

Materialism and Meaning of Money (MOM): Validation of Money Metaphor Scale (MMS) in South Africa

Nnedum, Obiajulu Anthony Ugochukwu

Lecturer in the Department of Psychology

Nnamdi Azikiwe University, Awka

E-mail: nneduma@yahoo.com Nigeria

Tel: +2348033146636

Egwu Ugwumba Egwu

Deputy Vice Chancellor Ebonyi State University

Professor in the Department of Psychology

Ebonyi state University Abakaliki, Nigeria

Tel: +234 8034 290 364

Ezeokana Jude Obinna

Associate Professor in the Department of Psychology

Nnamdi Azikiwe University, Awka

E-mail: fadaezeokana@yahoo.com .Nigeria

Tel: +23480 354 463 99

Madu Sylvester Ntomchukwu

Professor in the Department of Psychology

Nasarawa State University

P.M.B.1022 Keffi, Nasarawa state

E-mail: madusylvester@yahoo.com

Tel: +234 7062 8836 30

Chine Bernard Chukwukeluo

Department of Psychology

Nnamdi Azikiwe University, Awka

E-mail: nneduma@yahoo.com Nigeria

Tel: +2348033146636

Abstract

This paper studied the people's meaning of money (MOM) and the impact of materialistic value (MV) on the people's meaning of money. The study was based on the conceptual and psychological foundations of the synthesis of Nigerian cultural money metaphors, and contemporary thoughts of money and organizational behavior. Based on this foundations "meaning of money" of the people was conceptualized. Empirical part of the study had two phases; in the first phase, instrument to measure "meaning of money" (MOM) was developed with the sample of undergraduate students from, Sovenga, South Africa. In the second phase the impact of materialism on the meaning of money was

examined in line with Generative Money Theory (GMT; Nnedum, 2009) in South Africa, a country where multiculturalism is a dominant feature of the workforce. Students (N=97) completed a materialism scale (Richins & Dawson, 1992) and construct of money metaphor scale (Nnedum, 2009). Results of exploratory factor analysis (EFA) as well as confirmatory factor analysis (CFA) suggest that the money metaphor measure is a multidimensional construct with four sub-constructs of importance -significance, freedom -security, poverty repulsive obsession -neurotic ambivalence and achievement -recognition. A 13 item Money Metaphor Scale (MMS) was developed on the basis of four of these factors. Multiple regression analysis of materialism construct unto the various money metaphor sub-constructs showed “achievement -recognition” and “freedom - security” to be the most powerful consequents. Reliability measures, as well as material value correlations were determined. Results were discussed with respect to how materialism (value construct) may predict meaning of money (an individual difference variable) both at the main scale level and at the sub-constructs level.

Keywords: Meaning of Money (MOM), Materialism, Money Metaphor Scale (MMS), Money Importance-Significance (MIS), Poverty Repulsive Obsession-Neurotic Ambivalence (PRNA), Freedom-Security (FS), Achievement-Recognition (AR), Generative Theory of Money (GTM), Limpopo, South Africa.

Introduction

This is a study of traces of money metaphor in human cognitive thought and action and their impact on people's attitude towards, or experience of, materialism. The central thesis of the work is that metaphor is pervasive in everyday life, not just in language but in thought and action. Lakoff and Johnson (2001,) stated that “our ordinary conceptual system, in terms of which we both think and act, is fundamentally metaphorical in nature” (p.3). It implies that the concepts that govern our thoughts are not just matters of the intellect. According to Lakoff and Johnson, (2001) “They also govern our everyday functioning, down to the most mundane details” (p.4). Our concepts' structure: what we perceive, how we get around in the world, and how we relate to other people are virtually metaphorical in nature. Our conceptual system thus plays a central role in defining our everyday realities. If one is right in suggesting that our conceptual system is largely metaphorical, then the way one think, what one experience, and what one do every day is very much a matter of metaphor” (pp.3-4). Thus, primarily on the basis of cognitive evidence (Lakoff & Johnson 2001, p.4) most of our ordinary conceptual system is metaphorical in nature. Accordingly, this study attempts to identify what the money metaphor is, that structure how we perceive, how we think and what we do. In light of current status of scientific enquiry in the area of meaning of money, this study is aiming at three things: to trace the conceptual underpinnings of money metaphor in different streams of knowledge which are particularly relevant in meaning of money; to develop and test an instrument to measure the meaning of money and; to empirically test the impact of the meaning of money on individual's experience of materialism.

