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Money Beliefs and Financial Behaviors: Development of the Klontz Money Script Inventory

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Financial matters have been identified in the literature as a significant source of stress for individuals and families. However, little is known about the psychological issues related to money that may be contributing to individual and family problems. Using a sample of 422 individuals who identified their level of agreement on 72 money-related beliefs, this study identified four distinct money belief patterns (i.e., money avoidance, money worship, money status, and money vigilance). Three of these belief systems were significantly correlated with income and net worth. Demographic features associated with the four money belief scales are provided. The results of this study may be useful for practitioners interested in quickly and accurately identifying money beliefs in their clients that can have a negative impact on financial health.

Keywords: money disorder; money script; financial therapy; destructive money belief; financial health

INVENTORY

Money is a significant source of stress in the lives of Americans (APA, 2009). Money issues also are a primary reason for conflict and divorce in relationships (Dortch, 1994;

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Oggins, 2003). This is often the result of beliefs about money, whether accurate or not, that impact the way people think about and relate to money in their lives. The mental health field has developed many scales to assess personality, anxiety, depression, obsessive-compulsive tendencies, and other psychological symptoms and processes; however, the issue of money has been relatively ignored in the mental health field (Klontz, Bivens, Klontz, Wada, & Kahler, 2008; Trachtman, 1999). While some "money tests" are posted on the internet or published in consumer magazines purporting to measure one's relationship with money or money personality, there are far fewer *empirically-based* scales designed to assess an individual's destructive money beliefs or behaviors.

The purpose of this study was to develop a series of money script subscales (specifically, the development of the *Klontz-Money Script Inventory* or Klontz MSI) that can be used by practitioners who suspect that self-limiting and/or destructive money scripts are interfering with their client's financial health. Instruments such as the Klontz-MSI are helpful to practitioners who want to obtain a relatively quick yet somewhat valid and reliable analysis of thought patterns that might interfere with therapy, coaching, and/or the financial planning process. If a client identifies with one or more problematic money beliefs, the practitioner may want to intervene upon these beliefs, and/or incorporate a financial therapist into the planning process or refer to a psychotherapist trained in the diagnosis and treatment of money disorders.

LITERATURE REVIEW

Consistent with social learning theory (Bandura, 1977), individuals tend to carry beliefs about money and money skills learned in childhood into their adult lives (Furnham, 1996; Kirkcaldy & Furnham, 1993). Unfortunately, these money attitudes and skills may not be helpful if parents or other care providers did not have a healthy relationship with money. Klontz and Klontz (2009) hypothesized that money scripts–defined as beliefs individuals hold about money–are (a) developed in childhood, (b) often passed down from generation to generation in family systems, (c) typically unconscious, (d) contextually-bound, and (e) a factor that drives much of one's financial behaviors. They argued that emotionally charged "financial flashpoint" experiences can leave a lasting cognitive imprint as children try to make sense of the role money plays in their family, in their life circumstances, and in the world. Money scripts are often at the root of money disorders, and when associated with emotionally charged or traumatic events, these belief patterns can be highly resistant to change (Klontz & Klontz). As shown in the review of literature below, there are some data suggesting that certain types of money scripts may have a negative impact on one's financial and emotional health; however, there is limited evidence suggesting money scripts may be related to certain demographic characteristics.

Measuring Money Beliefs

Since the late 1970s, researchers have been interested in identifying subscales or factors of money beliefs and behaviors. Goldberg and Lewis (1978) described their interest

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as one of exploring the self-destructive patterns and unrealistic ideologies that form individuals' attitudes about money. Goldberg and Lewis stated the following:

> [People] have become so indoctrinated with the idea that having money is important, that they no longer question why. They are unaware that perhaps what they are truly seeking is an increase in self-respect, or security, or freedom, or love, or power (p. 14).

Goldberg and Lewis implied that money has often been and will often be a source of tension for some individuals. This led them to identify four motives for acquiring and using money, including the use of money for security, power, love, and freedom. Though not based on empirical evidence, it is clear that Goldberg and Lewis were interested in further developing the concept of money scripts and behaviors into sound measurement instruments.

According to early work by Yamauchi and Templer (1982), through the development of their Money Attitude Scale (MAS), individuals may hold the attitude or belief that money is a symbol of success or "status." Yamauchi and Templer found a sense of anxiety among certain individuals regarding money; for some, money relieved their anxiety and for others it provoked anxiety. More recent research using the MAS suggests that individuals who believe that money is closely related to status are more loss averse than the general population because of the perceived loss of social status associated with lower levels of wealth (Engelberg & Sjöberg, 2007). Further, evidence suggests that individuals who adhere to the belief that money is a sign of status have lower levels of emotional intelligence as measured by one's ability to accurately link facial expressions to the felt emotion (Engelberg & Sjöberg, 2006). Beliefs about one's self-worth have been found to be positively correlated with financial satisfaction and positive perceptions of one's past, present, and future financial situation, and negatively correlated with overspending and financial worry (Hira & Mugenda, 1999).

Existing Measures

One of the most widely cited measures of money beliefs is Yamauchi and Templer's (1982) Money Attitude Scale (MAS), which consists of 29 items making up four money attitude scales: (a) power-prestige, (b) retention-time, (c) distrust, and (d) anxiety. Yamauchi and Templer defined the power-prestige factor as the use of money to influence others or show status. Retention-time was defined as being prepared for one's financial future, distrust was said to measure a state of not wanting to spend money, and anxiety was defined as a state of worry about money as well as a desire to spend money.

Furham (1984) borrowed items from the MAS, as well as from other sources, to construct the Money Beliefs and Behaviour Scale, which is commonly cited in the literature. The Money Beliefs and Behaviour Scale consists of 60 items divided among six factors, which he labeled: (a) obsession, (b) power, (c) retention, (d) security, (e) inadequacy, and (f) effort/ability. Obsession was defined by Furham as being preoccupied with money.

