flow of



family income and their stock of wealth toward the end of meeting the family's implicit and explicit goals" (p. 103). Assessment of a family's resource management can be difficult, but necessary to determine the family's economic well-being (Fitzsimmons, Hira, Bauer, Hafstrom, 1993). This is particularly important as it has become increasingly easier for families and individuals to qualify for lines of credit with little more than a signature (Kerkmann, Lee, Lown, & Allgood, 2000), and applications can be completed with a couple clicks of the mouse. Financial management techniques can include goal setting, budgeting, saving, and record keeping, each of which was found to be inversely related to financial conflict between partners (Lawrence Thomasson, Wozniak, & Pawitz, 1993). Researchers have attempted to obtain a more comprehensive measure for family resource and family financial management (Fitzsimmons et al., 1993 & Rowland, Dodder & Nickols, 1985). Due to the complex nature of financial management it may not be possible to develop an all-encompassing measure, rather it might be necessary to look at related or specific areas of resource management (Fitzsimmons et al., 1993). With consideration for increased indebtedness of families it becomes even more important to know the extent finances affect the marital relationship (Kerkmann et al., 2000).

The way finances are managed has been linked to marital satisfaction (Archuleta & Grable, 2012). Money management affects marital satisfaction (Dakin & Wampler, 2008) and constitutes a major source of marital conflict (Bluestein & Schwartz, 1983), as well as relationship quality with financial wellness and the frequency with which couples engage in productive financial management behaviors (Britt et al., 2008). Practitioners and researchers have found that spousal differences affect money conflict as couples must decide how to spend their money based on different preference structures (Britt et al., 2010).

Men and women sometimes have had very different ideas about who should manage shared money and who should spend the family income (Britt et al., 2008). Gender plays a particularly important role in determining money management and perceptions of money management. Women are more likely to initiate conversations about relationship problems (Thompson and Walker, 1989), but men are more likely to have monetary control. Britt et al. (2008) conducted a study on the relationship between perceived personal, partner, and joint spending behaviors and the influence on relationship satisfaction. The results indicated that the partner's spending behaviors, but not one's own or joint spending behaviors, influenced relationship satisfaction.

Because financial preferences are so individualistic, it can cause a barrier to couples truly creating a joint sense of being a couple. These deeply held meanings of money are then manifested in individuals' financial behavior (Jenkins, Stanley, Bailey, & Markman, 2002). When spouses argue about combining their finances, they may actually be arguing about issues related to trust or autonomy. Joint money management systems are seen as a symbol of marital togetherness, but couples are becoming increasingly concerned with the notion of "financial autonomy." This can be seen through couples who have both joint and separate accounts to manage (Pahl, 1997). Through this individualist approach, couples may now have the ability to distribute less information regarding finances to their spouse, creating a secretive nature, and shutting down financial transparency. Marriage is typically associated with a pooling of assets, allowing for most couples to lower their cost of living than if they were to live separately. Discovering to what degree the individual and joint accounts are discussed openly, however, is a point of research interest. If joint spending protocols are established, or the budget is mutually agreed upon by both spouses, it is reasonable to predict that there will be less financial conflict,

and increased or sustained marital satisfaction as a result of financial transparency. By reducing what couples have reported as the most pervasive issue in their relationship, it allows for a lessened financial stressor, and again produces a greater likelihood of marital satisfaction. Through increased marital satisfaction there is an increased likelihood of marital sustainability. Goodwin (1990) has described the inadequacy of family financial management behaviors:

Goodwin and Carroll (1986) found that families, on average, engaged in fewer than 6 of 18 recommended financial management behaviors. As measured by Beutler and Mason (1987), fewer than 10% of families had high budget formality scores, including keeping written plans and records of expenditures, reviewing expenditures and using a planning horizon of one year or more. Almost 20% of their families never engaged in any of these practices and reported planning horizons of one day or less. Mullis and Schnittgrund (1982) found that fewer than one fourth of families engaged in formal budgeting. Titus, Fanslow, and Hira (1989), using an index of 10 items, reported that families' average proficiency in financial planning behavior was 54 on a 100-point scale (p. 222).

If there is a withdrawal from positive interaction or joint interaction with couples, there is a likely outcome of marital disagreements, producing prolonged marital dissatisfaction. However, studies have shown that through sound financial management, couples have reported a higher marital satisfaction. Dew and Xiao (2013) gathered a national sample and found that sound financial management behaviors were positively associated with relationship happiness, and Kerkmann et al. (2000) found couples were more satisfied when they were handling their finances properly. Financial management and financial transparency rely on a solid communicative foundation. If couples are unable to communicate properly, strong financial

transparency and financial management strategies cannot be established appropriately, leaving the couple vulnerable to developing relationship problems.

### **Communication**

Communication plays a central role in marriage, and the notion that the communication skills of spouses are major determinants of marital satisfaction is shared by theorists, researchers, and therapists alike (Burleson & Denton, 1997). Markman, Rhoades, Stanley, Ragan, and Whitton (2010) explored premarital communication quality as it was related to divorce and later distress in the first 5 years of marriage, focusing on negative and positive communication. They found that more initial negative communication predicted steeper declines in satisfaction, creating a higher risk level for divorce, and couples were most at risk for decline when there was high negative communication and low positive affect. Wilmarth et al. (2014) found similar results from married couples and the mediation of communication. Their analysis supported the hypothesis that financial wellness is positively related to positive communication and negatively related to negative communication. Former studies have shown a connection between early communication quality and future marriage outcomes; the higher the communication quality the higher the marriage quality reported.

Archuleta et al. (2011) found financial stress may be indirectly associated with marital satisfaction as a result of the communication strategies couples use to manage their stress. Many interventions that have focused on developing communication skills have proven to be less than effective and lasting than methods of enhancing marital satisfaction and eliminating undesirable behaviors (Burleson & Denton 1997). This would indicate that not only does there need to be focus on the communication patterns of couples, but also on eliminating undesirable behaviors and improving marital satisfaction.

**Self-disclosure.** Communication has proven to be an important factor in relationship behavior; one crucial modality of communication in relationships is self-disclosure (Morton, Alexander, and Altman, 1967). Self-disclosure has been defined by Waring, Holden, and Wesley (1998) as “the process of revealing one’s inner thoughts, feelings, and past experiences to another person” (p.817), while Jorgensen and Gaudy (1980) also add perceptions, fears, and doubts. The couple allows for their inner information to surface that would not normally be revealed in the day-to-day interaction. The couple then develops a relationship through the process of exchanging inner information about one’s self (Waring et al., 1998). Self-disclosure has been found to be one of the most important factors in predicting marital satisfaction (Sokloski & Hendrick, 1999).

While some studies indicate self-disclosure has positive effects, others reveal that self-disclosure may be detrimental or inappropriate at certain times (Markman, 1981). This may be due to the information that is being exchanged, or not exchanged for that matter. Some couples may be using what is described as “selective disclosure of feelings” (Levenger & Senn, 1967, p. 246). This refers to couples who filter out personal feelings or information that could have a negative effect on the marriage. When a couple decides to share intimate thoughts and feelings, it does not go without risk. There must be a certain degree of trust that the other person will not share the information, or use it to demean or belittle them (Dowd, Means, Pope, & Humphries, 2005). The disclosure of information must be reciprocal; a give and take must occur between the couple to develop intimacy (Dowd et al., 2005). Therefore, if either spouse is not disclosing income or purchases, or does feel as though he or she has a relationship in which it is safe to share this information, there is a decrease in self-disclosure within the marriage. This is

particularly alarming because self-disclosure is one the most important factors to consider when predicting the nature of marital satisfaction (Dowd et al., 2005).

According to Markman (1981), self-disclosure is even more important in the early stages of a relationship where the information being exchanged is more in-depth and intimate. If the established trust is lost during the stages of self-disclosure, particularly the beginning, the process is halted and the relationship will suffer. “Couples who self-disclose are believed to be on the path toward building a strong relationship foundation that will enhance each partner’s satisfaction in the relationship and promote more efficient and effective interpersonal problem-solving techniques which, in turn, will result in a more stable and satisfying relationship over time” (Jorgensen & Gaudy, 1980, p. 281).

Consistent research in marital interaction studies shows that positive communication exchange is related to high marital satisfaction (Markman, 1981). Based on this, it is likely that a couple with well-established communication techniques will be more likely to self-disclose, promoting financial transparency and increasing marital satisfaction.

### **Marital Satisfaction**

Several studies have looked at the relationship between financial issues and marital satisfaction, marital quality, and marital happiness. Archuleta, Grable, and Britt (2013) found that people who are happier with their financial situations tend to be happier in their relationship. When people are unhappy about their financial situations, that dissatisfaction may begin to affect other areas of their lives. The individual’s satisfaction may be related to the role they play in making financial decisions within the relationship (Archuleta et al.). The greater satisfaction an individual has with his or her decision making role, the greater relationship satisfaction that was reported (Dew et al., 2012).

Marital satisfaction has been shown to mediate the association between financial disagreements and divorce (Dew et al., 2012). Couples with reduced marital satisfaction were at a greater risk for divorce, and perceptions of unfairness or inequality had a positive association with divorce. Archuleta (2013) found that there was greater relationship satisfaction between spouses that shared financial goals and values. Decision making and goal setting should be done jointly by the spouses, but decision making and power are a particularly common issue for spouses and can cause financial conflict. Sabatelli and Shehan (1993) suggested the difference in power originates from an imbalance of resources, perhaps income or earning power of each spouse, and the ability to provide rewards within the relationship. Historically, it is the husband who holds greater power and asserts dominance in the marriage since it is the male who tends to have greater income, education, and occupational status. This power differential allows one spouse greater control within the relationship leading to greater potential conflict and decreased marital satisfaction. “The patterns of fairness, reciprocity, decision making, dominance, control and power found within ongoing relationships are addressed within the exchange framework” (Sabatelli & Shehan, 1993, p. 386).