Background on Materialism

Materialism is in many ways a prominent aspect of South African culture, or life. Materialism, which according to Mick, (1966) is a value representing the individual's orientation toward the role of possessions in life that serve to guide the type and quantities of goods purchased (Mick, 1996, p.108); is also defined as a strong desire for wealth and physical passions by Kashdam & Breen,(2007, p.522). It is teleologically germane to this study that a person who is preoccupied with the pursuit of money,

wealth and material passions arguably tend to score high in materialism and equally strong in materialistic values. By definition, a strong materialistic value reflects a predominant orientation toward the purchase, consumption and passion of wealth and physical goods (Kashdam & Breen, 2007, p.522). Thus, as a value orientation, the importance of material goods directs a person's life choices and influences one's attitude to money. Tatzel (2002) developed taxonomy of "money world", - the model that integrated the notions of materialism and money spending dispositions. Watson (2003) proposed that materialistic people tended to be more likely to spend money, more likely to express positive attitudes toward borrowing money for luxury purchases, and less likely to own, save, than were less materialistic people. It appears that materialism, "the devotion to acquisition and possession" (Tatzel, 2002, p.110), is "derided as a shallow cultural value that impoverishes the human spirit while fueling narcissistic self-absorption" (Oropesa, 1995, p. 216). Similarly, Holt (1995) view materialism as "the consumption style that results when consumers perceive that value inheres in consumption objects rather than in experiences and people" (p.13).

According to Materialistic Value Theory (MVT; Richins & Dawson 1992, Richins, 1994; Belk, 1982, Belk, 1985, Tatzel, 2003), every individual has a need for the devotion to acquisition and possession. As an individual difference variable, materialism is divided into two broad categories (Tatzel, 2002, p.110): High scorers, or highly materialistic people and Low scorers, or Low materialist. Highly materialistic people compared to low materialistic, want more money, are less apt to share and are preoccupied with money (Tatzel, 2002, p.110), value financial security (Tatzel, 2002, p.111), tend to be concerned with appearances, so that possessions are used for impression management (Browne & Kaldenberg, 1997) and are involved with status consumption (Richins, 1994; Holt, 1995; Wong, 1997). The paucity of research on the influence of material value, or materialism on people's meaning of money (MOM) phenomena warrants further research. In the current research, the study was particularly interested in people's attitude to materialistic value, or materialism; and how such a value orientation of success defined by possession may predict economic attitudes, that is, the meaning of money. The meaning of money may be explored from people's metaphorical meaning of money.

Review of Literature

Conceptualization of Metaphor

The meaning of money is a function of the societal attitude to wealth and materialism. Individual's attitude towards, and meaning of, money are learned through the socialization of cultural beliefs, cultural values and cultural metaphorical expressions. Thus, metaphor can be viewed as the ornamental use of language. In line with same current thinking in psychology, culture is a set of shared understanding that characterize smaller or larger groups of people (Kovelses, 2007, p.10), that is, the shared understanding that people have in connection with all of these "things". Thus, cultural metaphors are "ways of seeing the world as mediated by social milieu" (Manhaim, 1949; Egwu, 1996, p. 130). Apparently, cultural metaphors have been revered by researchers in all disciplines for their unsurpassed epistemological value (Allison, Hidgley & Beggan, 1996 p. 479). Aristotle once noted that "the greatest thing by far is to be a master of metaphor" (Ca.330 B.C, trans 1924). Similarly, Robert Nisbet once stated that metaphor is a way of knowing – one of the oldest, most deeply embedded, even indispensable ways known in the history of human consciousness. Conceptually, metaphor is "a model, pretense, semantic fiction, filter, stereoscope, disguise, screen, myth, pigeonhole, contextual shift, and displacement, to name only some metaphorical images" (Allison et al; 1996, p.481). Fittingly, metaphor consists of "giving to one thing a name or description that belongs by convention to something else, on the grounds of some similarity between the two (Leary, 1990, p.4). In short, this definition seem germane to that offered by Aristotle (Ca.330 B.C, trans 1924), who stated that "a good metaphor implies an intuitive perception of the similarity in dissimilar" (P.1459). It is plausible therefore to understand similarities in the meaning of money in dissimilar cultures using cultural money metaphor. These similar instances operate as "pegs and pigeonholes – as our categories of

understanding” – and are “metaphorical in nature and function” (p.2). Aristotle (ca.330 B.C, Trans 1924) first alluded to this idea when he noted that “it is from metaphor that we can best get hold of something fresh” (p.1410). At this juncture, it will be of research interest to examine ways in which money metaphorical items of cultural thought will be relevant to an understanding of the meaning of money in societies. More specifically, the cognitive view of money metaphor can simultaneously explain both the content and universality in metaphorical meaning of money that influence human attitude to wealth and, or materialism. Cognitive psychologists have done important work on the universal aspect of linguistic money metaphors (Egwu, 1996; Nnedum, 2003; Lakoff & Johnson, 1980; Kovecses, 2007), but they have paid much less attention to why cultural money metaphors converge interculturally and intraculturally as extensively as they do. In this article, the researcher proposes a new theory of money metaphor coherence -the generative theory of money (GTM). First, the researcher identifies the major dimensions of money metaphor coherence, that is, those social and cultural frontiers that signal continuities in human experience of money. Second, the researcher describes which components, factors, criteria, dimensions, or aspects of conceptual money metaphors are involved in the meaning of money generalizability and how they are involved in nomological validity. Third, this article addresses the issue of the degree of cultural money metaphor coherence in the interplay among embodiments, attitudes, perceptions, value; and universality of money metaphor in dissimilar geo-political cultures. Critically, metaphors are the use of one phenomenon and its characteristics to describe another phenomenon (Gannon, 2001, p.1). Empirically, it is the systematic use of data to test hypothesis that is considered important (Gannon, 2001, p. 1). Accordingly, metaphors are useful only to the extent that they give rise to hypotheses and theories (Gannon, 2001, p.1). Consequently, the research hypotheses are based on examining the money metaphor scale association with other constructs.