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Power refers to using money (particularly in the form of giving it away) to maintain an upper hand, whereas retention refers to the keeping of money. Security refers to what Furham called "old-fashioned approach to money" involving money conservation, inadequacy refers to feelings of not having enough money, and effort refers to how money is obtained. Unlike Yamauchi and Templer (1982), Furham mixed money belief and behavior statements into his assessment.

Tang (1992), the developer of the Money Ethic Scale (MES), identified six major beliefs about money: (a) money is good, (b) money is evil, (c) money represents achievement, (d) money is a sign of respect, (e) budgeting is important, and (f) money is power. Tang summarized the six beliefs as representing the areas of affective, cognitive, and behavioral attitudes toward money.

A common theme in the three money belief scales discussed above is that people may hold very strong attitudes toward money that lead them to retain or dispose of money very rapidly. As such, associations have appeared in the literature linking individual demographic characteristics to certain types of money beliefs. The purpose of the current study is to include additional demographic characteristics in correlation analyses and provide updated terminology in the identification of money beliefs.

Demographic Associations

An important contribution of this study to the literature is the inclusion of demographic factors associated with money beliefs and attitudes. As mentioned above, few studies have validated scale scores against demographic benchmarks. The following review briefly describes key findings noted by Furnham (1984), Tang (1992), and Yamauchi and Templer (1982) in relation to their scales and certain demographic characteristics.

Although it would seem reasonable to assume that attitudes and beliefs about money are dependent upon one's income, previous research has been unable to establish a strong connection (Yamauchi & Templer, 1982). However, there does appear to be a slight correlation with higher income individuals believing that money is a sign of achievement and being less likely to view money as evil compared to lower income individuals (Tang, 1992). Early work by Furnham (1984) on his Money Belief and Behaviour Scale showed a positive relationship with income and an obsession with money, using money to control others/for power, and the belief that hard work is financially rewarding (i.e., Furnham's effort factor). Given the positive association of income and education, it is not surprising that Furnham found similar relationships between education and money beliefs, with more educated individuals treating money in a more conservative manner. Furnham also noted that individuals with lower levels of education perceived that they were poorer in childhood compared to those with higher levels of education.

Some associations between money beliefs and age and gender have also been found. According to Tang (1992), younger individuals are more likely to view money as a source of evil when compared to older individuals. Older individuals are more likely to believe

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they were poorer during childhood and that their parents cared about money more than younger individuals (Furnham, 1984). Older respondents are also more likely to worry about their financial situation and have more negative outlooks for their future financial situation (Furnham). Tang found a slight correlation with older individuals and females being more inclined to keep a budget and those who budget their money to report greater life satisfaction. Males have been shown to obsess about money more than females, be more conservative (i.e., old-fashioned), and feel that money is a sign of security and hard effort (Furnham).

METHOD

Item Development

In contrast to the existing scales on money beliefs, the current study obtained scale items directly from clients who were seeking help for a disordered money belief. The scale items were collected in over a decade of clinical observation, using exercises designed to elicit beliefs regarding money from financial therapy clients (Klontz, Klontz, & Kahler, 2008). A Delphi group of nationally recognized financial therapists evaluated the face validity of the items. A total of 72 money concepts were identified, and for the purposes of this study these items were grouped by the research team into eight hypothesized money script factors: (a) money worship (8 items), (b) anti-rich (6 items), (c) money is bad (5 items), (d) money mistrust/openness (12 items), (e) frugality/fiscal responsibility (12 items), (f) money anxiety (8 items), (g) money status (18 items), and (h) money is unimportant (3 items). See Appendix A for a list of hypothesized factors.

Participants

The data used in this study came from a convenience sample collected by sending links to a web-survey to a free listserve for financial planners, coaches, and mental health providers, and posting the link on a variety of on-line social networks and inviting the public to access the test on-line through references in several local newspaper articles in the Midwest and Hawaii. While the respondents' names were not collected, the survey was designed to allow only one set of responses per computer using a standard function on web-based survey development software. It was not possible to determine the response rate as it is not known how many individuals received or viewed an invitation to participate in the survey. Respondents were asked to identify their level of agreement with 72 statements about money scripts. After 57 surveys were eliminated for missing data, the final sample for this pilot study included 422 respondents. The demographic profile of the sample is discussed in the results section and shown in Table 1.

Measurement

All money belief items were coded on a six-point Likert-type scale where 1 = strongly disagree, 2 = disagree, 3 = disagree a little, 4 = agree a little, 5 = agree, and 6 = strongly agree. Gender, race, marital status, and use of revolving credit were binary

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variables where men were coded as 1 and women were coded as 2, non-Hispanic Whites were coded 2 and all others 1, married respondents were coded as 1 and all others were coded as 2, and respondents who carried credit card balances from month to month were coded as 1 and all others were coded as 2. Age was measured using five categories: 1 = 18 – 30 years of age, 2 = 31 – 40 years of age, 3 = 41 – 50 years of age, 4 = 51 – 60 years of age, and 5 = 61 – 80 years of age. Education was coded categorically, where 1 = less than high school degree, 2 = high school degree, 3 = some college, 4 = associate's degree, 5 = bachelor's degree, and 6 = graduate or professional degree in the original data. Given the small percent of respondents with less than a high school degree (less than 1% of the sample), categories 1 and 2 were combined.