### **Theoretical Framework**

Application of a theoretical lens lays out the framework for which this information should be viewed, interpreted, and analyzed. For this proposed study, social exchange theory will be used as a theoretical context to better understand the relationship between financial transparency and communication as it relates to marital satisfaction. This framework can illustrate how spouses decide to distribute or share financial information with one another based on a cost and reward system (e.g., joint spending behaviors, mutual purchase decisions, and deception of financial statements). Social exchange theory, most often credited to sociologist

George Homans, focuses on any social, physical, or psychological pleasure as a reward within an ongoing relationship (Sabatelli & Shehan, 1993). Sociologist Peter Blau (1964) went as far as to classify rewards into four general classes: money, social approval, esteem or respect, and compliance. Inversely, a cost would be described as anything one saw as unpleasant or undesirable, for example lack of financial transparency between spouses resulting in a decrease in marital satisfaction. When rewards exceed the costs in a transaction, a profit occurs (White & Klein, 2014).

An individual will analyze a situation to decide the cost to benefit relationship, choosing the situation offering the greatest reward (White & Klein, 2014). For example, a partner may have decided to purchase an expensive item outside of the established budget. Therefore, the partner has already assessed the situation and determined the outcome of the decision to knowingly make the purchase is more rewarding than the potential conflict as a result of the purchase.

People consider the value of rewards and probability of obtaining them when considering alternative actions (Sabatelli & Shehan, 1993). When the greatest reward is not available, the person will choose the best alternative, or the situation allowing for the least amount of loss. Continuing with the example from above, the partner can now choose to either tell his or her spouse about the purchase or choose to hide or lie about the purchase. While both may have a negative outcome, the partner may decide omission of the purchase offers a greater perceived reward than facing a potential conflict, therefore, choosing to forgo financial transparency.

A modified social exchange perspective asserts that people, though not always perfectly rational, will engage in calculations of costs and benefits in social transactions and will utilize their perceptions of the available alternatives when they are assessing their costs and benefits



(Turner, 1978). Perceived costs are viewed lower in a profitable transaction compared to rewards (Britt et al., 2008). When outcomes fall below expectations, they are viewed as unsatisfactory. Individuals will then be more likely to pursue outside relationships with others who possess desirable and valued characteristics (Sabatelli & Shehan, 1993). If the individual perceives he or she would have better outcomes outside the marriage, that person will likely move to dissolve the current marriage (Dew et al., 2012). Blau's primary assumption states that humans will choose between alternative potential relationships, or behaviors, by simply ranking either the actual or expected experiences associated with each and then select the best alternative. (Blau, 1964). Therefore, meeting the perceived expectation within the marriage is fundamental to marital continuation. If an unfair, or perceived unfair, exchange occurs, Homans (1961) predicts the disadvantaged spouse is likely to become angry while the advantaged partner in the transaction is likely to feel guilty. These associated emotions will then likely reduce the rewards derived and thus reduce the possibilities of continued association.

Individuals will continually reevaluate their situations for the perceived rewards and costs associated with a transaction and base their behavior on the opportunity offering the greatest potential for profit (White & Klein, 2014). However, it is important to point out that two individuals involved in the same transactions may have different perceived costs and rewards. "The attractiveness of a relationship is determined by the degree to which its outcomes equal or exceed one's expectations, and the degree to which the outcomes experienced exceed expectations, the greater the degree of attraction" (Sabatelli & Shehan, 1993, p. 392). Several factors can influence an individual's perception of a cost benefit analysis, including one's religious beliefs, values, demographics, or socioeconomic status. Each of these factors could have their own influence on one's perception of a given situation.

Perceived differences in power have often been cited as a source of conflict. Blau (1964) stated that power is conceived as the ability to extract compliance in an exchange relationship by controlling valued rewards and resources. Historically, the greater power has been held by the husband due to possessing more valued resources such as income, education, and occupational status. Due to this history, the wife or the partner who perceives themselves to have less power based on their resources or economical contribution, may choose to hide money in a secret account. This would allow for the “less powerful” partner to feel as though she is gaining power through acquiring more resources, however, this decreases financial transparency. Thibaut and Kelly (1959) believed individuals are always trying to protect themselves from exploitation. Therefore, the less powerful person in the relationship will act to reduce the asymmetry in dependence by seeking an alternative source of rewards, which in turn will reduce the other person’s alternative sources of rewards, then improving one’s own ability to provide rewards, thus persuading the other of the value of one’s resources, or devaluing the other person’s resources for the self (Thibaut & Kelly, 1959). This is often used to protect oneself from exploitation.

In summary, the key components and assumptions used in social exchange theory provide a framework for the sophisticated perspective on the interpersonal factors that mediate the formation, maintenance, and dissolution of a relationship (Sabatelli & Shahan, 1993). For marital partners, a lack of financial transparency may be primarily based on a constant reassessment of rewards and costs, and a battle for more power in the relationship. Inversely, financial transparency may be used as a way for the partners to maintain an equal distribution of power, therefore, equalizing the exchange of rewards and costs.

## **Current Study**

The ability for researchers, financial counselors and planners, and therapists to assess the multidimensional nature of financial transparency in the early years of marriage is critically important as finances play a pivotal role in not only the life of an individual, but in the life of spouses as they combine their individual management and communication styles for the first time. Previous quantitative studies concentrating on the relationship between marriage and finances have generally focused on financial stressors, behaviors, and management styles as they relate to the marriage. It has been acknowledged that interpersonal aspects of a relationship (i.e., equality, trust, disclosure, etc.) as they relate to finances have important implications on marital satisfaction; however, emphasis on financial transparency has yet to be researched. To increase our capacity to study the role of finances in the marital relationship, the Financial Transparency Scale (FTS) was developed to assess financial transparency between married partners. In the current study, the FTS was assessed using a sample of married individuals in the first 5 years of their first marriage. Principal components analysis (PCA) was used to determine the component structure of the FTS. I tested the FTS with four related scales; the *Kansas Marital Satisfaction Scale* (KMS), the *Shared Goals and Values Scale* (SGVS), the *Frequency of Financial Management Scale* (FFMS), and the *Communication Patterns Questionnaire – Short Form* (CPQ-SF), which together assess marital satisfaction, couples' shared goals, financial management, and communication. I expected FTS scores to be positively related to each of the scales.

## Chapter 3 - Methods

### Participants

Individuals who were legally married, for the first time, for less than 5 years were recruited to participate in the study. Three recruitment methods were utilized for this study: an email sent via listserv through the university, social media advertisements, and advertisements through Amazon Mechanical Turk.

Potential participants consisting of undergraduate students, graduate students, faculty, and staff, were individually contacted via email through a university provided listerv to participate in the survey. The potential participants were invited to participate in research designed to help understand how financial transparency relates to marital satisfaction. A link was provided to the online survey administered by Qualtrics.

The use of personal social media was also used to recruit potential participants. I personally, as well as others, advertised this study on Facebook and Twitter. The advertisement consisted of reposting the link to the email that was sent via the university listserv. Participants were not compensated or incentivized to participate through either of these methods.

Participants were also recruited through Amazon Mechanical Turk. Mechanical Turk is a web-based service designed to provide feedback from Human Intelligence Tasks (HITs). The participants received a small incentive (\$1.00) for the completion of the survey. Potential participants were provided a link to the online survey administered by Qualtrics.

Regardless of the recruitment method, after clicking the link to the survey, all participants were first directed to the informed consent form (see Appendix A). Participants were provided a brief summary of the study and were informed that the survey would take approximately 15 to 20 minutes to complete and their participation would not lead to distress or disruption of their daily

lives. After reading the informed consent form and agreeing to participate, participants were then directed to complete the survey. All responses to this survey were anonymous.

Over a thousand surveys were returned. However, no response rate is available due to this sampling method, and 949 surveys were not included in the analysis for various reasons. Initially all surveys that were not complete or individuals who did not meet the eligibility requirements were discarded. All surveys that were identified as “spam” by Qualtrics were discarded. Additionally, participants were asked their gender, as well as their partner’s gender. For purposes of this pilot study, only heterosexual couples were included. All participants who were reportedly in a gay or lesbian marriage, or those who chose not to disclose, were discarded at this time, although this will be helpful in future research.

A total of 183 surveys were used in this study. Participants’ ages ranged from 20 – 65 years ( $M = 32$ ,  $SD = 7.14$ ) and their partner’s ages ranged from 21 – 68 years ( $M = 33$ ,  $SD = 7.89$ ). Sixty percent of the participants were female, while 40% were male. The majority of the participants were White (80%), had a Bachelor’s degree (39%), were employed full-time (77%), and reported an income of \$50,000 - \$99,999 (51%).

### **Financial Transparency Scale Development and Refinement**

The Financial Transparency Scale (FTS) was constructed to be a brief, self-administered questionnaire measuring the individual financial transparency of partners. Development of the FTS was based on fundamental principles of related scales measuring financial management, financial behavior, self-disclosure, and communication, as well as conversations conducted with currently married couples, and the assistance of my major professor.

The first step in the FTS construction was to review existing related scales. I reviewed the financial literature as well as communication and self-disclosure literatures in order to

identify relevant existing measures. The financial literature focused on financial management and spending behaviors of the partners or the individual, but a measure on financial transparency was not located. Measures were found regarding marital self-disclosure and communication, but these measures did not include an in-depth discussion of financial matters. The existing scales reviewed included the Frequency of Financial Management Scale (Fitzsimmons et al., 1993), the Financial Management Behavior Scale (Parrotta, & Johnson, 1998), the Marital Self-Disclosure Questionnaire (Waring, Holden, & Wesley, 1998), the Communication Patterns Questionnaire – Short Form (Christensen & Heavey, 1990), and the Shared Goals and Values Scale (Archuleta, 2008).

