

Financial Transparency Scale: Its Development and Potential Uses

Emily E. Koochel,^a Melinda S. Markham,^b Duane W. Crawford,^c and Kristy L. Archuleta^d

The purpose of this study was to develop the Financial Transparency Scale (FTS) to assess financial transparency, the open and honest disclosure of one's finances, between married partners. A sample of 183 individuals married for less than 5 years, in their first marriage, completed an online survey. Principal components analysis (PCA) was conducted and determined the FTS is comprised of three components: Financial Partnership, Financial Secrecy, and Financial Trust and Disclosure. 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. An alpha of .94 was reported for the FTS. Financial practitioners can use the FTS as a tool to determine the level of financial transparency within a couple relationship, identify areas of concern, and illustrate the importance of open and honest communication about finances.

Keywords: communication, disclosure, financial transparency, marital satisfaction

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, Nielsen, & Futris, 2014). 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). Research has found, sound financial management behaviors, living within one's means, having little to no debt, and improved communication were positively associated with marital and relationship happiness (Dew & Xiao, 2013; Ksendzova, Donnelly, & Howell, 2017; Skogrand, Johnson, Horrocks, & DeFrain, 2011; Zimmerman & Roberts, 2012). 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, 2010; Dew et al., 2012; Dew & Stewart, 2012). Despite growing interest in financial stressors, financial behaviors, financial management, and financial problems as they relate to marital satisfaction, little research has explored the connection between marital satisfaction and financial transparency, defined as the open and honest disclosure of one's finances.

The purpose of this study was to develop the Financial Transparency Scale (FTS) to assess financial transparency between married partners. While financial management (Dakin & Wampler, 2008) and positive communication (Wilmarth et al., 2014) have been tied to marital and relationship happiness, there may be an assumption that because a situation is going well, transparency is implied. Just as a doctor cannot accurately diagnosis a patient without knowing all of their symptoms, neither can a financial practitioner if the client is not being financially transparent.

^a PhD student, Kansas State University, 326 Justin Hall, 1324 Lovers Lane, Manhattan, KS 66506. E-mail: ekoochel@ksu.edu

^b Associate Professor, Human Development and Family Studies, Kansas State University, 343-O Justin Hall, 1324 Lovers Lane, Manhattan, KS 66506. E-mail: mmarkham@ksu.edu

^c Professor, Human Development and Family Studies, Kansas State University, 310 Justin Hall, 1324 Lovers Lane, Manhattan, KS 66506. E-mail: dcrawfor@ksu.edu

^d Associate Professor, Financial Planning, Housing and Consumer Economics, Financial Planning Research Center (House B), 407 Sanford Dr., Athens, GA 30602. E-mail: karchuleta@uga.edu

Furthermore, in a relationship, although the couple may be engaging in positive communication; is that to say that the communication is transparent? It is anticipated that this scale will increase the capacity to study the role of finances in the marital relationship. This client-centered tool may help financial practitioners and couples identify areas of concern regarding financial transparency.

Literature Review

Money is a central issue in couple relationships beginning in the earliest years of partnership (Papp, Cummings, & Goeke-Morey, 2009) and financial problems are consistently ranked as a top stressor for Americans (American Psychological Association, 2015). For example, a sample of couples married 5 years or less ranked financial issues third among 10 possible content areas as a source of conflict within their marriage (Risch, Riley, & Lawler, 2003). Similarly, Kerkmann, Lee, Lown, and Allgood (2000) found that among university students who were recently married, 15% of marital satisfaction was predicted by financial factors, specifically perceived quality of financial management and financial problems. Dew (2016) found disagreements over finances on an almost daily basis had a predicted increase of 69% in the risk of divorce, relative to those who reportedly almost never fought about finance-related issues.

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 financial transparency between married partners. The ability to assess the multidimensional nature of financial transparency, the open and honest disclosure of one's finances, is critical in the early years of marriage as partners combine their communication and management styles for the first time.