A respondent's gross income was measured in 16 categories ranging in $10,000 increments up to $100,000 and $100,000 increments from $100,000 to $1,000,000 or above. These 16 categories were condensed to quartiles for the current study. Net worth was coded into the following eight categories: 1 = don't know, 2 = less than $0, 3 = $1 – $100,000, 4 = $100,001 – $250,000, 5 = $250,001 – $500,000, 6 = $500,001 – $1,000,000, 7 = $1,000,001 – $10,000,000, and 8 = over $10,000,000. The highest two categories were combined in the current study given the small number of respondents (less than 1%) in the highest category. Finally, respondents were asked to answer the following question about their socioeconomic status as a child: "During your growing-up years, which socio-economic class best describes your family: 1 = wealthy, 2 = upper middle-class, 3 = middle-class, 4 = lower middle/working-class, or 5 = poor."

Analyses

After the initial compilation of demographic characteristics of the sample was completed, a principal axis factor analyses was conducted as a means for establishing the number of factors and items within each factor. This was followed by a series of correlation tests and mean comparisons among the factors and demographic characteristics as shown in the results section below. Finally the paper concludes with an explanation of the demographic profiles associated with each money script factor. All analyses were conducted using SPSS PASW 18 for Windows.

RESULTS

Descriptive Statistics

The sample was largely comprised of highly educated, non-Hispanic White married females who were middle age or older and who did not carry credit card balances from month to month. The most frequently reported age category was 51 – 60 years, and the most frequently reported educational category was a graduate degree. Nearly 65% of the sample was female and 56% were married. Slightly over 19% of the sample reported to not know their net worth, while almost 4% reported a negative net worth. The most frequently reported category of socioeconomic status during childhood was middle-class, and most

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(60%) respondents did not carry a balance on their credit card(s). See Table 1 for a complete list of demographic characteristics of the sample.

Table 1
Descriptive Statistics of Sample (n = 422)

Variable	*Percent of Sample*
Age – Mean (SD)	3.1 (1.3)
1 = 18 – 30	14.2%
2 = 31 – 40	21.3%
3 = 41 – 50	21.8%
4 = 51 – 60	27.0%
5 = 61 – 80	15.6%
Gender	
1 = Male	35.5%
2 = Female	64.5%
Race/Ethnicity	
1 = Non-Hispanic White	81.8%
2 = other	18.2%
Marital Status	
1 = Married	55.5%
2 = Not married	44.5%
Education – Mean (SD)	4.0 (1.2)
1 = High school degree or less	4.5%
2 = Some college	12.1%
3 = Associate's degree	5.2%
4 = Bachelor's degree	34.8%
5 = Graduate degree	43.4%
Respondent Gross Income – Mean (SD)	2.5 (1.1)
1 = Less than $30,000	24.9%
2 = $30,000 - $59,999	25.8%
3 = $60,000 - $99,999	26.1%
4 = $100,000 or more	23.2%
Net Worth – Mean (SD)	4.9 (1.6)
1 = Don't know	19.2%
2 = $0 or less	3.6%
3 = $1 - $100,000	18.7%
4 = $100,001 - $250,000	10.9%
5 = $250,001 - $500,000	14.0%
6 = $500,001 - $1,000,000	13.7%
7 = $1,000,000 or more	19.9%
Childhood Socioeconomic Status – Mean (SD)	2.8 (0.9)
1 = Poor	5.2%
2 = Lower middle-class	32.5%
3 = Middle-class	39.3%
4 = Upper middle-class	20.6%
5 = Wealthy	2.4%
Carry Credit Card Debt	
1 = Yes	39.8%
2 = No	60.2%

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Factor Analysis

The statistical approach used in this study involved a principal axis factor analysis (which was chosen over principal component analysis that assumes all variance is explained within the factors) with 72 money scripts with an oblique rotation (i.e., promax rotation with a kappa of 4.0), which assumes the factors are correlated. It is reasonable to assume in this study that the factors were correlated since the items were all measuring a type of money script. Items that did not load at the .30 level[2] were suppressed, reducing the total scripts to 51.

According to Pett, Lackey, and Sullivan (2003), "there is no precise solution to determine the number of factors to extract" (p. 115). They did provide three suggestions for determining how many factors to retain, though it is important to note that researchers may conclude different solutions based on the same data. Pett et al.'s first suggestion was to include factors that have an eigenvalue of greater than 1. However, this method results in a large number of factors when the number of factored items is large, which leads to a sub-optimal solution (Pett et al.). In this study, the number of eigenvalues greater than 1 would have resulted in 22 factors. The second option proposed by Pett and associates was to use all factors with a percent of variance explained above a certain threshold. Unfortunately, no agreed upon threshold has been noted in the literature, and this option is not applicable for the less precise social science fields (Pett et al.). Since the first two methods of determining the number of factors to retain were not appropriate for use in the current study, the third method proposed by Pett et al. (i.e., a scree plot) was used. The third recommendation leads one to select factors that fall above a straight line drawn through the lower value eigenvalues. The scree plot (Figure 1) for the current study clearly indicates that four factors fell above the horizontal line (see Table 2 for items contained in the four factors).

[2] According to Pett et al. (2003), factor loadings of .30 or greater are weak but acceptable because this means at least 9% of the item's variance is explained by the factor. Given the exploratory nature of this study, factor loadings of .30 or greater are used versus the traditional .40 or greater.