After reviewing the existing measures and determining that these scales do not capture the necessary aspects of financial transparency, the second step was to define financial transparency and outline the various dimensions representative of this concept within a marriage. Financial transparency was founded in the dictionary definition of transparent “being open and honest; not secretive” (Merriam-Webster, 2016), and altered to include one’s finances, ultimately resulting in the following definition: “the open and honest disclosure of one’s finances.” Based on both the definition of financial transparency and the review of related scales, pools of items that subsequently represented financial transparency were formed (i.e., how likely are partners, how often will partners, and how likely are they as an individual to be transparent about finances in the marriage). Further additions and refinement to the scale were made after speaking with five different couples representing 2 – 30 or more years of marriage. Additional revisions were also made to clarify the wording of the individual questions with the help of my major professor.

Prior to disseminating the FTS to survey participants, several reviews were conducted to ensure the efficiency, effectiveness, and legibility of the proposed scale. Family Studies and

Personal Financial Planning faculty at Kansas State University reviewed the scale. The expert reviewers hold Doctoral degrees in Family Studies, Curriculum and Instruction, Family Social Science, Family Resource Management, and Personal Financial Planning. Two of the expert reviewers hold additional degrees in Marriage and Family Therapy, and two reviewers are Certified Financial Planners™. Regularly, preliminary revisions were made regarding wording of the questions to help ensure proper interpretation for the participants and data collection for the study. For example, initially the scale asked participants how likely they are to agree with their partner about how money is spent. One expert stated that transparency is not about agreeing or disagreeing, rather the ability or freedom to disagree. For example: the original question read, “How often do you and your partner mutually agree on how money should be spent? The final revision read, “How often do you and your partner discuss how money should be spent?” Therefore, transparency actually resides in the ability to discuss the matter, not solely on mutual agreement. Redundancy of similar questions and terminology were also critiqued (e.g. changing spouse to partner) to capture all couples for future use of the scale.

Additionally, four further reviews were then conducted by practicing Certified Financial Planners™, Marriage and Family Therapists, and those associated with Financial Therapy to extend the collective understanding of financial transparency between married partners. Common feedback asked for clarification of items on the scale. Drawing upon experience with their own clients, there was a common concern of either no understanding or misunderstanding of proposed questions (e.g. “how likely are you and your partner to prepare estate documents together?”). It was suggested that potential participants may be unfamiliar with the term, or what documents would be considered for purposes of the question. Examples were added to the question to help reduce confusion and initiate a mental association to the term. The final

question read “how likely are you and your partner to prepare estate documents together (will, trusts, power of attorney, etc.).

The revisions were made as necessary and confirmed by my major professor and myself. Once the scale development and refinement phase was complete, the survey was made available online for the qualifying sample.

### **Measurements**

The survey (see Appendix B) consisted of the *Financial Transparency Scale (FTS)*, the *Kansas Marital Satisfaction Scale (KMS)*, the *Shared Goals and Values Scale (SGVS)*, the *Frequency of Financial Management Scale (FFMS)*, and the *Communication Patterns Questionnaire – Short Form (CPQ-SF)*. In addition, demographic questions assessing participants’ eligibility and background were also included.

**Financial transparency scale.** The initial *Financial Transparency Scale (FTS)* included in the survey consisted of 32 items (Appendix B), broken down into three subscales, utilizing two three-item Likert scales ranging from “never” to “always” and “not at all likely” to “very likely”; higher scores are intended to indicate greater financial transparency. Five additional questions were utilized to assess the individual partner’s perception of financial management within the marriage. This scale was designed to assess three separate interactions relating to financial transparency: (a) how often a person and his or her partner engage in financially transparent behavior, (b) how likely a person and his or her partner are to engage in financially transparent behavior, and (c) how likely one person within the marriage is to engage in financially transparent behavior.

In the first subscale, partners were asked how often they engage in financially transparent activity with their partner (e.g., review financial statements, discuss savings goals, discuss



outstanding debts, etc.). The second subscale was designed to assess how likely the partners are to be financially transparent as a couple. It is important to understand that although a couple may say they are likely to engage in financially transparent behavior, they may not perform the tasks often. The second subscale draws attention to the disparity or similarity between the two constructs. The third subscale addressed the partner's individual behavior. Although the couple as a joint unit may view the marriage as being financially transparent, a deception may exist individually. Financial infidelity, or financially deceptive acts, can have devastating effects on relationships (Klontz & Britt, 2012). The third subscale addressed how likely a person is to lie about his or her spending or how likely he or she is to trust the other partner's spending.

**Kansas marital satisfaction scale.** The *Kansas Marital Satisfaction Scale* (KMS) is a self-administered, three-item survey. It utilizes a 7-point Likert format ranging from "extremely dissatisfied" to "extremely satisfied." The KMS was developed by Schumm et al. (1986). This scale was used in its entirety to assess marital satisfaction. The KMS appears to have excellent internal consistency with a reported alpha of 0.93, and the reliability scale has ranged from 0.75 to 0.95 in its previous studies (Grable, Archuleta, & Nazarinia, 2011). The KMS has also shown to be closely correlated to the Dyadic Adjustment Scale and the Quality of Marriage Index, each of which establish concurrent validity (Shumm et al., 1986). Along with its strong internal reliability as well as its ease of completion for participants, the KMS showed a strong correlation to marital social desirability, and scores are known to be positively related to measures of life satisfaction (Grable et al., 2011).

**Shared goals and values scale.** The *Shared Goals and Values Scale* (SGVS) is a self-administered four item survey. It utilizes a 7-point Likert scale ranging from "strongly disagree" to "strongly agree" (Archuleta, 2008). The items of this scale are summed, and as a result the

response scores could range from 4 to 28. The lower scores indicate there is less agreement on life goals and values and a higher score shows more agreement (Grable et al., 2011). This scale was derived from Gottmans's Sound Relationship House Scales and is intended to identify shared meaning about financial goals and values, life goals, and autonomy (Grable et al., 2011).

**Frequency of financial management scale.** The *Frequency of Financial Management Scale* (FFMS; Fitzsimmons et al., 1993) is a self-administered, four-item measure, utilizing a five-item Likert scale ranging from “never” to “most of the time”; higher scores are intended to indicate better financial behavior. This scale was designed to assess how often a person engages in positive/negative financial behavior (Grable et al., 2011). The Cronbach alpha for this scale ranges between 0.67 to 0.76, suggesting reliability (Fitzsimmons et al., 1993). Although the current scale is designed for individual use, an alteration to the scale was made for use in this study. After receiving approval from the authors of the scale, I added the phrase “and your spouse” to the end of the question “how often do you” posted at the top of the scale. This addition showed how often spouses perform these activities together. For example the first question in the scale read, “How often do you and your spouse make plans on how to use your money?”

**Communication patterns questionnaire – short form.** The *Communication Patterns Questionnaire – Short Form* (CPQ-SF) is an 11-item assessment of spouses' perceptions of their marital interactions. The questionnaire helps to explore various interaction and communication patterns used by couples during conflict. Items for the Communication Patterns Questionnaire (CPQ) resulted in a 35-item questionnaire on which couples independently self-report their typical interaction patterns (Furtis, Campbell, Nielson & Burwell., 2010). The CPQ was designed to assess interaction in three time periods: when an issue arises, during the discussion

of the issue, and after the discussion of the issue. Christensen and Heavey (1990) developed a shortened version of the CPQ, known as the CPQ-SF. The updated short-form asks spouses to only indicate their communication from two of the previously stated three time periods: when the issue arises and during the discussion of the issue. Of the 11-items on the CPQ-SF, 6 are to assess symmetrical interaction patterns between spouses and 5 to assess asymmetrical interaction patterns (Furtis et al., 2010). The symmetrical patterns are to reflect the spouses' mutual discussion, avoidance, blame, expression of feelings, and their negotiation. The complementary patterns include discussion by one spouse, but the other avoids; one spouse may be demanding while the other withdraws; and one spouse may criticize while the other defends.

**Demographic questions.** Demographic questions help characterize the population in which the data are being gathered. The survey initially began with “filter” questions designed to qualify or disqualify participants for the survey. The filter questions began with “Are you legally married?” The answer “no” resulted in no longer allowing the participant to complete the survey, while the answer of “yes” lead the participant to the next question, “How many years have you been legally married?” The survey answer options included, less than 1 year, 1 – 4 years, 5 – 9 years, and 10 years or more. Those who indicated they had been married fewer than 5 years were allowed to continue, and those who indicated they were married 5 years or more were not allowed to participate. Finally, the participants were asked, “Is this your first legal marriage?” Any answers resulting in “no” disqualified the participant, and all answers resulting in “yes” were allowed to move on to the remainder of the survey.

Additional questions regarding how assets and debts were viewed, whether or not they had a prenuptial agreement, who was the primary money manager, what accounts were utilized, and who earns the most money were asked immediately following the FTS. The remainder of

the demographic questions were asked at the end of the survey and included the following: age, gender, ethnicity, education level, number of children, number of dependent children, household and individual income, and current employment status. Throughout the survey there were “check questions” to help determine if participants were still thoroughly reading the questions (i.e., what color is the sky, what number comes next in the series, etc.).

### **Data Analysis**

After the data were collected they were examined to ensure the required assumptions needed to use a multivariate statistical technique were met, including: large sample size, linearity, absence of outliers, continuous data, lack of extreme multicollinearity, and a low percentage of missing data (Pett, Lackey, & Sullivan, 2003). For this study minimal missing data were replaced using substitution of the variable mean; the maximum number of replaced missing values on a single item was 9.