Marriage is typically associated with a pooling of assets (Kenney, 2004). Heimdal and Houseknecht (2003) reported that 73% of married couples said they put all of their money together in a "common pot," and more recently a survey conducted by TD Bank in 2016 found that 76% of couples said they share at least one bank account (Hill, 2016). Discovering to what degree the individual and joint accounts are discussed openly is a point of research interest, further emphasizing the need to better understand financial

transparency. Importantly, men and women have sometimes had very different ideas about who should manage shared money and who should spend the family income (Britt, Grable, Nelson Goff, & White, 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 & 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.

Improving financial management behavior has been a challenge for financial counselors (Bapat, 2019). Spuhler and Dew (2019) reported, "Sound financial management behaviors were positively associated with relationship satisfaction which was then, in turn, positively associated with happiness" (p. 24). However, because financial preferences are so individualistic, they 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 partners argue about combining their finances, they may actually be arguing about issues related to trust or autonomy (Pahl, 1997). Joint money management systems were seen as a symbol of marital togetherness, though more consistently for women than men, and couples with joint accounts were associated with happier relationships (Addo & Sassler, 2010; Kenney 2006); however, couples may pursue financial autonomy or independence through separate accounts.

"Communicating about money is even more challenging than other topics" (Britt-Lutter, Haselwood, & Koochel, 2018, p. 1). There must be a degree of trust that the other person will not share the information, or use it to demean or belittle them (Dowd, Means, & Pope, 2005). Weil (2009) suggested that financial infidelity flourishes when the feeling of safety is lacking regarding finances. If a marital partner senses they do not have a safe environment to fully self-disclose information, they may use what is described as "selective disclosure of feelings" (Levinger & Senn, 1967, p. 246). This refers to couples who filter out personal feelings or information that could have a negative effect on

the marriage. Through this individualistic approach, couples may now distribute less information regarding finances to their spouse, decreasing financial transparency.

Theoretical Framework

Social exchange theory was used as a theoretical lens to better understand the relationship between financial transparency and communication as it relates to marital satisfaction. This framework illustrates 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 partners resulting in a decrease in marital satisfaction. When rewards exceed the costs in a transaction, a profit occurs (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 partner 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.

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 transaction 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 of as the ability to extract compliance in an exchange relationship by controlling valued rewards and resources, and Weil (2009) suggested that financial infidelity may be expressed as a power struggle over money. Historically, the greater power has been held by the husband due to possessing more valued resources such as income, education, and occupational status (Gillespie, 1971). For example, 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 they are gaining power through acquiring more resources; however, this decreases financial transparency. Thibaut and Kelley (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. This will reduce the other person’s alternative sources of rewards, 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 & Kelley, 1959).

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 & Shehan, 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.

Present 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 partners 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 further understand the role of finances in the marital relationship, the FTS was developed to assess financial transparency.

Methods

Participants

Individuals who were legally married, for the first time, for less than 5 years were recruited to participate in the study, and were asked to report on their perception of financial transparency within their relationship. This study focused on the first formative years of marriage, as partners are typically combining their assets and management styles for the first time (Heimdal & Houseknecht, 2003; Kenney, 2004). This transition into marriage, and the merger of assets, proves to be a critical point of interception (Kerkmann et al., 2000; Papp et al., 2009; Risch et al., 2003) for financial transparency. Due to the differences of experiences between first and subsequent marriages, the sample was limited to include only those in their first marriage.

Three recruitment methods were utilized for this study: (a) an email sent via an all university listserv through a Midwestern university, (b) social media postings through Facebook and Twitter, and (c) advertisements through Amazon Mechanical Turk (MTurk). Only participants recruited through MTurk received a small incentive (\$1.00) for the completion of the survey.

Regardless of the recruitment method, after clicking the link to the survey, all participants were first directed to the informed consent form. Participants were provided a brief summary of the study and were informed that the survey would take approximately 15–20 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 online Qualtrics survey. All responses to this survey were anonymous.