Money Metaphor

Perhaps no research areas in social sciences boast of a richer menagerie of metaphorical expressions than does the area of psychology of money. Originally, money was conceptualized as an “unconscious equivalent of feces” (Freud, 1908/1959), the “inexhaustible breast” (Kelvin, 1957), the “having orientation” (Fromm, 1976), “measures of value” (Smith, 1776/1939), “wealth” (Achebe, 1958 ; Olugbile, 1997), “hygiene factor” (Herzberg, Mausher & Synderman, 1959) , “motivator” (Lawler, 1971), “frame of reference” (Tang & Gilbert, 1995), “life” (Egwu, 1996), and “blood line of all organic culture” (Nnedum, 2003). Money is one language that everyone understands (Nnedum, 2003) as it plays a special role in people’s cultural and social life (Charles-Pauvers, 2003).

Theoretical Underpinnings of Money Metaphor Scale (MMS)

Money represents a prominent feature of our society (Lim & Teo, 2003). Money is important in the life of most of us (Mitchell & Michel, 1999). In the literature, Yamauchi and Templer, (1982) developed a Money Attitudes Scale (MAS) and examined the meaning of money in a sample of adult employees in America. Five core dimensions were identified. Wernimont and Fitzpatrick, (1972) developed a Positive or Negative Attitudes towards Money Scale. Seven major factors were identified. Furnhan (1984) developed a Money Belief and Behavior Scale (MBBS). Six relevant criteria emerged in a sample of British adult employees. Tang (1992) developed a Money Ethic Scale (MES) and examined the meaning of money in a sample of full-time employees in the United States. Six major factors were identified. Recently, Mitchell, Dakin, Mickel and Gray, (1998) developed a Money Importance Scale (MIS) in a sample of adult Americans. Seven core dimensions were identified. However, the stream of empirical finding has very limited psychometric application to the individual difference psychology. In the USA, Yamauchi and Templer (1982,) suggested that “one obstacle in the investigation of the psychological aspects of money has been the lack of a standardized instrument for its assessment” (p. 522). There is a dearth of empirical materials and only a few amount of relevant theoretical and

psychometric information on the meaning of money in the psychological literature in Africa. This research attempted to develop an instrument for the measurement of the meaning of money.

Aims of the Study

The major purpose of the present study was to develop the money metaphor scale (MMS). Items were generated based on the following research: money as related to neurotic ambivalence (Egwu, 1996; Yamuchi & Templer, 1982 p.522), money metaphor depends, largely on cultural values attached to money (Akinwowo, 1991; Okpara, 1994); metaphors of money as related to individuals' wealth and feelings of respect (Tang, 1992, Smith, 1776/1939), money metaphors related to the beliefs about money (Furnham, 1984). From the extant work of these theorists and others, the following factors were predicted for the Money Metaphor Scale: importance – significance, freedom - security, achievement - recognition and poverty repulsive obsession – neurotic ambivalence. The present study also examined the novel nomological network of the instrument. The hypotheses derived from this nomological validity were examined. Hence, the following relationship between materialism and the money metaphor scale were proposed.

Hypotheses

H₁ Materialism will be positively and significantly associated with factor Money Importance-Significance.

H₂ Materialism will be positively and significantly associated with factor Freedom - Security.

H₃ Materialism will be positively and significantly associated with factor Poverty repulsive obsession- Neurotic ambivalence.

H₄ Materialism will be positively and significantly associated with factor Achievement – Recognition.

Method

Participants

A total of 97 randomly selected undergraduate students (male, female) from the psychology department at the university of Limpopo, Sovenga, South Africa, complete an attitude survey during class. The mean and standard deviation of these full-time student's ages were (19.12) and (4.32) respectively.

Table 1: Demographic characteristics of the participants with regards to sex

Characteristic	Type of participants	
	N	%
Category of age in years and sex		
Male	40	41.7
Female	56	58.3

Table 1 shows that 41.7% (40) of the participants were male while 58.3% (56) were female.