Principal component analysis (PCA) was used as the extraction method with direct oblimin rotation. PCA is a pure data reduction technique (Beavers et al., 2013), and a common starting point for scale reduction; it is used as a means to determine if there is a small number of underlying constructs that might account for the main sources of variation in a complex set of correlations (Stevens, 2002). This variable reduction scheme indicates how the variables cluster, or hang together, transforming the original variables into the new set of linear combinations -the principal components (Stevens, 2002). “During the factor extraction the shared variance of the variable is partitioned from the unique variance and the error variance revealing the underlying factor structure, PCA does not discriminate between the shared and unique variance” (Costello & Osbourne, 2005, p. 133).

Direct oblimin, an oblique rotation, maximizes the likelihood of extraction, and theoretically renders more accurate and perhaps a more replicable solution (Costello & Osbourne, 2005). This rotation produces both a structure matrix and pattern matrix. The structure matrix identifies the correlation between the items and factors, while the pattern matrix identifies the betas between the items and the factors, while controlling for the association between that item and other factors (Beavers et al., 2013). The pattern matrix is used to examine the factor loadings, noting that the number of factors can be no more than the number of items being factored, and there should be at least three to five items with significant loadings (greater than .03) to be considered a stable factor with a statistically valued contribution (Castello & Osbourne, 2005).

After the factors of the FTS were determined through the PCA, a correlation matrix was computed to establish initial concurrent validity of the FTS. Four other scales used to assess financial management, couples' shared goals and values, communication, and marital satisfaction, were utilized in the correlation matrix including the KMS, the SGVS, the FFMS, and the CPQ-SF.

## Chapter 4 - Results

### Factor Structure

Initially the sample was tested using the Bartlett's test for sphericity and the Kaiser-Meyer-Olkin (KMO) statistic to test for sampling adequacy. KMO is a criterion in which the factor accounts for at least as much variance as a single item would account for on average (Beavers et al., 2013). The KMO must be between 0 and 1 to indicate sampling adequacy. Each subscale of the FTS was formerly tested, as well as the scale in its entirety. The Bartlett's test for sphericity produced a significant chi-square indicating the variables were correlated enough for factor analysis to be appropriate. Factor analysis is used to reveal any latent variables that may cause the manifest variables to covary (Costello & Osbourne, 2005). The FTS produced a KMO of .885, which is deemed meritorious (Beavers et al., 2013).

Next the PCA was conducted. Items with low factor loadings ( $< .30$ ; Costello & Osbourne, 2005; Yarnold & Grimm, 1995), low commonalities, and items that exhibited high cross-loadings (greater than  $.40$ ; Schonrock-Adema, Heijne-Penninga, Van Hell, & Cohen-Schotanus, 2009), were removed individually; in total 6 items were removed. The result was the final three-factor FTS model consisting of 26 items (Table 1), explaining 59.66% of the total variance.

Table 1

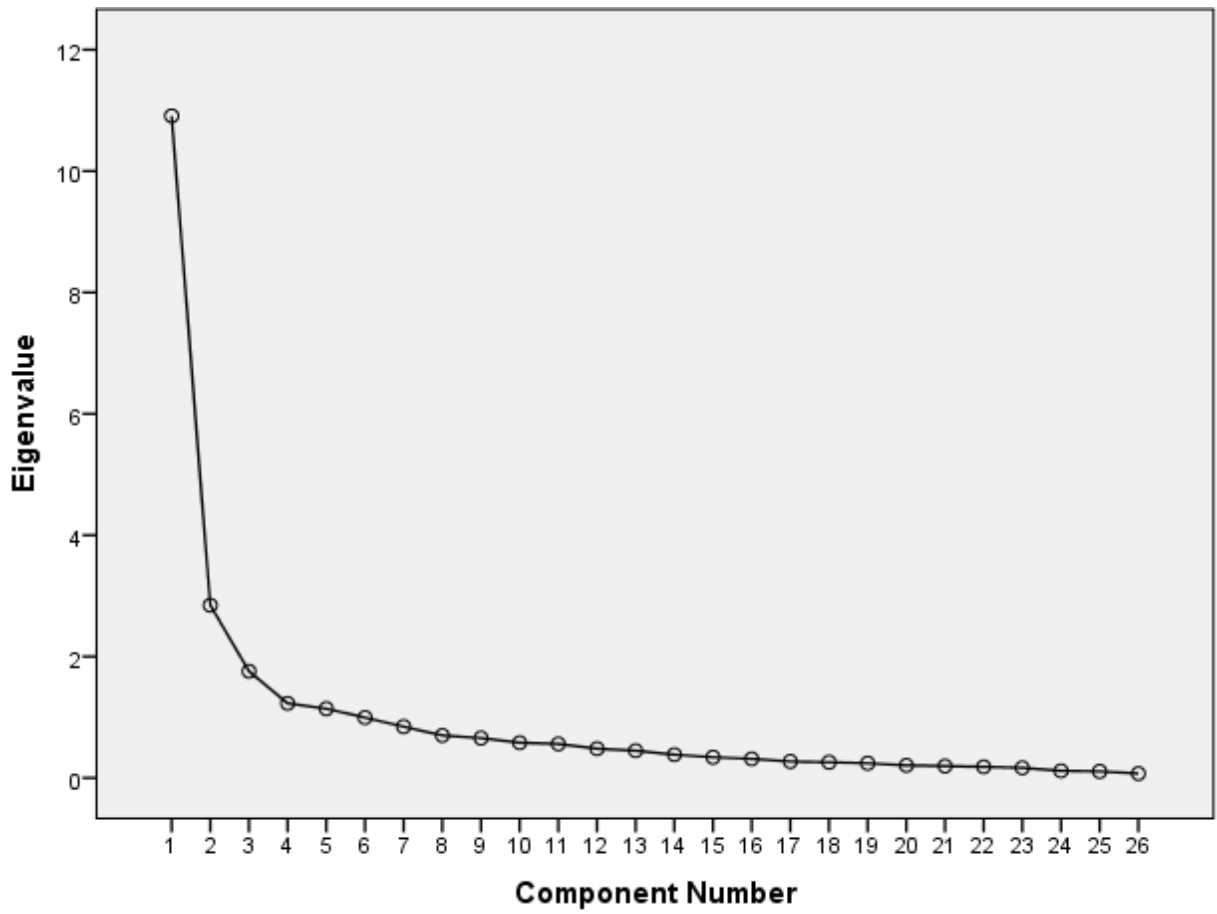
*Factor Loadings for Principal Component Analysis with Direct Oblimin Rotation of Financial Transparency Scale*

Scale Item	<i>Financial Partnership</i>	<i>Financial Secrecy</i>	<i>Trust and Disclosure</i>
Review Financial Statements	<b>.85</b>	-.19	-.12
Future Savings Goals	<b>.80</b>	.04	.04
Review Credit Reports	<b>.79</b>	-.19	-.09
Discuss Money Saved	<b>.79</b>	.02	-.03
Retirement	<b>.77</b>	.08	-.00
Discuss Money Spent	<b>.74</b>	.04	.02
Current Budget Together	<b>.74</b>	.01	-.01
Short Term Goals	<b>.73</b>	.07	.12
Records of Expenses and Income	<b>.70</b>	.04	.03
Discuss Outstanding Debts	<b>.70</b>	-.06	.06
Long Term Goals	<b>.70</b>	.17	.07
Repay Outstanding Debt	<b>.68</b>	.10	.13
Open and Honest	<b>.68</b>	.23	-.02
Plan For Large Purchases	<b>.68</b>	.13	.08
Spending Habits	<b>.66</b>	.02	.05
Estate Documents	<b>.58</b>	.06	-.03
Bill Pay Together	<b>.57</b>	-.16	-.01
Family Expenses	<b>.55</b>	.08	.23
Reverse Lie about Purchase	-.03	<b>.96</b>	-.02
Reverse Lie about Financial Transaction	.06	<b>.95</b>	-.04
Reverse Secret Regarding Spending	.09	<b>.84</b>	.06
Disclose Bonus	-.15	.01	<b>.90</b>
Disclose Earnings	-.10	.01	<b>.86</b>
Disclose Purchase to Partner	.12	-.05	<b>.70</b>
Partner's Financial Judgement	.20	.04	<b>.66</b>
Partner's Financial Management	.22	-.02	<b>.58</b>

*Note.* Factor loadings > .40 are in boldface.

The scree test (Figure 1) was used as a secondary approach to examine the extraction of factors. The scree test produces a graph in which the researcher looks for a break, or natural bend, in the eigenvalue factors as well as where the data begins to flatten out (Beavers et al., 2013; Costello & Osbourne, 2005). The data points above the break, not including the data at which the break occurs, are typically the factors to retain (Costello & Osbourne, 2005). The scree test also indicated that three factors should be retained for the FTS.





*Figure 1.* Scree plot for principal component analysis with direct oblimin rotation of financial transparency scale.

**Financial Partnership.** Factor 1 was termed *Financial Partnership*, and consists of the first 18 items (Appendix C) with factor loadings ranging from .55 to .85 (Table 1). This factor consisted of items that assess the individual and his or her partner's likelihood and occurrence of discussing financial management practices with one another. Items reflect assessment of discussion regarding goals, spending habits, purchases, budgeting, saving, and credit reports. The first component (eigenvalue = 10.91), accounted for 41.96% of the variance and had a high internal reliability of ( $\alpha = .95$ ).