The initial sample included 242 individuals who were legally married for the first time, for less than 5 years. We cleaned the data by removing (a) 56 surveys that were identified as “spam” by Qualtrics, (b) 17 non-heterosexual individuals, (c) 15 surveys that did not pass the “check questions,” and (d) 20 surveys that were deemed “incomplete.” The incomplete surveys in this sample were missing approximately 40% of the responses, and were discarded.

Measures were taken to reduce the likelihood of multiple responses from the same participants. Eighty-four percent of the participants were recruited through MTurk; these participants are assigned an “MTurk ID.” If a duplicate of the ID was found, it was discarded. Due to the anonymity of the survey the percentage of participants from either social media or the university listserv is unavailable. However, these responses were scanned for duplicates, and “check questions” were in place to minimize participants simply clicking through the survey. For example: “What color is the sky?” If the response was “red” the survey was discarded. Additionally, participants were asked their own gender and their partner’s gender. For purposes of this pilot study, only heterosexual individuals were included, persons who indicated they were in a same-sex relationship were not included.

A total of 183 surveys were used in this study. Participants’ ages ranged from 20 to 65 years ($M = 32$, standard deviation [SD] = 7.14) and their partners’ ages ranged from 21 to 68 years ($M = 33$, $SD = 7.89$). The majority of the participants were female (60%), White (80%), held a bachelor’s degree (39%), were employed full-time (77%), and reported an income of \$50,000–\$99,999 (51%); see Table 1 for sample demographics.

**TABLE 1. Participant Descriptive Statistics
(N = 183)**

Variables	Range	Mean (SD)
Participant's age	20–65	32 (7.14)
Partner's age	21–68	33 (7.89)
Variables	N	Frequency
Gender		
Male	73	40.0%
Female	110	60.0%
Ethnicity		
White	146	80.0%
Black or African American	12	6.5%
Hispanic or Latino	9	4.9%
Other Ethnicity (s)	9	4.9%
Asian/Pacific Islander	7	3.7%
Education		
High school	10	5.5%
Trade school	10	5.5%
Some college	37	20%
Associates degree	18	10%
Bachelor's degree	71	39%
Master's degree	32	17%
Doctoral/Professional degree	5	3%
Household Income		
Less than \$25,000	14	8%
\$25,000–\$34,999	14	8%
\$35,000–\$49,999	26	14%
\$50,000–\$74,999	49	27%
\$75,000–\$99,999	44	24%
\$100,000–\$149,999	28	15%
\$150,000–\$199,999	6	3%
\$200,000 or more	2	1%
Employment		
Part-time	140	77%
Full-time	16	9%
Student	4	2
Stay-at-home parent/person	19	10%
Out of work and looking for work	2	1%
Unable to work	2	1%

Note. SD = standard deviation.

FTS Development and Refinement

The FTS was constructed to be a brief, self-administered questionnaire measuring the individual financial transparency of partners. The first step in the FTS construction was to review existing related scales. 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 on marital self-disclosure and communication did not include an in-depth discussion of financial matters. The existing scales reviewed included the Frequency of Financial Management Scale (FFMS; Fitzsimmons, Hira, & Bauer, 1993), the Financial Management Behavior Scale (Parrotta & Johnson, 1998), the Marital Self-Disclosure Questionnaire (Waring, Holden, & Wesley, 1998), the Communication Patterns Questionnaire –Short Form (CPQ-SF; Christensen & Heavey, 1990), and the Shared Goals and Values Scale (SGVS; Archuleta, 2008; Archuleta, Grable, & Britt, 2013).

After reviewing the existing measures, financial transparency was defined and various dimensions representative of this concept within a marriage were outlined. 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, 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. Further additions and refinement to the scale were made after speaking with five married couples.

Prior to disseminating the scale items to survey participants, nine subject matter experts, consisting of scholars and practitioners in the fields of Personal Financial Planning and Family Science, reviewed the initial item pool. Questions were reworded to ensure proper interpretation for the participants. 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.