Table 2: Sex and Religion

Religion	Male N(%)	Female N(%)	Religion Ratio N(%)
Orthodox Christians	29(38.7)	46(61.3)	75(90.4)
Traditional African religionists	1(50)	1(50)	2(2.4)
Islam		1(1.9)	1(1.2)
2 Christian Church	1(33.3)	2(66.7)	3(3.6)

Table 2: Sex and Religion - continued

Presbyterian		1(1.9)	1(1.2)
Lutheran		1(1.9)	1(1.2)
Total	31(37.3)	52(62.7)	83(100)

Table 2 indicate that 90.4% (75) of participants are orthodox Christians,2.4 % (2) are traditional African religionists,1.2% (1) is a muslim,3.6%(3) are laity of 2 Christian church, 1.2%(1) is a member of Presbyterian church,1.2%(1) is a member of Lutheran church.

Table 3: Sex and Years of Study

Years of study	Male N(%)	Female N(%)	Religion Ratio N(%)
Year 1 level of education	1(5.0)	1(5.0)	2(2.8)
Year 2 level of education	10(47.6)	11(52.4)	21(29.2)
Year 3 level of education	13(40.6)	19(59.4)	21(29.2)
Year 4 level of education	3(33.3)	6(66.7)	9(12.5)
Year 5 level of education	3(5.0)	3(5.0)	6(8.3)

Table 3 indicates the educational level of male and female participants. About 2.8%(2) are in their first year,29.2%(21) are in second year,29.2%(21) are in their third year,12.5(9) are in their fourth year,8.3%(6) are in their fifth year, while did not indicate their year of study.

Table 4: Income of Parents

Gender	Low	Moderate	High	
	(R500-200,000)	(300-990,000R)	(R100,0000-above)	
Male	11(68.8)	4(25.0)	1(6.3)	16(39.0)
Female	22(88.0)	2(8.0)	1(4.0)	25(61.0)
Total	33(80.5)	6(14.6)	2(4.9)	41(100)

Table 4 indicate that for male,68.8%(11) are from low income family,25.0%(4) are from average family,6.3%(1)are from high income family,39.0(16) are from rich family. However for the female, 88.0%(22) are from low income family,8.0%(2) are from average family,4.0%(1)are from high income family,61.0%(25) are from rich family

Instruments

The instruments used for the study were: a material value scale and a money metaphor scale (MMS).

The materialism scale: a material value scale (Richins & Dawson, 1992) was used to measure an individual's materialistic value of success as defined by possession or materialism. The scale is a single item measure selected from the 18 item materialism scale (Richins & Dawson, 1992). Materialism was measured using a single question: "I admire people who own expensive homes, cars and cloths". A 7-point scale present response options ranging from strongly disagree (1) to strongly agree (7). Moreover, a single item measure has been employed in this study because of the limited space on the questionnaire. Researchers have supported the usefulness of a single items measure if space on a questionnaire is limited (Scarpello & Campbell, 1938; Begley & Czajka 1993; Bhuian & Islam 1996; Wanous, Reichers & Hudy 1997). The crumbach alpha measure of internal consistency of the scale is .85 (Richins, 2004, p.212). In this study, the concurrent validity of materialism scale was achieved by the correlation of it with a psychometric instrument that is rationally predicted to measure similar theoretical construct. The love of money scale (Tang & Chui, 2007) yielded a correlation coefficient of 0.64 with the materialism scale; while the overall money metaphor scale yielded a

correlation coefficient of 0.86 with materialism scale, while love of money yielded a correlation coefficient of 0.63 with the overall money metaphor scale. In addition, high love of money individuals (N=52, M=4.88, SD=1.84) differed significantly from low love of money individuals (N=45, M=3.07, SD =1.90) on materialism, with $t(95) = 4.78$, $CI = 1.06 - 2.57$ at $p < .000$ level of significance. This is a strong evidence of contextual validity of materialism scale in South African sample.

The Money Metaphor Scale (MMS) Item Generation

Theory driven approach was adopted for scale development of money metaphor scale. Sub-construct items were decided based on review of empirical literature on cultural money metaphor. Twenty-five items were generated to reflect the four content domains. The response format was a 7 point Likert-type scale using disagree strongly (1), neutral (4), and agree strongly (7) as anchor points. The money metaphor items were further screened for appropriateness by use of mainly two procedures: Q-sorting and item evaluation. The list of items was further subjected to qualitative analysis based on cognitive response of forty respondents which resulted in further reduction of items to 20. First, Pilot testing based on quantitative analysis of the instrument was conducted on the data of 40 respondents. Some items related to sub-construct of poverty repulsive obsession- neurotic ambivalence showed high correlation with the items of other sub-constructs and consequently, were dropped from further analysis. Since, there was no theoretical or intuitive reason to justifiably disbelieve correlation amongst the factors, the researcher has chosen direct oblimin rotation which is oblique (non-orthogonal) in nature and it yielded 65.16% of total variance of the scale. Kaiser-Meyer-Olkin measure of sampling adequacy was 0.86, this was adequate to proceed with exploratory factor analysis(EFA) and confirmatory factor analysis(CFA) since it is above 0.60 .Bartlett's Test of sphericity gives chi-square value of 700.42, $p < .000$ level of significance. For item loading, the rule-of-thumb is that loading is "weak" if less than .40, "strong" if more than .60, and otherwise as "moderate". Below are the factor loadings of the scale.