**Financial Secrecy.** Factor 2, *Financial Secrecy*, consists of three items (19 – 21, Appendix C) with factor loadings ranging from .84 to .95 (Table 1). This factor included items that assess the likelihood of one partner choosing to keep a secret or lie about a financial transaction, spending, or purchase. Component two (eigenvalue = 2.85) accounted for 10.94% of variance with an internal reliability of  $\alpha = .93$ .

**Financial Trust and Disclosure.** Factor 3 was termed *Financial Trust and Disclosure*, and consists of five items (22 – 26, Appendix C) with factors ranging from .58 to .89 (Table 1). This factor included items that assess the likelihood of one partner to disclose their own financial earnings, bonuses, or purchases, as well trust in their partners financial judgement and management. Component three (eigenvalue = 1.76) accounted for 6.77% of total variance with an internal reliability of  $\alpha = .83$ .

All items on the FTS were summed across the items after recoding of three items assessing negative financial transparency were reverse coded for proper summation. The higher the score, the greater financial transparency indicated.

### **Initial Validity of the FTS**

A correlation matrix was computed to establish concurrent validity of the FTS. The correlation matrix included the 3 individual subscales of the FTS, the FTS, SGV, KMS, FFMS, and the CPQ-SF (Table 2). As expected, scores on the FTS were positively correlated with the SGV,  $r = .39, p < .01$ , the KMS,  $r = .51, p < .01$ , the FFMS,  $r = .58, p < .01$ , and the CPQ-SF,  $r = .66, p < .01$ . Therefore, financial transparency is associated with couples who agree on life goals and values, engage in positive financial behavior and partner communication, and ultimately report greater marital satisfaction.

Table 2

*Descriptive Statistics and Correlations for FTS subscales, FTS, Shared Goals and Values, Kansas Marital Satisfaction, Frequency of Financial Management, and Communication Patterns Questionnaire-Short Form (N = 183)*

	<i>M</i>	<i>SD</i>	Financial Partnership	Financial Secrecy	Trust and Disclosure	SGV	KMS	FFMS	CPQ-SF
Financial Partnership	74.13	13.63							
Financial Secrecy	12.72	3.07	.30**						
Trust and Disclosure	21.30	4.02	.53**	.35**					
SGV	27.22	6.04	.34**	.36**	.27**				
KMS	17.97	3.34	.45**	.37**	.42**	.33**			
FFMS	14.13	3.92	.60**	.20**	.31**	.25**	.34**		
CPQ-SF	42.65	7.45	.56**	.52**	.53**	.38**	.56**	.38**	
FTS	107.26	17.50	.96**	.48**	.71**	.39**	.51**	.58**	.66**

\*\* $p < 0.01$ .

## Chapter 5 - Discussion

Interpersonal aspects of a relationship (i.e., equality, trust, disclosure, etc.) as they relate to finances have important implications for marital satisfaction; however, emphasis on financial transparency, “the open and honest disclosure of one’s finances,” has yet to be researched. To increase our capacity to study the role of finances in the marital relationship, the purpose of this study was to develop the Financial Transparency Scale (FTS) to assess financial transparency between married partners. Although there has been an increased interest in examining financial stressors, financial behaviors, financial management, and financial problems as they relate to the marital relationship (Archuleta et al., 2011; Britt & Huston, 2012; Britt et al., 2008; Dakin & Wampler, 2008; Dew & Xiao, 2013; Falconier, 2015; Ferber & Lee, 1974; Goodwin & Carroll, 1986; Kerkmann et al., 2000), and we know financial wellness is positively related to positive communication and negatively related to negative communication (Wilmarth et al., 2014), there is no current measure to examine financial transparency between marital partners.

The FTS provided initial validity to assess the open and honest disclosure of one’s finances, breaking down in to the three subscales. The financial partnership subscale assesses the individual and his or her partner’s likelihood and occurrence of discussing financial management practices with one another. The financial secrecy subscale assesses the likelihood of one partner choosing to keep a secret or lie about a financial transaction, spending, or purchase. The financial trust and disclosure subscale assesses the likelihood of one partner to disclose his or her own financial earnings, bonuses, or purchases, as well trust in his or her partner’s financial judgement and management. Each of these individual subscales is an aspect of financial transparency. Specifically, the FTS provides important information about a partner’s

likelihood to lie about purchases, keep secrets regarding spending, disclose bonuses and earnings, and trust his or her partner's financial management and judgement.

Social exchange theory suggests each partner will assess the situation for costs and rewards, ultimately determining maximum profitability. If there is not a reward available, the partner will choose the best alternative, seeking to absorb the least amount of loss (Sabatelli, Shehan, 1993). For spouses discussing financial transparency, each partner will assess whether or not it is in their best interest to be transparent. For example, when discussing the budget, one partner may decide to not disclose a recent bonus he received. There could be a multitude of reasons behind the omission. Perhaps he has already earmarked it for a personal purchase, or he feels as though it is his hard-earned reward and does not want to share the additional profit. A primary assumption of social exchange theory states that humans will choose between alternative potential relationships, or behaviors, by simply ranking either the actual or expected experiences associated with each and then select the best alternative (Blau, 1964). Therefore, whatever reason exists, the partner has decided that the particular reason for nondisclosure will offer more reward than disclosing the bonus to the partner, and more importantly that the potential loss (e.g., a potential partner conflict, lying to the partner, etc.) is worth the anticipated reward. The FTS, and specifically the subscales of financial secrecy and financial trust and disclosure, offer greater insight into how much a spouse is willing to disclose or keep secretive from his or her partner in their financial relationship, ultimately making the assessment of whether the reward of transparency is greater than the potential loss.

## **FTS in Relation to Other Related Scales**

While positive correlations were found between the FTS and each of the subscales with the SGV, KMS, FFMS, and CPQ-SF, it is to be noted that the SGV and FTS have a statistically weak positive correlation ( $r = .39, p < .01$ ). This can be explained by taking a closer look at the questions addressed in both scales. The SGV assesses the level of mutual agreeance for the couple. For example, the instructions read, “Please indicate your level of agreement with the following statements,” and item one reads, “We have similar financial goals.” The FTS, on the other hand, looks only at whether the couple has a discussion regarding finances. For example, “Please indicate how often the following occur between you and your partner,” with item one reading, “Discuss finances openly and honestly.” As previously discussed during the FTS development and refinement process, it was decided that transparency actually resides in the ability to discuss the matter, not solely on mutual agreement. Therefore, the scales appear to be measuring two different variables, thus attributing to their low correlation.

Inversely the FTS and CPQ-SF have a moderately high correlation ( $r = .66, p < .01$ ). Direct comparison of the scales indicates both scales are assessing communication, particularly how likely something is to be discussed. For example, on CPQ-SF item one in its entirety reads “When an issue or problem arises, how likely is it that both spouses avoid discussing the problem?” Both the FTS and CPQ-SF appear to be addressing the same construct of communication, but measuring distinct topics of discussion with the FTS focusing on finances.

The FFMS and FTS have a moderate correlation ( $r = .58, p < .01$ ). In looking closely at the subscales, the FFMS and Financial Partnership subscale have a moderately high correlation at ( $r = .60, p < .01$ ). The FFMS is assessing how often the couple is engaging in financial activities together, such as budgeting and writing down where money is spent, similar to the first

subscale of the FTS assessing how often the couple is engaging in financial partnership such as, reviewing a budget or discussing spending habits. However, the unique contribution of the FTS can be found in the two additional subscales, Financial Secrecy and Financial Trust and Disclosure.

The correlations between the FFMS and the Financial Secrecy ( $r = .20, p < .01$ ) and Financial Trust and Disclosure subscales ( $r = .31, p < .01$ ) were weak. Additionally, it should be explicitly noted that the variables for financial secrecy were reverse coded, and remained reverse coded in the correlation matrix (Table 2), producing a positive correlation. These two subscales are able to assess aspects of financial transparency that are not being measured with the currently available scales. While the FFMS assesses financial activities (e.g., how often partners use a budget, write down where money is spent), it does not assess potential financial deception in the relationship or whether or not a person trusts his or her partner's financial judgment and management. So although money is being discussed there may still be deception in the planning, bringing to light the unique contribution of the FTS. While subjective ratings of transparency, communication, trust, and self-disclosure in a marital relationship have typically been marked as contributing factors to a more satisfying marriage, the concept has not been applied to the financial aspect of the marital relationship. Therefore, I am confident that the FTS can be used to enhance research and practice when examining the financial relationship between married partners.

### **Potential Research Uses for the FTS**

The findings of this study provide researchers with the ability to assess the domain of financial transparency between married partners through the dimensions of Financial Partnership, Financial Secrecy, and Financial Trust and Disclosure, contributing to the focus of past quantitative research in the area. Financial transparency provides important information to



the context in which finances are being discussed. By affectively assessing the three individual domains of the FTS, researchers can examine how financial transparency affects other aspects of the marital and financial relationship. For example, the FTS was positively correlated with the KMS and the CPQ-SF, suggesting that the greater the financial transparency, the more likely the couple is to report positive communication and marital satisfaction. Alternatively, couples reporting low marital satisfaction, and more negative communication, are more likely to report less financial transparency, perhaps due to lying, or lack of trust and disclosure.

The FTS also allows for partner comparison. Although dyadic data were not collected in this study, dyadic data will provide an assessment of the partners as it relates to their marriage. Additionally, an assessment of financial transparency over the length of the marriage will help examine the patterns of interaction as they evolve, expanding on our knowledge of how marital partners adjust to the ever-changing dynamic of marriage (e.g., children, jobs, etc.). This study also only utilized legally married heterosexual couples in their first marriage, for pilot testing reasons. Future research is needed to replicate the initial results regarding reliability and validity, and additional testing with more diverse couples will offer greater refinement of the findings. Overall, for researchers, this scale provides a measurement for a sophisticated perspective on the interpersonal factors that mediate financial transparency between married individuals.