A final set of 32 items were included in the online survey. The items assessed the individual’s perception of: (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. Two 5-item Likert scales were utilized ranging from *never* to *always* and *not at all likely* to *very likely*; higher scores indicate greater financial transparency.

Measures

In addition to the FTS items, the survey consisted of the Kansas Marital Satisfaction Scale (KMS), the SGVS, the FFMS, and the CPQ-SF. Demographic questions were also included.

KMS. The KMS is a self-administered, three-item survey that uses a 7-point Likert scale ranging from *extremely dissatisfied* to *extremely satisfied* to assess marital satisfaction (Schumm et al., 1986). 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 (Grable, Archuleta, & Nazarinia, 2011).

SGVS. The SGVS is a self-administered four-item survey. It utilizes a 7-point Likert scale ranging from *strongly disagree* to *strongly agree* (Archuleta, 2008). This scale was derived from Gottman's Sound Relationship House Scales and is intended to identify shared meaning about financial goals and values, life goals, and autonomy. A reported Cronbach's alpha of 0.88 indicates a high level of reliability (Archuleta et al., 2013; Grable et al., 2011).

FFMS. The FFMS (Fitzsimmons et al., 1993) is a self-administered, four-item measure, utilizing a 5-point Likert scale ranging from *never* to *most of the time*; higher scores indicate better financial behavior. This scale assesses how often a person engages in positive/negative financial behavior (Grable et al., 2011). The Cronbach alpha ranges between 0.67 and 0.76, suggesting adequate reliability (Fitzsimmons et al., 1993). Although this scale is designed for individual use, an alteration was made for use in this study. Specifically, the phrase "and your spouse" was added to the end of the question "how often do you" posted at the top of the scale.

CPQ-SF. The CPQ-SF (Christensen & Heavey, 1990) is an 11-item assessment of spouses' perceptions of their marital interactions. The questionnaire explores various interaction and communication patterns used by couples during conflict. The Cronbach alpha ranges between 0.68 and .91,

suggesting adequate reliability (Futris, Campbell, Nielsen, & Burwell, 2010).

Data Analysis

Data were examined to ensure the required assumptions needed to use a multivariate statistical technique were met, including: (a) large sample size, (b) linearity, (c) absence of outliers, (d) continuous data, (e) lack of extreme multicollinearity, and (f) a low percentage of missing data (Pett, Lackey, & Sullivan, 2003). For this study, minimal missing data 4.5% (<5%; Graham, 2009), were replaced using substitution of the variable mean; the maximum number of replaced missing values on a single item was nine.

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 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). Direct oblimin, an oblique rotation, maximizes the likelihood of extraction, and theoretically renders more accurate and perhaps a more replicable solution (Costello & 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. The KMS, the SGVS, the FFMS, and the CPQ-SF were utilized in the correlation matrix to assess financial management, couples' shared goals and values, communication, and marital satisfaction.

Results

Factor Structure

Initially, the sample was tested using Bartlett's test for sphericity and the Kaiser-Meyer-Olkin (KMO) statistic to test for sampling adequacy. Bartlett's test for sphericity produced a significant χ^2 statistic, indicating the variables were correlated enough for factor analysis to be appropriate. The KMO was .89, which is deemed meritorious (Beavers et al., 2013).

Next, the PCA was conducted. Items with low factor loadings (<.30; Costello & Osbourne, 2005), low commonalities, and items that exhibited high cross-loadings (greater than .40; Schönrock-Adema, Heijne-Penninga, van Hell, & Cohen-Schotanus, 2009) were removed individually; in

TABLE 2. Factor Loadings for Principal Component Analysis With Direct Oblimin Rotation of Financial Transparency Scale