Exploratory Factor Analysis (EFA)

The revised and shortened 13 item metaphor scale was administered on a sample of 97 respondents and was subjected to exploratory factor analysis (EFA). Careful examination of the items based on the above criterion finally yielded a four factor solution. Factor loading of the different items on respect factors are given in table 5

Table 5: Summary of Factor Loading for the Money Metaphor Scale.

S/N	Item	Loading
	Factor I: Money Importance-significance	
1	Money is rest of mind	.81
2	Money is everything	.79
3	Money is the blood of life	.83
4	Money can open all doors	.72
	Factor II: Freedom -Security	
5	Money is a good possession	.70
6	Money is life	.72
7	Money is freedom	.78
8	Money is time	.80
	Factor III: Poverty Repulsive obsession – Neurotic Ambivalence	
9	One who has no money is insignificant	.80
10	Whatever money cannot do, cannot be done, and remains undone.	.70
11	Money is restless life	.62
	Factor IV: Achievement - Recognition	
12	I work for money	.68
13	Money is the shining star of a person	.80

N = 97

Four factor solution with eigen values greater than one, was obtained through exploratory factor analysis (EFA). Based on the criterion explained above, the following items on table 5 constitute the money metaphor scale. As mentioned above, the exploratory factor analysis, with varimax rotation gave four factor solutions with acceptable communality. Factors emerging in this stage were quite similar to what were proposed theoretically in the study. These factors were related to “importance–significance” of money, “freedom–security”, and “poverty repulsive obsession–neurotic ambivalence”, “achievement– recognition”. All the items with pure high loading of 0.60 or greater on each one factor were retained. This resulted in 13 items representing the four factors. Confirmatory factor analysis (CFA) investigated the items’ factor structure since items were derived in accordance to an a priori typological scheme. This preliminary CFA further screened the 13 provisional items by identifying which items best mirror the proposed four factors and kept those having substantial loading (>0.40) and significant ($p < 0.001$) standardized factor loadings. Next the author performed scale and sub-constructs reliabilities to prove scale psychometric quality.

Confirmatory Factor Analysis

Table 6: Summary of Factor loading for the Money Metaphor Scale, alpha reliability, and Communality.

S/N	Item	Loading	Communality
	Factor I: Money importance-significance		
1	Money is rest of mind	.81	.69
2	Money is everything	.79	.66
3	Money is the blood of life	.83	.75
4	Money can open all doors	.72	.66
	Factor II: Freedom - Security		
5	Money is a good possession	.70	.76
6	Money is life	.72	.66
7	Money is freedom	.78	.68
8	Money is time	.80	.69
	Factor III: Poverty Repulsive Obsession-Neurotic Ambivalence.		
9	One who has no money is insignificant	.80	.68
10	Whatever money cannot do, cannot be done, and remains undone.	.70	.68
11	Money is restless life	.62	.78
	Factor IV: Achievement - Recognition		
12	I work for money	.68	.82
13	Money is the shining star of a person	.80	.60

Factors of the Money Metaphor Scale (MMS)

Factor I had four items which accounted for 24.35 percent of the common variance. It contained items like “money is rest of mind” because “money can open all doors”. “Money is the blood of life” because “money is every thing in life” which suggested it be labeled “Money Importance-Significance”. Factor II contained four items (17.60 percent of the variance) and was labeled “Freedom – security”. Persons scoring high on this factor could be described as placing great value on the essence of freedom and the feeling that having money is a good possession (Tang, 1992) that offers security. The three items of factor III suggest that it be titled “Poverty Repulsive Obsession (Neurotic ambivalence)”, which accounted for 13.57 percent of the variance. In Africa, a person who has no money is of no significance because money is the totality of an individual’s wealth (Egwu, 2004), wealth is seen in terms of accumulation of salient things, properties, physical object, wives, children, farms, economic trees, yams barns, titles (Egwu, 1996), individual cultural personality and carriage (Nnedum, 2003). Factor IV, “Achievement – Recognition”, had two items (12.69 percent of the variance). African people “work for their money”, not only because hard work is a core value of the African hegemonic complexities but also, for the fact that “money is the shining star of a person” (Egwu, 1996). The Kaiser-Meyer-Olkin Measure of sampling adequacy and Bartlett’s Test of sphericity value was 0 .837

and cronbach alpha's was 0 .87. Value of chi square test (508.812) at 78 degree of freedom was significant at less than 0.000 level of significance. The instrument explained approximately 68.3% variance in the South African sample.