### **Potential Practice Uses of the FTS**

The FTS will benefit financial practitioners as they can use the scale to determine the level of financial transparency between married individuals, drawing attention to areas of concern such as financial secrecy between partners. Financial therapists, counselors, and planners can use this tool to illustrate to married couples the importance of healthy open and honest communication about finances, pointing out that couples often have differing perceptions

of their relationship. This would be most appropriate during the client intake process prompting that the couple complete the FTS while in the office. However, some practitioners may be more comfortable gathering client information prior to using the FTS. The practitioner may use leading questions during the initial consultation such as “what is your current spending plan”, or “when do you typically discuss your finances together”? This will allow the practitioner to better understand the current protocol in place, as well as discover initially whether the clients appear to be financially transparent with one another. The FTS could as be used as a take home assignment for the couple. It should be emphasized to the partners that they will need to take the survey individually, with no communication to one another about the answers they have chosen. The answers should be reviewed by the financial practitioner to determine how to appropriately address any differences or similarities that were discovered. By drawing attention to the individual patterns and tendencies of the couple, they may gain a better understanding of how they personally contribute to the financial success of the marriage.

Additionally, Papp et al. (2009) identified that money is a central issue in the earliest years of relationship. The FTS allows practitioners to identify potential financial conflict areas related to finances, and perhaps through early detection can decrease the likelihood of marital dissolution. While required by some religions, there is a general practice of pre-marital education programs or counseling. Several predictors of divorce occur prior to marriage or in the early stages, suggesting it is important to focus on premarital initiatives (Britt & Huston, 2012). The FTS could be used during group or individual financially-based premarital education programs to develop a working agreement (e.g., how often to review the budget, address future goals, etc.) or a spending protocol (e.g., at what price point is there a discussion about a purchase), that is established at the beginning of the marriage. This will help to align the future

financial expectations of the individuals, and the household, effectively mitigating the effects of financial behaviors not addressed prior to forming a relationship.

### **Limitations and Strengths**

Although the statistically significant findings in this study provide meaningful direction to future researchers and practitioners, it is not without its limitations. Participants in this study were asked to report on their dyadic relationship, therefore the collected data are only representative of one partner's perception of the relationship. Furthermore, participants in this study were required to be married for 5 years or less. Future research should include couples married for greater than 5 years, offering a comparative analysis. Additionally a longitudinal study could be conducted to determine if there were changes or trends that occurred throughout the marriage. Another limitation of these results is reflected in the percentage of Caucasian participants (80%), a relatively large percentage compared to other racial backgrounds. Additional research should be conducted with a larger cross-cultural sample.

Despite these limitations, this study exhibits numerous strengths. The strengths of this study include assessing the financial transparency of married partners, specifically in the domains of Financial Partnership, Financial Secrecy, and Financial Trust and Disclosure. The FTS is associated with aspects of financial management and communication, and marital communication and satisfaction. Previous quantitative studies have focused on how money management, spending behaviors, and communication affect marital satisfaction (Archuleta & Grable, 2012; Dakin & Wampler, 2008; Jenkins et al., 2002). The FTS provides a new means to capture this information for quantitative researchers, as well as identify areas of concern, such as deception of spending. This is important as we know approximately 40% of first marriages end in divorce (Bramlett & Mosher, 2001), and 15% of marital satisfaction has been predicted by

financial factors (Kerkmann et al., 2000), with newlyweds ranking financial issues third among 10 possible areas of conflict in their marriage (Risch et al., 2003). Additionally, the FTS expands our knowledge on the existing financial issues related to marital satisfaction, and serves as a contribution for future research.

## **Conclusion**

Money arguments may lead to marital instability, as they are associated with dissolution via ineffective communication strategies and reduced relationship satisfaction (Dew et al., 2012). To contribute to the available quantitative measures assessing finances in the marital relationship I developed the FTS, a short scale that measures how financially transparent partners are in their marriage. The FTS demonstrates high internal reliability and identifies additional domains to be considered in assessing the financial relationship. Further research and scale development, as represented by this research, will allow for greater clarification for researchers, financial counselors and planners, and therapists alike, to facilitate conversations with couples to establish open and honest communication about finances and financial management, and to increase and sustain satisfaction in both their relationship and financial situation.

## References

- Aniol, J. C., & Snyder, D. K. (1997). Differential assessment of financial and relationship distress: implications for couples therapy. *Journal of Marital and Family Therapy*, 23(3), 347-352.
- Archuleta, K. L. (2008). *The impact of dyadic processes and financial management roles on farm couples*. Unpublished Doctoral Dissertation, Kansas State University, Manhattan, KS.
- Archuleta, K. L. (2013). Couples, money, and expectations: Negotiating financial management roles to increase relationship satisfaction. *Marriage & Family Review*, 49(5), 391-411. doi: 10.1080/01494929.2013.766296
- Archuleta, K. L., Britt, S. L., Tonn, T. J., & Grable, J. E. (2011). Financial satisfaction and financial stressors in marital satisfaction. *Psychological Reports*, 108(2), 563-576. doi:10.2466/07.21.PR0.108.2.563-576
- Archuleta, K. L., & Grable, J. E. (2012). Does it matter who makes the financial decisions? An exploratory study of married couples' financial decision-making and relationship satisfaction. *Financial Planning Review*, 5(4), 1-15.
- Archuleta, K. L., Grable, J. E., & Britt, S. L. (2013). Financial and relationship satisfaction as a function of harsh start-up and shared goals and values. *Journal of Financial Counseling and Planning*, 24, 3-14.
- Beavers, A. S., Lounsbury, J. W., Richards, J. K., Huck, S. W., Skolits, G. J., & Esquivel, S. L. (2013). Practical considerations for using exploratory factor analysis in education research. *Practical Assessment, Research, & Evaluation*, 18(6), 1-13.

- Beutler, I. F., & Mason, J. W. (1987). Family cash-flow budgeting. *Home Economics Research Journal*, 16, 3–12.
- Blau, P.M. (1964). Justice in social exchange. *Sociological Inquiry*, 34, 193 – 206.
- Blumstein, P. & Schwartz, P. (1983). *American Couples*. New York: Willian Morrow.
- Bramlett, M. D., & Mosher, W. D. (2001). *First marriage dissolution, divorce, and remarriage: United States. Advance data from vital and health statistics* (No. 323). Hyattville, MD: National Center for Health Statistics.
- Britt, S., Grable, J. E., Nelson Goff, B. S., & White, M. (2008). The influence of perceived spending behaviors on relationship satisfaction. *Journal of Financial Counseling & Planning*, 19(1), 31-43.
- Britt, S. L., & Huston, S. J. (2012). The role of money arguments in marriage. *Journal of Family and Economic Issues*, 33(4), 464-476.
- Britt, S. L., Huston, S., & Durband, D. B. (2010). The determinants of money arguments between spouses. *Journal of Financial Therapy*, 1 (1), 42 – 60.
- Burleson, B. R., & Denton, W. H. (1997). The relationship between communication skill and marital satisfaction: Some moderating effects. *Journal of Marriage & Family*, 59(4), 884-902.
- Costello, A. B., & Osbourne, J. W. (2005). Best practices in exploratory factor analysis: four recommendations for getting the most from your analysis [computer file]. *Practical Assessment, Research & Evaluation*, 101-9.
- Cherlin, A. C. (2010). Demographic Trends in the United States: A Review of Research in the 2000s. *Journal of Marriage & Family*, 72(3), 403-419. doi:10.1111/j.1741-3737.2010.00710.x

- Christensen, A., & Heavey, C. L., (1990). Gender and social structure in the demand-withdraw pattern of marital conflict. *Journal of Personality and Social Psychology*, 59, 73-81.
- Cushman, T. (2015). The moral economy of the great recession. *Society*, 52(1), 9-18.
- Dakin, J., & Wampler, R. (2008). Money doesn't buy happiness, but it helps: Marital satisfaction, psychological distress, and demographic differences between low- and middle-income clinic couples. *American Journal of Family Therapy*, 36(4), 300-311.  
doi: 10.1080/01926180701647512
- Dew, J. (2007). Two sides of the same coin? The differing roles of assets and consumer debt in marriage. *Journal of Family and Economic Issues*, 28 (1), 89-104.  
doi:<http://dx.doi.org/10.1007/s10834-006-9051-6>
- Dew, J., Britt, S., & Huston, S. (2012). Examining the relationship between financial issues and divorce. *Family Relations*, 61(4), 615-628. doi:10.1111/j.1741-3729.2012.00715.x
- Dew, J. P., & Xiao, J.J. (2013). Financial declines, financial behaviors, and relationship happiness during the 2007-2009 recession. *Journal of Financial Therapy*, 4(1), 1-20.  
<http://dx.doi.org/10.4148/jft.v4i1.1723>
- Dew, J. P., (2016) Revisiting financial issues and marriage. In J.J. Xiao (Ed.), *Handbook of consumer finances research* (pp. 281 – 290). New York, NY: Springer.
- Dowd, D. A., Means, M. J., & Pope, J. F. (2005). Attributions and marital satisfaction: The mediated effects of self-disclosure. *Journal of Family & Consumer Sciences*, 97(1), 22-26.
- Falconier, M. K. (2015). TOGETHER – A couples' program to improve communication, coping, and financial management skills: Development and initial pilot-testing. *Journal of Marital and Family Therapy*, 41, 236–250. doi: 10.1111/jmft.12052.