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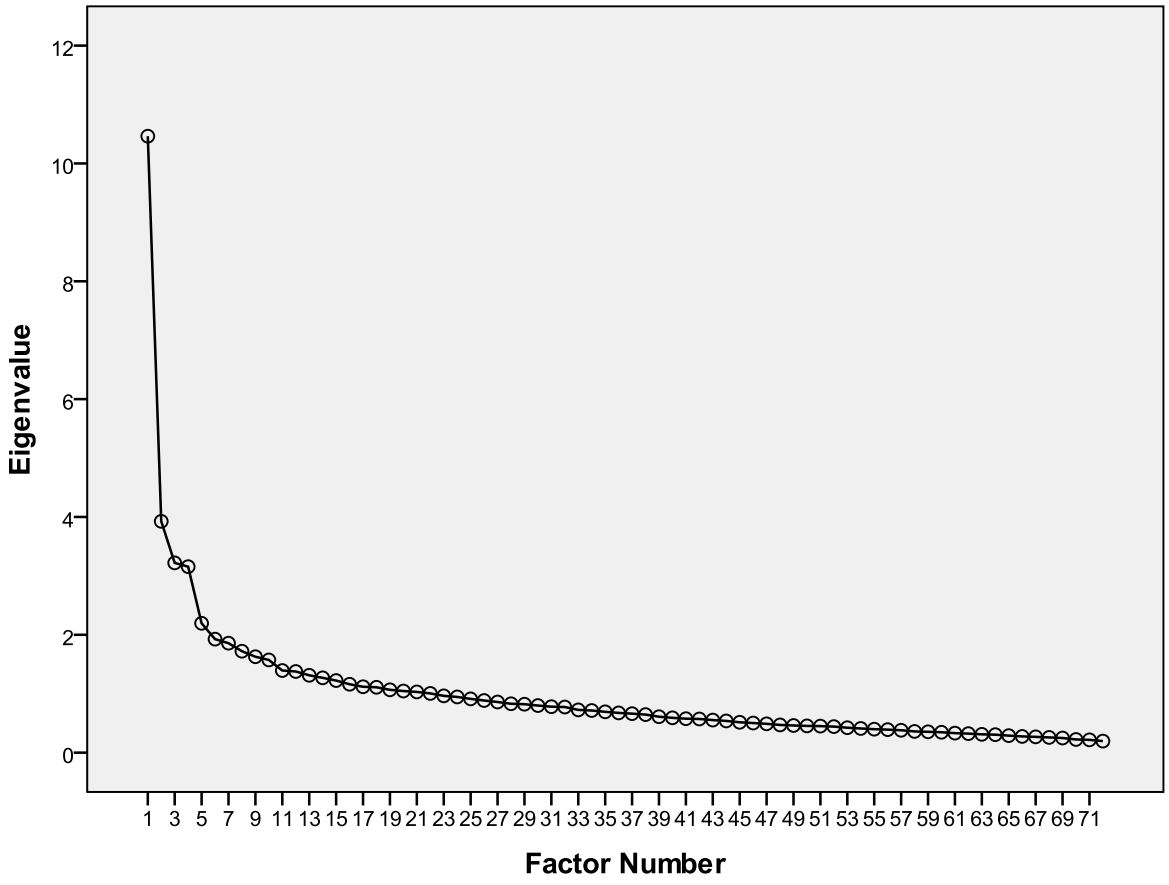

Figure 1. Money Belief Scree Plot

Once it was determined that four factors were appropriate for this study, the principal axis factor analysis was re-conducted to limit the analysis to four factors. The results of the second and final analysis are shown in Table 2. Based on the individual items in each factor, the authors labeled the factors describing money scripts as (a) money avoidance, (b) money worship, (c) money status, and (d) money vigilance. With regard to the eight original hypothesized factors (see Appendix A), money avoidance consists of five of the six items from the "anti-rich" factor, all the items from "money is bad" factor that were retained in the factor analysis, and some items from the "money is unimportant" factor. Money worship consists of six of the eight items that made up the original "money worship" factor, as well as items from the "money anxiety" and "money mistrust/openness" factors. Money status consists of seven items from the original "money status" factor, as well as items from the following factors: "money mistrust/openness" and "frugality/fiscal responsibility;" and one item each from "money worship" and "money is unimportant" factors. The money vigilance factor included items primarily from "money mistrust/openness," "frugality/fiscal responsibility," and "money anxiety" factors.

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Table 2
Factor loadings for items of the Klontz-Money Script Inventory

Factor		*Item Loading*
1.	*Money Avoidance* (Cronbach's Alpha = .843)	
	I do not deserve a lot of money when others have less than me.	.733
	Rich people are greedy.	.579
	It is not okay to have more than you need.	.552
	People get rich by taking advantage of others.	.517
	I do not deserve money.	.491
	Good people should not care about money.	.481
	It is hard to be rich and be a good person.	.477
	Most rich people do not deserve their money.	.474
	There is virtue in living with less money.	.447
	The less money you have, the better life is.	.442
	Money corrupts people.	.425
	Being rich means you no longer fit in with old friends and family.	.423
	The rich take their money for granted.	.383
	You cannot be rich and trust what people want from you.	.334
	It is hard to accept financial gifts from others.	.324
2.	*Money Worship* (Cronbach's Alpha = .797)	
	Things would get better if I had more money.	.679
	More money will make you happier.	.667
	There will never be enough money.	.512
	It is hard to be poor and happy.	.504
	You can never have enough money.	.502
	Money is power.	.488
	I will never be able to afford the things I really want in life.	.427
	Money would solve all my problems.	.413
	Money buys freedom.	.393
	If you have money, someone will try to take it away from you.	.345
	You can't trust people around money.	.317
3.	*Money Status* (Cronbach's Alpha = .773)	
	Most poor people do not deserve to have money.	.631
	You can have love or money, but not both.	.583
	I will not buy something unless it is new (e.g., car, house).	.556
	Poor people are lazy.	.501
	Money is what gives life meaning.	.480
	Your self-worth equals your net worth.	.405
	If something is not considered the "best," it is not worth buying.	.397
	People are only as successful as the amount of money they earn.	.388
	It is okay to keep secrets from your partner around money.	.371
	As long as you live a good life you will always have enough money.	.357
	Rich people have no reason to be unhappy.	.356
	If you are good, your financial needs will be taken care of.	.349
	If someone asked me how much I earned, I would probably tell them I earn more than I actually do.	.347
4.	*Money Vigilance* (Cronbach's Alpha = .700)	
	You should not tell others how much money you have or make.	.537
	It is wrong to ask others how much money they have or make.	.502
	Money should be saved not spent.	.468
	It is important to save for a rainy day.	.448