Reliability

A value for the reliabilities of the subscales, or sub-constructs was all within acceptable range. (See table 7 below). This implies that the scale as well as sub-constructs has satisfactory inter-item consistency and test-retest reliability. Value of cronbach alpha for the different sub-constructs was between 0 .84 to 0.76 indicating that the scale is reliable. The alpha loadings were generally high, holding strong promise for explicability of findings.

Table 7: Reliability of Money Metaphor Scale (MMS)

Sub-constructs	Item	4 weeks test retest	Gultman split half	Correlation between form	Spearman brown	Alpha Part 1 part 2		Alpha	X	SD
Factor 1 (97)	4	.92	.87	.77	.87	.73	.65	α.. 84	58.1	20.1
Factor 2 (97)	5	.94	.80	.70	.83	.72	.65	α .82	10.4	6.0
Factor 3 (97)	3	.97	.65	.63	.81	.67	.61	α..78	13.2	5.7
Factor 4 (97)	2	.91	.76	.80	.77	.69	.62	α..76	09.0	3.6

Research Procedure

Informed consent was obtained from the university research ethics committee, formerly represented by the departmental head of psychology and the students of three psychology classes of the University of Limpopo, Sovenga, South Africa. The principal researcher introduced this research to three post-graduate students of psychology who assisted the researcher as the research assistants after being trained by the departmental head, who organized a three-day workshop for them. The workshop focused on how to administer the scales and how to handle anticipated problems, such as lack of, or short concentration span, having to repeat one question or request from participants etc. The workshop lasted for five hours a day. Data were collected by the principal researcher through the three trained research assistants. An English version of the instruments was used with participants who were much more familiar with the English language. The researcher and their assistants conducted the survey individually during class. Participants completed the survey voluntarily and anonymously.

Data Analysis

Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) were employed to extract the meaning of money sub-constructs, while the Product – Moment Correlation coefficients and regression analysis were computed to predict materialism in, four specific money metaphor sub-constructs, or factors: Importance-Significance, Freedom - Security, Poverty Repulsive Obsession-Neurotic Ambivalence, Achievement – Recognition. In the factor analysis, factor loadings' eigen – values, Kaiser-Meyer-Olkin (KMO) statistics were reported. In the correlations, co-efficient of correlation value were reported, and in each of the regression equations correlation coefficients, standardized regression weight “B”, corresponding R-value, change R² values were reported.

Research Design and Statistics

This was a survey design that relied on primary data for testing of research hypotheses. The data from the questionnaire was analyzed using SPSS Program Version 11.0. Descriptive statistics were used to describe the performance of the sample across the different groups on all of the sub- scales. Multivariate statistics were employed to test the model as well as the hypotheses. Specifically, the

structural validity of the MMS was determined using Exploring Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA). Validity of the scales was examined using cronbach's alpha and Product-Moment Correlation Coefficients. Performance on the MMS scale was compared on groups using Univariate Analysis of Variance (ANOVA). Performances on the scale were explored in relation to constructs using Multiple Regression Analysis. All tests were performed at 95% (alpha = 0.05) significant level.

Results

The findings of this study are presented in Tables 8 and 9 below. Table 8 presents the inferential data obtained from scores of each of the sub-constructs of money metaphor scale administered. Table 8 present a summary of regression analysis of materialism on indicator variables: Money Importance-Significance, Freedom – Security, Poverty Repulsive Obsession-Neurotic Ambivalence and Achievement – Recognition.

Table 8: Correlations among study variables

S/ N	Variables	1	2	3	4	5	6	7	8	9	10
1	Sex	1									
2	Marital Status	.13	1								
3	Religion	.12	.18	1							
4	Voting	.33**	.04	.04	1						
5	Factor 1	-.16	.21*	.05	-.10	1					
6	Factor 11	-.10	.09	.12	.12	.52**	1				
7	Factor 111	-.21	.17	.16	-.24	.49**	.32**	1			
8	Factor 1V	-.16	-.07	.11	-.07	.43**	.49**	.21*	1		
9	Money metaphor	-.19	.15	.115	-.06	.85**	.78**	.67**	.60**	1	
10	Materialism	-.04	.04	.21	.08	.39**	.45**	.26**	.50**	1.52**	1

Note: N = 97; ** correlation is significant at 0.01 (2tail) *Correlation is significant at 0.05 (2-tail)

Table 8 indicates that there was a positive association at a high level of significance, between materialism and importance of money, freedom-security, poverty repulsive obsession – neurotic ambivalence, and achievement and recognition.