- Ferber, R. & Lee, L. C. (1974). Husband-wife influence in family purchasing behavior. *Journal of Consumer Research*, 1 (1), 43-50.
- Fitzsimmons, V. S., Hira, T. K., & Bauer, J. W. (1993). Financial management: Development of scales. *Journal of Family and Economic Issues*, 14(3), 257-274.
- Futris, T. G., Campbell, K., Nielsen, R. B., & Burwell, S. R. (2010). The communication patterns questionnaire--short form: A review and assessment. *Family Journal*, 18(3), 275-287. doi:10.1177/1066480710370758
- Glenn, N.D. (1990). Qualitative research on marital quality in the 1980s: A critical review. *Journal of Marriage and the Family*, 52, 818-831.
- Godwin, D. D. (1990). Family financial management. *Family Relations*, 39(2), 221–228.
- Godwin, D. D., & Carroll, D. D. (1986). Financial management attitudes and behavior of husbands and wives. *Journal of Consumer Studies and Home Economics*, 10, 47–55.
- Gottman, J. M., & Notarius, C. I. (2000). Decade review: Observing marital interaction. *Journal of Marriage & Family*, 62(4), 927-947.
- Grable, J. E., R., Archuleta, K. L., & Nazarinia, R. (2011). *Financial Planning and Counseling Scales*. New York: Springer.
- Grable, J. E., Britt, S. and Cantrell, J. (2007), An exploratory study of the role financial satisfaction has on the thought of subsequent divorce. *Family and Consumer Sciences Research Journal*, 36, 130–150. doi: 10.1177/1077727X07309284.
- Homans, G. C. (1961). *Social Behaviors: Its elementary forms*. New York: Harcourt, Brace & World.
- Jenkins, N. H., Stanley, S. M., Bailey, W. C., & Markman, H. J. (2002). *You paid how much for that? How to win at money without losing at love*. San Francisco, CA: Jossey-Bass.



- Jorgensen, S. R., & Gaudy, J. C. (1980). Self-disclosure and satisfaction in marriage: The relation examined. *Family Relations*, 29(3), 281.
- Kerkmann, B. C., Lee, T. R., Lown, J. M., & Allgood, S. M. (2000). Financial management, financial problems and marital satisfaction among recently married university students. *Journal of Financial Counseling and Planning*, 11(2), 55-65.
- Klontz, B. T., & Britt, S. L. (2012). How clients' money scripts predict their financial behaviors. *Journal of Financial Planning*, 25(11), 33-43.
- Lawrence, F. C., Thomasson, R. H., Wozniak, P. J., & Prawitz, A. D. (1993). Factors relating to spouse financial arguments, *Financial Counseling and Planning*, 4, 85-93.
- Levinger, G., & Senn, D. J. (1967). Disclosure of feelings in marriage. *Merrill Palmer Quarterly*, 13, 237-249.
- Markman, H. (1981). The prediction of marital distress: A five year follow-up. *Journal of Counseling and Clinical Psychology*, 49, 760-762.
- Markman, H., Rhoades, G., Stanley, S., Ragan, E., & Whitton, S. (2010). The premarital communication roots of marital distress and divorce: The first five years of marriage. *Journal of Family Psychology*, 24(3), 289-298 10p. doi:10.1037/a0019481
- Morton, T. L., Alexander, J. F., & Altmann, I. (1976). Communication and relationship definition. In G.R. Miller (Ed.), *Annual Review of Communication research* (Vol. 5). Beverly Hills, CA: Sage.
- Mullis, R. J., & Schnittgrund. (1982). Budget behaviors: Variance over the life cycle of low income families. *Journal of Consumer Studies and Home Economics*, 6, 113-120.
- Orbuch, T. L., House, J. S., Mero, R. P., Webster, P. S. (1996). Marital quality over the life course. *Social Psychology Quarterly*, 59, 162-171.

- Pett, M., Lackey, N. & Sullivan, J. (2003). *Making sense of factor analysis*. Thousand Oaks: Sage Publications, Inc.
- Pahl, J. (1997). His money, her money: Recent research on financial organization in marriage. *Journal of Economic Psychology*, *16*, 361-376.
- Papp, L. M., Cummings, E. M., & Goeke-Morey, M. C. (2009). For richer, for poorer: Money as a topic of marital conflict in the home. *Family Relations*, *58*(1), 91-103.
- Parrotta, J. L., & Johnson, P. J. (1998). The impact of financial attitudes and knowledge on financial management and satisfaction of recently married individuals. *Financial Counseling and Planning*, *9*(2), 59 – 74.
- Rowlands, V. T., Dodder, R. A., & Nickols, S. Y. (1985). Perceived adequacy of resources: Development of a Scale. *Home Economics Research Journal*, *14*, 218 – 225.
- Rick, S. I., Small, D. A., & Finkel, E. J. (2009). Fatal (fiscal) attraction: Spendthrifts and tightwads in marriage. *Journal of Marketing Research*, *48*(2), 228-237.  
doi:10.1509/jmkr.48.2.228
- Risch, G. G., Riley, L. A., & Lawler, M. G. (2003). Problematic issues in the early years of marriage: Content for premarital education. *Journal of Psychology & Theology*, *31*(3), 253.
- Sabatelli, R. M., & Shehan, C. L. (1993) Exchange and resource theories. In P. Boss, W. J. Doherty, R. LaRossa, W. R. Schumm, & S. K. Steinmetz (Eds.), *Sourcebook of family theories and methods: A conceptual approach* (pp. 385-411). New York, NY: Springer.
- Schönrock-Adema, J., Heijne-Penninga, M., van Hell, E. A., & Cohen-Schotanus, J. (2009). Necessary steps in factor analysis: Enhancing validation studies of educational

- instruments. The PHEEM applied to clerks as an example. *Medical Teacher*, 31(6), 226-232.
- Schumm, W. R., Paff-Bergen, L. A., Hatch, R. C., Obiorah, F. C., Copeland, J. M., Meens, L. D., & Bugaighis, M. A. (1986). Concurrent and discriminant validity of the Kansas marital satisfaction scale. *Journal of Marriage and the Family*, 48(2), 381-387.
- Sokolski, D. M., & Hendrick, S. S. (1999). Fostering marital satisfaction. *Family Therapy*, 26(1), 39 – 49.
- Stanley, S., Markman, H., & Whitton, S. (2002). Communication, conflict, and commitment: Insights on the foundations of relationship success from a national survey. *Family Process*, 41(4), 659-675.
- Stevens, J. P. (2002). *Applied multivariate statistics for the social sciences* (4<sup>th</sup> ed., pp. 385-386). Mahwah, N.J.: Lawrence Erlbaum Associates.
- Transparent. 2016. In Merriam-Webster.com. Retrieved April 10, 2016, from <http://www.merriam-webster.com/dictionary/transparent>
- Thompson, L., & Walker, A. J. (1989). Gender in families: Women and men in marriage, work, and parenthood. *Journal of Marriage & Family*, 51(4), 845-871.
- Titus, P. M., Fanslow, A. M., & Hira, T. K. (1989). Net worth and financial satisfaction as a function of household money managers' competencies. *Home Economics Research Journal*, 17, 309–318.
- Waring, E. M., Holden, R. R., & Wesley, W. (1998). Development of the marital self-disclosure scale questionnaire (MSDQ). *Journal of Clinical Psychology*, 54(1), 817 – 824.
- White, J., & Klein, D. (2014). *Family theories: An introduction*. Thousand Oaks, CA: Sage.

Wilmarth, M. J., Nielsen, R. B., & Futris, T. G. (2014). Financial wellness and relationship satisfaction: Does communication mediate? *Family & Consumer Sciences Research Journal*, 43(2), 131-144. doi:10.1111/fcsr.12092

Yarnold, P. R., & Grimm, L. G. (1995). *Reading and understanding multivariate statistics*. American Psychological Association, 99-134.

# Appendix A - Informed Consent

**PROJECT TITLE:** Financial Transparency as it Relates to Marital Satisfaction

**APPROVAL DATE OF PROJECT:**

**EXPIRATION DATE OF PROJECT:**

**INVESTIGATORS:** Dr. Mindy Markham and Emily Koochel

**CONTACT FOR ANY PROBLEMS/QUESTIONS:** Emily Koochel at 620-617-5385 or [ekoochel@ksu.edu](mailto:ekoochel@ksu.edu)

**IRB CHAIR CONTACT/PHONE INFORMATION:**

- Rick Scheidt, Chair, Committee on Research Involving Human Subjects, 203 Fairchild Hall, Kansas State University, Manhattan, KS 66506, (785) 532-3224.
- Cheryl Doerr, Associate Vice President for Research Compliance, 203 Fairchild Hall, Kansas State University, Manhattan, KS 66506, (785) 532-3224.

**PURPOSE OF THE RESEARCH:** The purpose of this study is to determine the correlation between financial transparency and marital satisfaction in married couples in the first 5 years of marriage.

**PROCEDURES:** Participants will be contacted through two primary collection mechanisms, university listservs and Amazon's Mechanical Turk. The university provided listserv will contact students individually via email to participate in the survey. Amazon's Mechanical Turk will recruit participants through advertisements for the study. A small incentive of \$1.00 will be provided to the those participants who complete the survey via the collection method. The survey will be conducted using Qualtrics. Each survey will consist of a university approved informed consent form, the Financial Transparency Scale, and demographic questions.

**LENGTH OF STUDY:** 15 - 20 minutes to complete the online survey

**RISKS OR DISCOMFORTS ANTICIPATED:** There are no known risks associated with participating in this study.

**BENEFITS ANTICIPATED:** You may be enlightened about your own marital and financial situation and make progress to improve and continue financial transparency.

**EXTENT OF CONFIDENTIALITY:** All research data will be stored in the principal investigators's locked office. All personal data will remain strictly confidential.