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People should work for their money and not be given financial handouts.	.431
If someone asked me how much I earned, I would probably tell them I earn less than I actually do.	.387
You should always look for the best deal before buying something, even if it takes more time.	.368
If you cannot pay cash for something, you should not buy it.	.354
It is not polite to talk about money.	.351
I would be a nervous wreck if I did not have money saved for an emergency.	.348
It is extravagant to spend money on oneself.	.327
I would be embarrassed to tell someone how much money I make.	.323

Correlations

Correlation analyses between the sums on the four factors were conducted. Table 3 shows the means, ranges, and standard deviations for each factor, as well as Cronbach's Coefficient Alpha levels and intercorrelations. Based on the number of items in each factor, the possible ranges are 15 to 90 for the avoider factor, 11 to 66 for the worship factor, 13 to 78 for the status factor, and 12 to 72 for the vigilance factor, with a higher score representing a greater tendency to agree with items from that factor. As shown in the table, all four factors have a statistically significant positive correlation indicating that each of the scales appears to measure a type of money script people hold about money. The internal consistency of the avoidance, worship, status, and vigilance scales were examined using Cronbach's Coefficient Alpha. A coefficient of .84 was obtained for the avoidance subcale and .80 for the worship subscale, indicating good internal consistency (George & Mallery, 2003). The internal consistency of the status and vigilance subscales were also acceptable (α = .77 and α = .70) (George & Mallery).

Table 3
Means, Ranges, Standard Deviations, Cronbach Alphas, and Correlations between the Subscales

	X	*Range*	*S.D.*	*Alpha*	*Avoidance*	*Worship*	*Status*	*Vigilance*
Avoidance	41.92	16 – 83	9.91	0.84	1.00			
Worship	33.42	12 – 59	8.23	0.80	0.45***	1.00		
Status	25.99	13 – 61	6.70	0.77	0.44***	0.48***	1.00	
Vigilance	43.28	19 – 65	6.92	0.70	0.26***	0.29***	0.27***	1.00

Correlations between the sums on the money belief factors/subscales and participant demographic characteristics are shown in Table 4. Respondents who had missing data for net worth were recoded as having the mean level of net worth as reported by all other respondents. Although the correlation coefficients were not large, they do show some statistical significance and are therefore worthy of further investigation. Furnham (1996) noted in his research that "demographic variables were weak predictors of money-related pathology" (p. 386).

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Table 4
Demographic Correlations

	Age	*Gender*	*Race*	*Marital Status*	*Educa-tion*	*Gross Income*	*Net Worth*	*Child-hood SES*	*Revolve Credit*
Avoidance	-0.30***	NS	0.13**	0.17***	-0.13**	-0.23***	-0.22***	NS	NS
Worship	-0.33***	NS	0.16**	0.18***	-0.10*	-0.13**	-0.24***	NS	-0.16**
Status	-0.20***	NS	0.19***	0.11*	-0.13*	-0.13**	NS	0.10*	NS
Vigilance	NS	NS	NS	NS	NS	NS	NS	NS	0.10*

Specifically, younger, non-White, non-married respondents with lower levels of education, income, and net worth were more likely to identify with the money avoidance scripts. This is nearly the same pattern for the money worship scripts with the addition of credit revolvers. Respondents identifying with the money status scripts tended to be younger, non-White, and non-married with lower levels of education, income, and a lower socioeconomic status as a child. Not carrying credit card debt from month to month was positively associated with the vigilance scripts. Gender was not significantly related to any of the belief subscales.

Mean Comparisons

A series of multivariate analysis of variance (MANOVA) tests were conducted to further evaluate the relationship between the money script subscales and age, education, gross income, net worth, and childhood socioeconomic status (not shown). Independent sample *t* tests were conducted for the binary variables of gender, race, marital status, and carrying credit card debt over multiple months (not shown). The means for the demographic characteristics based on each subscale response category are shown in Table 6.

The results of the MANOVA with age and the money script subscales indicate that there was a statistically significant difference between the outer most categories (i.e., between categories 1 and 3, 4, and 5 and between categories 2 and 4 and 2 and 5) for age and avoidant money scripts with younger respondents reporting higher scores on the avoidant money scripts. The same pattern was present for age and worship scripts. Respondents in the youngest age category scored significantly higher on status scripts than all other age categories. There were no statistically significant differences between age and vigilance scripts.

Men and women did not differ significantly on their scores for any of the money script subscales. Whites scored significantly higher on the worship scale, and significantly lower on the vigilance scale. Single respondents scored significantly higher on the avoidance, worship, and status subscales. A statistically significant difference exists between the lowest education category and all higher categories with respondents with a high school degree or less scoring the highest on the status subscale.

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Respondents in income quartiles 1 and 2 scored significantly higher than those in quartiles 3 and 4 for the avoidance scripts. Respondents in the 2nd income quartile scored significantly higher than those in the 4th quartile on worship scripts. Respondents in the 1st income quartile scored significantly higher than those in the 3rd quartile on vigilance scripts.

The respondents with missing net worth data were again imputed with the mean net worth from the sample. There was a statistically significant difference between the outer categories for net worth and avoidance scripts (i.e., between categories 2 and 6; between categories 3 and 5, 6; and between categories 4 and 6) with lower net worth respondents scoring higher on the script. There was also a statistically significant difference with the mean net worth category reporting a higher score for avoidance scripts compared to those with slightly higher levels of net worth. A similar pattern was noted for the worship scripts (i.e., statistically significant difference between categories 2 and 5, 6, and 7; between categories 3 and 7; between categories 4 and 7; and between categories 4.93 and 5, 6, and 7). The only statistically significant difference between net worth categories and the status scripts were with the mean group scoring significantly higher on status scripts than respondents in categories 3, 6, and 7. All findings with the mean net worth category potentially indicate that the respondents with missing data most closely resemble respondents who reported the lowest levels of net worth. There was no statistically significant difference in net worth for the vigilance scripts.