Table 9: Regression Analysis of Materialism on Money Metaphor sub- constructs

Model	β	R	R ²	ΔR^2	Standard error	t value	FValue	PValue
Factor 1	.39**	.39	.15	.14	5.57	4.72	17.23	.000
Factor II	.45**	.45	.21	.20	5.13	7.16	24.21	.000
Factor III	.26**	.26	.07	0.6	3.51	9.20	6.95	.000
Factor IV	.50**	.50	.25	.24	2.05	10.88	31.57	.000
Money metaphor	.52**	.52	.27	.26	11.99	11.18	34.65	.000

Table 9 presents summary of results of regression analysis for materialism. As can be observed from table 9, the predictor variable exerted very high effect on the dependent variables: money importance (R² = .15), freedom-security (R² = .21), poverty repulsive-neurotic ambivalence (R² = .07) achievement – recognition (R² = .25) and overall money metaphor (R² = .27). Inspection of the standardized beta weight showed the magnitude of impact and the direction of the relationship with materialism to be positive, and high for freedom-security (β = 0.45, p < .000), achievement – recognition (β = .50, p < .000), overall money metaphor (β = .52, p < .000), but moderate for importance of money (β = .39, p < .000) and poverty repulsive – neurotic ambivalence (β = .26, p < .000). Materialism was significantly and positively related to the money metaphorical thoughts, action and behaviors. In short,

the findings suggest that materialism influences individual thoughts of, action towards, and behavior in relation to, money in the South African sample.

Nomological Validity of the Money Metaphor Scale (MMS)

The partial validity consisted of the correlation of each of the four sub-constructs of MMS with various psychometric instruments that have undergone rigorous validity tests and that are conceptually predicted to measure similar theoretical constructs. The materialistic value (Richins & Dawson 1992) which attempts to assess the importance a consumer attaches to worldly possessions was hypothesized to correlate positively with the sub-constructs of money metaphor scale. Tables 8 and 9 display the product moment correlation coefficients and regression between factors 1, 11, 111 and 1V and the materialistic value.

As predicted, factor 1, money importance, was significantly and positively correlated ($r = 0.39^{**}$, $\beta = .39$, $t = 4.72$, $p < .000$) with materialism (Richins & Dawson, 1992). Money is the means to acquiring material possession. Money is associated with rest of mind, especially for people who experience the economy of “cash mentality”, where money is the key that can easily open all doors (hypothesis I). Thus, highly materialistic people who think that money is their blood of life may tend to feel that money is everything. It is plausibly possible that highly materialistic individuals who think that money is every thing may tend to use their possession to “buy people over” influence people – a Machiavellian character (Christie & Geis, 1970) of necrophilics (Farier, 1970). Highly materialistic people reported that money is a good possession (Richins & Dawson 1992) because materialistic individuals tend to need possessions to be happy, enjoy freedom and feel secured in life (Richins & Rudin, 1994). Materialism is highly correlated with factor freedom-security ($r = .45^{**}$, $\beta = .45$, $t = 7.16$, $p < .000$). It is apparent that with money, one feels alive, experiences a feeling of autonomy, freedom (hypothesis 11) and security. One who has money, tends to secure the future, s/he can recreate destiny to become what one wants to be because money is life (Egwu, 2004).

As predicted, Factor three, poverty repulsive obsession, was found to be low, significant and positively correlated with materialism ($r = .26^{*}$, $\beta = .26$, $p < .000$). The result provides support for hypothesis 111 and, evidence of construct validity for factor three. Additional analysis found that the correlation between materialism and factor three was lower ($F = 6.95$, $p < .000$) than the materialism – factor one correlation ($F = 17.23$, $p < .000$); Lower also ($F = 24.21$, $p < .000$) than the materialism – Factor two correlation; and Lower still ($F = 31.56$, $p < .000$) than the materialism – Factor four correlation; suggesting the uniqueness of this factor. In short, people who spend restless time making money tend to think that one who has no money is insignificant, and consequently may be less likely to spend the “hard earned” money on material possession, because of his or her belief that whatever money cannot do, cannot be done and remains undone. People can overcome compulsive cycle of “getting and spending” (Rassuli & Hollander, 1986, p.10), for one to obsessively repulse poverty. As hypothesized, factor 4, (achievement – recognition) was determined to be positively correlated ($r = .50^{**}$, $\beta = .50$, $t = 10.88$, $p < .000$) with materialism (Richins & Dawson, 1992). The highly materialistic people work hard for their money (Mirels & Garret, 1971), ostensibly not only because money is the vehicle that can drive them to the mountain of their habitual possession, but also for the fact that money as the metaphorical shining star of a person can sustain and illuminate constantly their pathological quest for possession. Thus, money is a source of achievement (Tang, 1992, p. 199), recognition and respect (Tang, 1995, p. 811).