Scale Item	Financial Partnership	Financial Secrecy	Trust and Disclosure
Review financial statements	.85	-.19	-.12
Future savings goals	.80	.04	.04
Review credit reports	.79	-.19	-.09
Discuss money saved	.79	.02	-.03
Retirement	.77	.08	-.00
Discuss money spent	.74	.04	.02
Current budget together	.74	.01	-.01
Short term goals	.73	.07	.12
Records of expenses and income	.70	.04	.03
Discuss outstanding debts	.70	-.06	.06
Long term goals	.70	.17	.07
Repay outstanding debt	.68	.10	.13
Open and honest	.68	.23	-.02
Plan for large purchases	.68	.13	.08
Spending habits	.66	.02	.05
Estate documents	.58	.06	-.03
Bill pay together	.57	-.16	-.01
Family expenses	.55	.08	.23
Reverse lie about purchase	-.03	.96	-.02
Reverse lie about financial transaction	.06	.95	-.04
Reverse secret regarding spending	.09	.84	.06
Disclose bonus	-.15	.01	.90
Disclose earnings	-.10	.01	.86
Disclose purchase to partner	.12	-.05	.70
Partner's financial judgment	.20	.04	.66
Partner's financial management	.22	-.02	.58

Note. Factor loadings >.40 are in boldface.

total six items were removed. The result was the final three-factor FTS model consisting of 26 items (Table 2) that explain 59.66% of the total variance. Cronbach's alpha indicated a high level of reliability at 0.94.

Financial Partnership. Factor 1 was termed *Financial Partnership*, and consisted of the first 18 items (Appendix) with factor loadings ranging from .55 to .85 (Table 2). This factor consisted of items that assess the individuals' perceptions of their own and their partners' likelihood and occurrence of discussing financial management practices with each another. This factor (eigenvalue = 10.91) accounted for 41.96% of the variance and had high internal reliability ($\alpha = .95$).

Financial Secrecy. Factor 2, *Financial Secrecy*, consisted of three items (19–21, Appendix) with factor loadings ranging from .84 to .95 (Table 2). This factor included items that assess the respondent's likelihood of keeping a secret or lying about a financial transaction or purchase. This factor (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 consisted of five items (22–26, Appendix) with factor loadings ranging from .58 to .89 (Table 2). This factor included items that assess the respondent's likelihood of disclosing their own financial earnings, bonuses, or purchases, as well as their trust in their

TABLE 3. 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*

Note. CPQ-SF = Communication Patterns Questionnaire – Short Form; FFMS = Frequency of Financial Management Scale; KMS = Kansas Marital Satisfaction Scale; *SD* = standard deviation; SGV = Shared Goals and Values Scale

* $p < .01$.

partner's financial judgment and management. This factor (eigenvalue = 1.76) accounted for 6.77% of total variance with an internal reliability of $\alpha = .83$.

All items on the FTS were summed after 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 three individual subscales of the FTS, the FTS, SGV, KMS, FFMS, and CPQ-SF (Table 3). 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 was associated with couples who agree on life goals and values, engage in positive financial behavior and partner communication, and ultimately report greater marital satisfaction.

Demographics

To assess validity across demographics, additional correlations were run to assess gender, education, income, and age. As a result, household income ($r = 0.19, p < .05$) and education ($r = 0.16, p < .05$) had a statistically significant correlation with Financial Partnership, and the FTS, ($r = 0.18,$

$p < .05$); ($r = 0.15, p < .05$). To further explore this correlation, a one-way analysis of variance (ANOVA) was conducted and reported no statistically significant differences between groups.

Discussion

The purpose of this study was to develop the FTS to assess the open and honest disclosure of one's finances between married partners. Results of a PCA revealed the FTS consists of three subscales: Financial Partnership, Financial Secrecy, and Financial Trust and Disclosure.

Social exchange theory suggests each partner will assess a 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 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 non-disclosure 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

Although 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 ($r = 0.39, p < .01$). This can be explained through further examination of the questions in both scales. The SGV assesses the level of mutual agreement for the couple. For example, the instructions read, "Please indicate your level of agreement with the following statements." The FTS 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." Financial 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 contributing to their low correlation.