No statistically significant differences existed for childhood socioeconomic status and the money script subscales. Respondents who carried credit card debt over multiple months score higher on the worship script, but lower on the vigilance script.

Table 6
Demographic Means Based on Subscales

	Age	*Gender*	*Race*	*Marital Status*	*Education*	*Gross Income*	*Net Worth*	*Child-hood SES*	*Revolve Credit*
Avoid-ance	1 – 47.88 2 – 44.13 3 – 41.49 4 – 39.10 5 – 38.97	M – 41.41 F – 42.20	W = 42.52 O = 41.53	M – 40.44 S – 43.76	1 – 46.05 2 – 43.92 3 – 43.73 4 – 41.33 5 – 41.20	1 – 44.12 2 – 44.35 3 – 40.29 4 – 38.69	2 – 46.87 3 – 43.73 4 – 43.48 4.93 – 46.95 5 – 38.71 6 – 36.93 7 – 39.33	1 – 40.32 2 – 41.99 3 – 42.50 4 – 40.93 5 – 43.60	Y – 42.52 N – 41.53
Worship	1 – 38.05 2 – 45.97 3 – 32.75 4 – 31.75 5 – 29.59	M – 32.80 F – 33.77	W = 35.01 O = 32.37	M – 32.08 S – 35.10	1 – 35.79 2 – 34.65 3 – 33.95 4 – 33.48 5 – 32.73	1 – 34.33 2 – 34.53 3 – 33.18 4 – 31.49	2 – 38.87 3 – 34.15 4 – 35.98 4.93 – 36.59 5 – 31.56 6 – 31.45 7 – 29.99	1 – 30.23 2 – 33.88 3 – 33.68 4 – 32.93 5 – 34.30	Y – 35.01 N – 32.37

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Status	1 – 29.43	M – 26.73	W = 28.77	M – 25.35	1 – 31.90	1 – 27.03	2 – 26.20	1 – 24.09	Y – 25.61
	2 – 26.72	F – 25.57	O = 29.26	S – 26.78	2 – 25.78	2 – 26.54	3 – 25.33	2 – 25.27	N – 26.24
	3 – 25.25				3 – 25.41	3 – 25.69	4 – 26.13	3 – 26.59	
	4 – 24.61				4 – 26.14	4 – 24.58	4.93 – 28.64	4 – 25.95	
	5 – 25.26				5 – 25.38		5 – 25.66	5 – 30.20	
							6 – 24.74		
							7 – 25.01		
Vigilance	1 – 44.57	M – 43.07	W = 42.40	M – 43.19	1 – 43.26	1 – 44.30	2 – 44.20	1 – 42.14	Y – 42.40
	2 – 43.80	F – 43.40	O = 43.87	S – 43.40	2 – 43.33	2 – 43.85	3 – 43.19	2 – 44.00	N – 43.87
	3 – 53.57				3 – 44.64	3 – 41.56	4 – 42.48	3 – 43.60	
	4 – 41.97				4 – 43.31	4 – 43.49	4.93 – 44.56	4 – 41.95	
	5 – 43.30				5 – 43.09		5 – 41.14	5 – 42.30	
							6 – 42.69		
							7 – 44.35		

DISCUSSION

The Klontz-Money Script Inventory (Klontz-MSI) subscales can best be described as providing researchers and practitioners insight into a client's desire to avoid money issues (avoidance), accumulate money (worship), differentiate one's self from other socioeconomic classes (status), or keep one's money issues private (vigilance). A discussion of each set of money scripts is provided below.

Money Avoidance. Money avoiders believe that money is bad or that they do not deserve money. For the money avoider, money is often seen as a force that stirs up fear, anxiety, or disgust. People with money avoider scripts may be worried about abusing credit cards or over-drafting their checking account; they may self-sabotage their financial success, may avoid spending money on even reasonable or necessary purchases, or may unconsciously spend or give money away in an effort to have as little as possible in their control. Klontz and Klontz (2009) hypothesized that disordered money behaviors such as financial denial, financial rejection, under spending, and excessive risk aversion may result from money avoidant money scripts.

In the present study, money avoiders were found to have lower (or unknown) levels of income and net worth. This finding is consistent with that of Tang (1992) who observed that higher income individuals were less likely to view money as being bad or evil than lower income individuals. Younger and single individuals were also more likely to be money avoiders. Practitioners should be aware that a person between the ages of 18 and 30 is likely to score nearly 9 points higher on the money avoidance scale than a person who is between the ages of 61 and 80. A person's score on the money avoidance scale consistently falls as they age, so it is possible that people have a tendency to change their attitudes towards money as they age, leading them to not feel so avoidant. Single respondents score, on average, 4 points higher on the scale than married respondents, which may be an indication of maturation that is mimicking the age results. It is not possible to determine if lower income and net worth precedes money avoidant beliefs or if

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money avoidant beliefs prevent a person from attaining higher levels of income and net worth. It is interesting to note, however, that respondents who did not know their net worth scored higher than all other categories of net worth on money avoidant beliefs. This is to be expected since money avoiders, are by name, not likely to be aware of their financial situation. Individuals with the highest level of net worth (i.e., $1,000,000 or more) scored higher on money avoidant beliefs than those with a net worth of $250,000 to $1,000,000, but lower than those with a net worth of less than $250,000. Again, it was not possible to conclude whether those with a net worth above $1,000,000 are at risk of dwindling their wealth as a result of their money avoidant attitude.