Discussion

The data indicate that the MMS provides a reliable measure of four factors of the meanings of money: money importance-significance, freedom-security, poverty repulsive obsession-neurotic ambivalence and achievement-recognition. The meaning of money is a multidimensional construct. The nomological networks of the four factors to psychometrically established measure of materialistic

value gave credence and support to the theoretical and empirical relevance of MMS in the organizational behavior literature. It should be pointed out that the correlations are in accordance with conventional metaphorical attitude to money such as poverty repulsive obsession-neurotic ambivalence.

In addition, MMS is not only useful for future research relating value to cultural meaning of money, but MMS has potential to have applicability in personnel selection, clinical profiling and work place behavior management. It is plausibly possible that MMS, if employed in assessing applicants seeking job in financial and economic institution, could highlight categories of individuals who have potential money pathology and as such will be inclined to exhibit workplace deviance, or counter productive behavior, in the work place if employed. In the clinical setting, there is evidence that individual's proclivity to exhibit poverty repulsive obsession may be associated with repressed anal character projection (Freud, 1908/1959). Thus, MMS holds strong promise as a diagnostic tool for the identification and management of irrational attitudes to, and behaviors toward, money. A word for researchers in the emerging field of economic psychology as well as organizational behavior is that the sample size is small, and therefore, the results should be interpreted with caution due to its small and non-representative sample. Consequently, more rigorous studies are needed to fully determine the construct validity and nomological network of association of other constructs with MMS (Anastasi, 1988; Tang, 1992, p.201).

Theoretical Implication

An important criterion for explanatory potential of the instrument is specificity of the substantive nature of relationship between the antecedent (materialism) and the consequence (meaning of money). Interestingly, specification of necessary or sufficient condition for test validity for confirmation is called for at this stage. Based on this study, materialistic value has produce positive effects on attitudinal indicators of the meaning of money (MOM). The results reported here lend additional credence to the body of literature on materialism by providing evidence that theory and results related to the influence of materialism extend to classical attitudinal indicators of MOM.

Practical Implications

From a practical stand point, this study could provide practitioners, especially managers and clinicians, with valuable psychometric instrument for making informed decisions regarding recruitment, selection, placement as well as improving clinical diagnosis, personality assessment and predictive behavior analysis. Simply put, MMS measures people's metaphorical attitudes toward money. Researchers may want to use the MMS in their research and explore people's meaning of money as related to their personality, behavior, performance, life experiences and personal dispositions.

Significance of the Study

This is the first attempt to develop empirically robust psychometric instrument, using African cultural metaphors of money, as illumination of generative meaning of money, to examine people's attitude toward, or meaning of, money as related to critically substantive constructs like materialism. More specifically, the psychometrically valid instrument reported in this study, Money Metaphor Scale (MMS), holds strong promise for use in future research involving the meanings of money in the South Africa and elsewhere. Interestingly, money metaphor scale is capable of assessing four attitudinal domains of any individual, viz: importance-significance, freedom-security, poverty repulsive obsession-neurotic ambivalence, and achievement-recognition domains. Perhaps it is not surprising then that "importance" dimension as well as "freedom" and "achievement" may be related to work related outcome measures, although "poverty repulsive obsession" may tend to explain the clinical implications of a turbulent society that may predispose individuals to exhibit neurotic ambivalence.

Limitations

The current study used a self-report methodology, leaving potential common method variance problems. While, one time period was used to collect main data, future study should employ alternative research methodologies (e.g. field based experiments) to assess the robustness of the results. In addition, the data used for the current study were relatively small in comparison with the sample size of the population of the study; therefore future researchers replicating the study may increase their sample size. At the level of conceptualization, this study is limited in terms of the number of cultural metaphors it utilized. The study largely refers to Nigerian cultural metaphors of money, acknowledged here is that this is but one of the many cultural metaphors evolved in different cultures across the Africa.

Recommendation

This study will, hopefully, create awareness that cultural metaphors of money derived from Nigeria could be used to develop a robust psychometric instrument for measuring the meanings of money in South Africa and anywhere else. Also, the findings hold strong evidence that Money Metaphor Scale may be used by researchers in examining the attitudinal performance of people on their meaning of money as related to life experience, personal disposition, work-related outcomes, personality constructs and personal values. One consistent recommendation of the study is that the relations between materialism and meanings of money need to be studied further in the organizational context, and addressed in organizational practice.

Conclusion

A key theoretical basis of this study is Generative Theory of Money (GTM), which proposes and has found empirical support for the argument that possession as a materialistic value makes independent contributions to core MOM dimensions of importance of money, freedom-security, poverty repulsive obsession-neurotic ambivalence as well as achievement-recognition. The results of this study provide robust and consistent evidence regarding the nature of relationship of materialism to the core meanings of money. This study provides researchers and the practitioners with a valid instrument for the assessment of the meanings of money in South Africa.

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