Inversely, the FTS and CPQ-SF have a moderately high correlation ($r = 0.66, p < .01$). Direct comparison of the scales indicates both scales are assessing communication, particularly how likely something is to be discussed. For example, a CPQ-SF item 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 ($r = 0.58, p < .01$). Looking at the subscales, the FFMS and Financial Partnership subscale have a moderately high correlation ($r = 0.60, p < .01$). The FFMS assesses how often couples engage in financial activities together, which is similar to

the first subscale of the FTS. The unique contribution of the FTS can be found in the two additional subscales: (a) Financial Secrecy and (b) Financial Trust and Disclosure.

The correlations between the FFMS and the Financial Secrecy ($r = 0.20, p < .01$) and Financial Trust and Disclosure subscales ($r = 0.31, p < .01$) 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), it does not assess potential financial deception in the relationship or whether a person trusts his or her partner's financial judgment and management.

Potential Research Uses for the FTS

The findings of this study provide researchers with the ability to assess the domain of financial transparency between partners through the dimensions of Financial Partnership, Financial Secrecy, and Financial Trust and Disclosure. By effectively assessing the three individual domains of the FTS, researchers can examine how financial transparency affects other aspects of the couple and their 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 not collected in this study, dyadic data will provide an assessment of the partners as it relates to their relationship. Financial transparency assessment over the length of the relationship will help examine the patterns of interaction as they evolve, expanding our knowledge of how partners adjust over time. Importantly, this study utilized legally married, heterosexual couples in their first marriage. Future research is needed to replicate the initial results regarding reliability and validity with other couples, including same-sex couples and those who are cohabiting.

Limitations and Future Research

Although the findings of this study and the FTS provide meaningful direction to future researchers and practitioners, it is not without 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 mostly White and were married for less than 5 years. Future research should include a wider range of participants including those who have been married longer, those who are not legally married, cohabiting couples, same-sex couples, and individuals of varying ethnic or racial backgrounds. Lastly, longitudinal research would help determine if there are changes or trends that occur throughout the relationship.

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 within a couple relationship, drawing attention to areas of concern such as financial secrecy between partners. Financial therapists, counselors, and planners can use this tool with couples to illustrate the importance of healthy, open, and honest communication about finances, pointing out that couples often have differing perceptions of their relationship. This is particularly appropriate as financial practitioners continue to integrate client-centered approaches drawn from multiple counseling and therapeutic strategies (Shelton, Smith, & Panisch, 2019). This would be most appropriate during the client intake process. 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 couple's protocol, as well as their degree of financial transparency with one another. The FTS could also be used as a take home assignment. Ideally, partners should take the FTS individually, with no communication with one another about the answers they have chosen. Responses should be reviewed together with the financial practitioner, discussing 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.

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 pre-marital initiatives (Britt & Huston, 2012). The FTS could be used during group or individual financially based pre-marital 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. Although, not used in this study, cohabiting partners may also benefit from the use the FTS. As two partners move in together, the FTS may 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.

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Appendix Financial Transparency Scale

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

	Never	Seldom	Occasionally	Usually	Always
1. Discuss finances openly and honestly					
2. Review financial statements together (credit card statements, investment statements, etc.)					
3. Discuss how money should be spent					
4. Discuss how money should be saved					
5. Make savings goals for the future together					
6. Review credit reports together					
7. 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
8. Review a current budget together					
9. Discuss spending habits					
10. Set long-term (more than 5 years) financial goals together					
11. Set short-term (<1 year) financial goals together					
12. Discuss family expenses					
13. Pay bills together					
14. Plan ahead for large purchases together					
15. Keep records of expenditures and income					
16. Prepare estate documents together (will, trusts, power of attorney, etc.)					
17. Discuss repayment of outstanding debt					
18. 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
19. Lie to your partner about a financial transaction					
20. Lie about a purchase to your partner					
21. Keep a secret from your partner regarding spending					
22. Disclose all of your purchases to your partner					
23. Trust your partner's financial judgment					
24. Trust your partner's financial management					
25. Disclose your earnings to your partner					
26. Disclose a bonus to your partner					

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