Money Worship. According to Klontz et al. (2008), "more money will make things better" is the most common belief among Americans. Individuals who subscribe to this notion believe that an increase in income and/or financial windfall would solve their problems. However, there is a paucity of empirical evidence to suggest that more money solves life problems. In the literature, there is no significant correlation between happiness and money once household incomes are above $75,000 per year (Kahneman & Deaton, 2010), and the significant economic gains experienced by Americans in the past few decades have not been accompanied by a rise in life satisfaction. Furthermore, increases in income have been found to be associated with increases in distrust and depression (Diener & Seligman, 2004). Furthermore, after an initial period of excitement, financial windfalls do not have a lasting positive impact on mood. For example, research has shown that while lottery winners feel good about winning, they are not significantly happier than non-winners, and even report experiencing less pleasure in ordinary activities than non-winners (Brickman, Coates, & Janoff-Bulman, 1978). In some cases, winning the lottery has been shown to result in severe depression (Nissle & Bschor, 2002). Despite the lack of evidence showing a relationship between wealth and happiness, "most people still cling to the notion that their problems would be resolved if they only had more money" (Csikszentmihalyi, 1999, p. 823). Klontz and Klontz (2009) hypothesized that money-worshiping money scripts may be associated with money disorders including compulsive hoarding, unreasonable risk-taking, pathological gambling, workaholism, overspending, and compulsive buying disorder.

Demographic characteristics linked to money worshipers include being young, White, and single with lower (or unknown) levels of income and net worth with the tendency to not pay credit card debt in full each month. The spread of scores for the different age categories is fairly similar for the money worship scripts as it is for money avoidance scripts (i.e., young respondents score almost eight points higher than older respondents). Culture/ethnicity may impact one's tendency to idolize money as evidenced by White and single respondents scoring nearly three points higher on the money worship scale. As with money avoidant beliefs, it is not possible to determine if low income and net worth precedes the tendency to "worship" money or if worshiping money causes low income and net worth. Not surprisingly, respondents who worship money were likely to carry revolving debt. Respondents identifying with the money worship scale subscribed to the belief that more money will make you happier. This may be true to a point if they are able to work themselves out of credit card debt. However, without changing belief patterns,

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it will be nearly impossible to change long-term behavior. Further, it is important to note that the scale items do not differentiate between whether respondents enjoy having money or if they enjoy having the goods and services that money buys.

Money Status. "Money is status" scripts are concerned with the association between self-worth and net-worth. These scripts can lock individuals into the competitive stance of acquiring more than those around them. Individuals who believe that money is status see a clear distinction between socio-economic classes. Research has shown that being over-concerned with financial success, and being materialistic has been associated with lower ratings of well-being (Tatzel, 2002), lower levels of self-actualization, vitality and happiness, and higher levels of anxiety, physical symptoms and unhappiness (Kasser & Ahuvia, 2002).

In the present study, individuals who believed that money is a status symbol were more likely to be young, single, less educated, and less wealthy. The range of scores for age and marital status were not as great as the previous two scales. The same pattern of low or unknown net worth individuals scoring higher on the money status scale remained consistent. The addition of a statistically significant difference in respondents with a high school degree or less scoring higher on money status beliefs than all other education categories was observed. This may be indicative of the types of jobs held by high school educated individuals in comparison to more prestigious jobs held by those with some college or a college degree(s), and possible feelings of lower self-esteem. It is also noteworthy that respondents who identified themselves as having been raised in lower socioeconomic status homes were more likely to endorse money status beliefs. Klontz and Klontz (2009) hypothesized that an individual's financial comfort zone (FCZ)–or the socioeconomic class in which he or she is most comfortable–is typically established in childhood and anchored by culturally-bound and often erroneous assumptions about money and wealth. It is possible that money status scripts and a drive to elevate to a higher socioeconomic status may put individuals raised in lower socioeconomic environments at risk for disordered money behaviors such as overspending or excessive risk-taking, with the goal of rapid wealth attainment in an attempt to raise one's perceived social status.

Money Vigilance. For many people, money is a deep source of shame and secrecy, whether one has a lot or a little (Klontz & Klontz, 2009). In a survey of 1,001 adults, more than half considered money to be a sensitive topic in their households (Medintz, 2004). Forty percent of those surveyed reported that they had lied to their spouses about the cost of a purchase and 40% expressed that they felt it was okay for spouses to not share financial information with each other (Medintz). People who are secretive with their money may be developing financial behaviors that are unhealthy for their financial future. For example, individuals who hide money under their mattress are guaranteeing themselves a rate of return less than inflation leading them to insufficient preparation for retirement and perhaps their children's college education. The money vigilance factor, as identified in this study, appears to be linked to alertness, watchfulness, and concern about money, and the sense that one must be heedful of pending trouble or danger. While such an approach to money may encourage saving and frugality, excessive wariness or anxiety

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regarding pending financial danger keeps someone from enjoying the benefits and sense of security that money can provide.

In the present study, respondents who felt vigilant about their financial situation were likely to be non-White, lower income, non-credit revolvers. Culturally, non-Whites may be taught to be more private about their personal affairs as a form of self-protection, so they may be more secretive with their money or distrustful of the intentions of others, increasing the need for vigilance. Individuals who are financially vigilant may also be less likely to seek credit, which requires strangers obtaining very private credit report information. Therefore, the finding of non-credit card debt revolvers may be more of an indication of a lack of credit cards by individuals holding the money vigilant beliefs.