**TERMS OF PARTICIPATION:** I understand this project is research, and that my participation is completely voluntary. I also understand that if I decide to participate in this study, I may withdraw my consent at any time, and stop participating at any time without explanation, penalty, or loss of benefits, or academic standing to which I may otherwise be entitled.

I verify that my signature below indicates that I have read and understand this consent form, and willingly agree to participate in this study under the terms described, and that my signature acknowledges that I have received a signed and dated copy of this consent form.

\_\_\_\_\_  
Participant Name

\_\_\_\_\_  
Participant Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Research Team Member Name

\_\_\_\_\_  
Research Team Member Signature

\_\_\_\_\_  
Date

## Appendix B - Survey

1. Are you legally married?
  - a. Yes
  - b. No
  
2. How long have you been legally married?
  - a. Less than one year
  - b. 1 – 4 years
  - c. 5 – 9 years
  - d. 10 years or more
  
3. Is this your first legal marriage?
  - a. Yes
  - b. No
  
4. How long did you date your partner before getting married? (Years or Months)  
(Open ended)
  
5. Did you live with your partner before getting married?
  - a. Yes
  - b. No
  
6. If yes, how long did you live together?
  - a. Less than 1 year
  - b. 1 year
  - c. 2 years
  - d. 3 years
  - e. 4 years
  - f. More than 5 years
  
7. What is the current year?
  - a. 2015
  - b. 2016
  - c. 2017

Please indicate how often the following occur between **you and your partner**.

	Never	Seldom	Occasionally	Usually	Always
Discuss finances openly and honestly.					
Review financial statements together (credit card statements, investment statements, etc.).					

Discuss how money should be spent.					
Discuss how money should be saved.					
Discuss the purchase of a high value item.					
Make savings goals for the future together.					
Review credit reports together.					
Review credit scores together.					
Discuss outstanding debts.					

Please indicate how likely the following are to occur between **you and your partner**.

	Not at All Likely	Not Likely	Somewhat Likely	Likely	Very likely
Make financial decisions together.					
Review a current budget together.					
Discuss spending habits.					
Openly communicate about finances.					
Set long-term (more than 5 years) financial goals together					
Set short-term (less than 1 year) financial goals together.					
Discuss family expenses.					
Pay bills together.					
Plan ahead for large purchases together.					
Keep records of expenditures and income.					
Prepare estate documents together (will, trusts, power of attorney, etc.).					
Discuss repayment of outstanding debt.					

Discuss savings plans for retirement.					
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8. What number comes next? 1, 2,3,4,.....

- a. 5
- b. 10
- c. 15

Please indicate how likely **you** are to do the following.

	Not at All Likely	Not Likely	Somewhat Likely	Likely	Very likely
Lie to your partner about a financial transaction.					
Lie about a purchase to your partner.					
Keep a secret from your partner regarding spending.					
Disclose all of your purchases to your partner.					
Trust your partner's financial judgement.					
Trust your partner's financial management.					
Have access to your partner's financial statements?					
Have access to your partner's on-line banking.					
Disclose your earnings to your partner.					
Disclose a bonus to your partner.					

9. Who earns the most money in your marriage?

- a. You
- b. Your partner
- c. Both
- d. Do not know

10. Regardless of who incurred the debt prior to getting married, how do you view debts now?

- a. Yours
- b. Mine
- c. Ours



11. Regardless of who incurred the assets prior to getting married, how do you view assets now?
  - a. Yours
  - b. Mine
  - c. Ours
  
12. Did you and your partner have a prenuptial agreement?
  - a. Yes
  - b. No
  
13. Who is the primary money manager in your marriage?
  - a. You
  - b. Your partner
  - c. Both
  - d. Other (open text box)
  
14. If you paid off all of your debts would you:
  - a. Still owe money
  - b. Break even
  - c. Have additional money leftover
  
15. What type of spending accounts do you and your partner utilize?
  - a. Individual and joint accounts
  - b. Individual accounts only
  - c. All accounts are joint

Select the response that best indicates how much you agree with each statement.

How satisfied are you with your marriage?		1. Extremely dissatisfied
How satisfied are you with your husband/wife as a spouse?		2. Very dissatisfied
How satisfied are you with your relationship with your husband/wife?		3. Somewhat dissatisfied
		4. Mixed
		5. Somewhat satisfied
		6. Very satisfied
		7. Extremely satisfied

Please indicate your level of agreement with the following statements.

1. We have similar financial goals.

1      2      3      4      5      6      7  
 Strongly Agree                      Mixed                      Strongly Agree

2. Our hopes and aspirations, as individuals and together for our children, for our life in general, and for our old age are quite compatible.

1      2      3      4      5      6      7

Strongly Agree                      Mixed                      Strongly Agree

3. We have similar values about the importance and meaning of money in our lives.

1      2      3      4      5      6      7

Strongly Agree                      Mixed                      Strongly Agree

4. We have similar values about “autonomy” and “independence”.

1      2      3      4      5      6      7

Strongly Agree                      Mixed                      Strongly Agree

16. What color is a stop sign?

- a. Purple
- b. Red
- c. Blue

Please indicate how often you and your partner engage in the following activities.

	<b>Never</b>	<b>Seldom</b>	<b>Occasionally</b>	<b>Usually</b>	<b>Most of the time</b>
Make plans on how to use your money					
Write down where money is spent					
Evaluate spending on a regular basis					
Use a written budget					

Please indicate how likely you are to do the following.

When an issue or problem arise, how likely is it that...

	<b>Very likely</b>	<b>Likely</b>	<b>Somewhat likely</b>	<b>Almost never</b>	<b>Never</b>
Both spouses avoid discussing the problem					
Both spouses try to discuss the problem					
Female tries to start the a discussion while male tries to avoid a discussion					
Males tries to start a discussion while female tries to avoid discussion					
<b>During a discussion of issues or problems, how likely is it that...</b>	<b>Very likely</b>	<b>Likely</b>	<b>Somewhat likely</b>	<b>Almost never</b>	<b>Never</b>
Both spouses express feelings to each other					
Both spouses blame, accuse, or criticize each other					
Both spouses suggest possible solutions or compromises					
Female pressures, nags, or demands while males withdraws, becomes silent, or refuses to discuss the matter further					
Male pressures, nags, or demands while female withdraws, becomes silent, or refuses to discuss the matter further					
Female criticizes while male defends himself					
Male criticizes while female defends herself					

17. What comes next? A, B, C,....

- a. Z
- b. D
- c. X

18. What is your age? (open ended)

19. What is your partner's age? (open ended)

20. What is your gender:

- a. Male
- b. Female
- c. Transgender female
- d. Transgender male

- e. Gender variant / non-conforming
- f. Not listed (text box)
- g. Prefer not to answer

21. What is your partner's gender?

- a. Male
- b. Female
- c. Transgender female
- d. Transgender male
- e. Gender variant / non-conforming
- f. Not listed (text box)
- g. Prefer not to answer

22. Please specify your ethnicity (select all that apply):

- a. White
- b. Hispanic or Latino
- c. Black or African American
- d. Native American or American Indian
- e. Asian / Pacific Islander
- f. Other

23. How many children are financially dependent on you?

- a. 0
- b. 1
- c. 2
- d. 3
- e. 4
- f. 5 or more

24. What is your approximate household income?

- a. Less than \$25,000
- b. \$25,000 to \$34,999
- c. \$35,000 to \$49,999
- d. \$50,000 to \$74,999
- e. \$75,000 to \$99,999
- f. \$100,000 to \$149,999
- g. \$150,000 to \$200,000
- h. \$200,000 or more

25. What is your approximate individual income?

- a. Less than \$25,000
- b. \$25,000 to \$34,999
- c. \$35,000 to \$49,999
- d. \$50,000 to \$74,999
- e. \$75,000 to \$99,999

- f. \$100,000 to \$149,999
  - g. \$150,000 to \$200,000
  - h. \$200,000 or more
26. What is the highest level of education you completed?
- a. Some high school, no diploma
  - b. High school graduate, diploma or equivalent
  - c. Trade/technical/vocational training
  - d. Associate degree
  - e. Bachelor's degree
  - f. Master's degree
  - g. Doctorate degree or Professional degree
27. What is your current employment status?
- a. Part-time
  - b. Full-time
  - c. Student
  - d. Military
  - e. Unable to work
  - f. Stay at home parent / person
  - g. Out of work and looking for work
  - h. Out of work but not currently looking for work

## Appendix C - Financial Transparency Scale

Please indicate how often the following occur between **you and your partner**.

	Never	Seldom	Occasionally	Usually	Always
Discuss finances openly and honestly.					
Review financial statements together (credit card statements, investment statements, etc.).					
Discuss how money should be spent.					
Discuss how money should be saved.					
Make savings goals for the future together.					
Review credit reports together.					
Discuss outstanding debts.					

Please indicate how likely the following are to occur between **you and your partner**.

	Not at All Likely	Not Likely	Somewhat Likely	Likely	Very likely
Review a current budget together.					
Discuss spending habits.					
Set long-term (more than 5 years) financial goals together					
Set short-term (less than 1 year) financial goals together.					
Discuss family expenses.					
Pay bills together.					
Plan ahead for large purchases together.					
Keep records of expenditures and income.					

Prepare estate documents together (will, trusts, power of attorney, etc.).					
Discuss repayment of outstanding debt.					
Discuss savings plans for retirement.					

Please indicate how likely **you** are to do the following.

	Not at All Likely	Not Likely	Somewhat Likely	Likely	Very likely
Lie to your partner about a financial transaction.					
Lie about a purchase to your partner.					
Keep a secret from your partner regarding spending.					
Disclose all of your purchases to your partner.					
Trust your partner's financial judgement.					
Trust your partner's financial management.					
Disclose your earnings to your partner.					
Disclose a bonus to your partner.					