CONCLUSION

The primary objective of this study was to construct a money belief assessment, known as the Klontz-Money Script Inventory (Klontz-MSI), which can be used by practitioners to quickly and somewhat accurately assess potentially problematic attitudes of clients that may interfere with accomplishing financial goals. The Klontz -MSI serves as an update to the terminology used in Yamauchi and Templer's (1982) Money Attitude Scale and Furnham's (1984) Money Beliefs and Behaviours Scale. It also involves a different methodology with regard to item construction, as the items used in the Klontz -MSI were obtained directly from clients. Based on an original list of 72 commonly heard money scripts, the factor analysis revealed four distinct money belief subscales: (a) money avoidance, (b) money worship, (c) money status, and (d) money vigilance.

Limitations

It is possible that the individuals who responded to this web-based survey differed from non-respondents. Other problems with open web-based surveys include the inability to control who responds to the survey and inability to obtain an accurate response rate (Dillman, 2000). The current sample had relatively high levels of net worth and education making generalizability of the findings limited to similar samples. The results are also limited with regard to ethnic diversity, with 82% of respondents being Caucasian. Given that money attitudes such as risk-tolerance have been found to differ according to race and ethnicity (Yao, Gutter, & Hanna, 2005), future research on money beliefs would benefit from a more diversified sample.

Additional research is needed with other samples to test and retest the reliability of the instrument and to determine cutoff scores for the individual subscales for use as a clinical diagnostic tool. Further research with the instrument will help establish norms which will assist in financial therapy consultations. It would also be beneficial to include an existing measure of destructive money beliefs, such as Yamauchi and Templer's (1982) Money Attitude Scale, in future studies to assess for concurrent validity with the Klontz -MSI. Future studies are planned with the current data to determine specific money

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behaviors (such as compulsive buying and pathological gambling), which will add to the discussion of how money beliefs and behaviors are related.

Implications

From the perspective of financial counselors, financial therapists, financial coaches, and educators, it seems that younger individuals in particular are most likely to hold potentially destructive beliefs about money. This may influence their ability to attain financial goals and independent financial security. Practitioners may want to administer the Klontz -MSI to clients as a quick screening tool to identify potential problem areas with money. As shown in the results, individuals who adhere to the avoidance, worship, and/or status subscales are more likely to have lower levels of education, income, and net-worth. It is not possible to determine whether the money beliefs precede education and income attainment or whether the lower levels of education and income lead to certain beliefs about money. It is simply known that there is an association between them to be aware of in working with clients around money. The Klontz -MSI may also be useful in work with couples, where identifying divergent money scripts can be useful in helping couples resolve money-related conflicts. Knowing a client's demographic status therefore gives the practitioner validation for assessing the Klontz -MSI and provides normalization to clients with certain demographic characteristics.

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Appendix A
Hypothesized Factors and Items

1.	*Money Worship*
	Money would solve all my problems.
	Things will get better once I have more money.
	Money buys freedom.
	It is hard to be poor and happy.
	More money will make you happier.
	Rich people have no reason to be unhappy.
	Money is power.
	Money is what gives life meaning.
2.	*Anti-Rich*
	People get rich by taking advantage of others.
	Rich people are greedy.
	The rich take their money for granted.
	It is hard to be rich and be a good person.
	The rich should give the most to charity.
	Most rich people do not deserve their money.
3.	*Money is Bad*
	Money is the root of all evil.
	Money corrupts people.
	Having a lot of money separates you from others.
	Being wealthy means you cannot know whether someone loves you or your money.
	Being rich means you no longer fit with old friends and family.
4.	*Money Mistrust/Openness*
	I work hard, so cheating the government is okay now and then.
	You cannot trust people around money.
	It is okay to keep secrets from your partner around money.
	You cannot trust banks.
	If you have money, someone will try to take it away from you.
	You should not tell others how much money you have or make.
	It is wrong to ask others how much money they have or make.
	If you loan money to someone you should not expect to get it back.
	If someone asked me how much I earned, I would probably tell them I earn more less I actually do.
	It is not polite to talk about money.
	If someone asked me how much I earned, I would probably tell them I earn more than I actually do.
	You cannot be rich and trust what people want from you.

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5. *Frugality/Fiscal Responsibility*
   It is important to save for a rainy day.
   Life is short, it is better to spend money while you have it.
   Money should be saved, not spent.
   If I had to borrow money to get what I want I would do it.
   I deserve money.
   If something is not considered the "best," it is not worth buying.
   I am entitled to money.
   If you cannot pay cash for something, you should not buy it.
   You should always try to pay less than retail price for something.
   You should always look for the best deal before buying something, even if it takes more time.
   There will always be someone I can turn to for money.
   I will not buy something unless it is new (e.g., car, house).
6. *Money Anxiety*
   There will never be enough money.
   You can never have enough money.
   Investing money in the stock market is no way to secure your future.
   I will never be able to afford the things I really want in life.
   I have to work hard to be sure I have enough money.
   Taking risks with money is foolish.
   It takes money to make money.
   I would be a nervous wreck if I did not have money saved for an emergency.
7. *Money Status/Worth*
   People are only as successful as the amount of money they earn.
   Your self-worth equals your net worth.
   Poor people are lazy.
   If you are good, your financial needs will be taken care of.
   As long as you life a good life you will always have enough money.
   Most poor people do not deserve to have money.
   Giving money to others is something people should do.
   People should work for their money and not be given financial handouts.
   There is virtue in living with less money.
   I don't deserve money.
   Money I did not earn (e.g. inheritance, insurance settlement, etc.) is not really mine to spend.
   It is extravagant to spend money on oneself.
   It is hard to accept financial gifts from others.
   There will always be enough money for the things I want.
   I do not deserve a lot of money when others have less than me.
   It is not okay to have more than you need.
   The poor have no money because they do not want to work.
   I would be embarrassed to tell someone how much money I make.
8. *Money is Unimportant*
   Money is not important.
   The less money you have, the better life is.
   Good people should not care about money.

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