

Development and Validation of Native Material Values Scale for Iran (NMVS-I)

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Abstract: The present study aims at developing a scale to measure materialism among Iranians by using famous material scales through developing and validating a Native specific material value scale. The conceptual model will be validated and tested for reliability. The population (N = 251) were the students of three branches Islamic Azad university who completed the questionnaires prepared for the present study. Exploratory and confirmatory factor analyses were used to identify the related items. Also the order of the effective factors of Friedman test was used to weight the items. Eleven factors were displayed 5 of which were related to possession whose subcategories are centrality, nongenerosity, ownership; 3 of the factors were related to generosity which was called generosity and envy in line with 1 of the factors which was related to happiness that includes luxury or satisfaction. More research needed to be done on different social groups and culture.

Key words: Iran, materialism, scale development, scale validation, students

INTRODUCTION

The study of the consumption culture has become an important topic in the consumer behavioral literature, especially in materialism. A number of different and/or similar, definitions of materialism have been proposed till now, the definition explained by Belk (1985) indicated that materialism as “the importance a consumer attaches to worldly possessions”. Micken and Roberts (1999) suggested that materialistic behaviors reflect “a preference for certainty, with materialists relying on objects not just as identity markers, but identity fixers”. Finally, Browne and Kaldenberg (1997) explained that materialism was a cluster of values and traits which focus on possessions. From a conceptual perspective, this suggested that materialism was a multi-faceted structure relating to the importance of material objects for the individuals. This structure derived empirically and tested by Richins and Dawson (1992) which was the basis for the measurement used in the present study. Richins and Dawson (1992) argued that acquisition and possession are the central theme in materialists’ lives. These people tend to spend little time on leisure activities because they desire to work longer hours in order to earn more money. They suggested that consumers’ functional materialistic behaviors along with the three aspects of centrality, success and happiness were represented in their CVs. Materialists assess the standard of success by the number and quality of possessions they hold. Happiness was gained through acquisition of possessions rather than social relationships, experiences, or achievements.

Richins and Dawson (1992) developed a model by the three-factor MVS and determined its internal consistency across different samples within the context of current definitions of materialism. Keynes (1936) descriptions of motives to save money opposed to refraining from spending suggested that materialistic people are spenders. For example, a primary aspect of Richins and Dawson (1992) definition of materialism was *Possession-defined success*. This aspect of materialism concerns the tendency of materialists to assess their own and others’ success by the number and quality of possessions accumulated. Materialistic people value possessions for the money they spend the more they spend the more satisfied they become. Similar to this trend, it would be predicted that people with high levels of materialism (Richins and Dawson, 1992) are more prone to be spenders than savers.

Although materialism may have positive impacts on individuals and economies, it was often criticized for leading us to negative outcomes such as dissatisfaction and resentment, along with compulsive buying and debt (Otero-López *et al.*, 2010; Roberts and Clement, 2007). Materialism reflects the importance a consumer attaches to worldly possessions. At the highest levels of materialism, such possessions assume a central place in a person’s life and are believed to provide the greatest sources of satisfaction and dissatisfaction in life. Clearly, this description of materialism illustrates the relevance with the construct held between marketing practitioners and consumer behaviorists. Thus, researchers are actively investigating its formation and consequences, as well as seeking out characteristics associated with high

materialism. In addition, as the main concern of the aforementioned study, researchers developed measurement scales to assess materialism (Belk, 1984; Campbell, 1969; Moschis and Churchill, 1978; Richins and Dawson, 1992). The materialism scale was developed to measure "the importance a person places on possessions and their acquisition as a necessary or desirable form of conduct to reach desired end states, including happiness" (Richins and Dawson, 1992).

It could be said that material values were common characteristics across subcultures and cultures. Supporting this idea, Richins and Dawson (1992) reported very similar properties for their materialism scale with data from both urban and rural areas, as well as different US geographic regions. Furthermore, except for age, they found insignificant correlations between levels of materialism and demographic factors like gender, marital status, household size, level of education and income. Richins and Dawson (1992) began their materialism scale development study with the advertising that America is a consumer society. However, is materialism uniquely American?

From a social, or macro, perspective there are positive and negative aspects of materialism as well. Kassiola (1990) and Tawney (1920) characterized materialism as the negative consequence of industrialism, while others argued that it was capitalist economic organization that results in the negative aspects of materialism (Bredemeier and Toby, 1960; Fromm, 1968, 1976; Galbraith, 1972; Heilbroner, 1956). Through the *ideology of consumption* (Hetrick, 1989) that equates material possessions with happiness, consumers are forced to accumulate possessions and organize their lives around the consumption of goods (Daun, 1983). This produces cultures of consumption in which the normal functions of culture are supplanted by consumption (Featherstone, 1991). Some social critiques of consumption as Scitovsky (1976), Slater (1980), Bredemeier and Toby (1960), Fromm (1976) and many others are critiques of these cultures of consumption and led others, such as Mick (1996) and Burroughs and Rindfleisch (2002) to characterize materialism as the *dark side* of consumption.

But despite such widespread concern about materialism, Campbell (1969) developed a materialism scale, but it was a more accurate scale of attitude toward materialism which was also untested. Moschis and Churchill (1978) developed a materialism scale which includes the orientation toward money as well as possessions. Csikszentmihalyi and Rochberg-Halton (1987) suggested that it was possible to separate materialism into two components:

- "Terminal materialism, in which consumption was an end of itself, there is little interaction between owner and object" (Csikszentmihalyi and Rochberg-Halton, 1987)

- "Instrumental materialism, where objects are used in order" (ibid) to make life longer, safer, more enjoyable").

Belk (1984) developed a scale with the evidence relating to:

- Possessiveness, possessiveness was defined as "the inclination and tendency to retain control or ownership of one's possession" (Belk, 1983)
- Nongenerosity, Generosity involves the willingness to give or share possessions with others. In the context of materialism, nongenerosity involves the unwillingness to give possessions to or share possessions with others
- Envy, which was defined as an interpersonal attitude involving "displeasure and ill-will at the superiority of (another person) in happiness, success, reputation, or the possession of anything desirable" (Schoeck, 1969).

Richins and Dawson (1992) Material Values Scale (MVS) was used to assess participants' level of materialism. This scale treats materialism as a value that influences individuals interpretations of their lives and environment (Richins, 2004) with three sub-categories centrality, success and happiness.

The definition proposed by Belk (1985) suggested that materialism was the prominence a consumer attaches to worldly possessions. Rassuli and Hollander (1986) defined materialism as the interest in getting and spending. Burroughs and Rindfleisch (2002) added that one's well-being can be enhanced through one's relationship with objects. In a more psychological approach, Micken and Roberts (1999) suggested that materialistic behaviors reflect a preference for certainty, with materialists relying on objects not just as identity markers, but identity fixers. Browne and Kaldenberg (1997) characterized materialism as a cluster of values and traits that focus on possessions. What all these definitions have in common was that they reflect the use of consumption to acquire more instrumental or functional value in the things purchased. Collectively, the definitions suggested that an individual who seeks a relationship with objects was enhanced in some way.

After reviewing the conceptualizations, definitions and descriptions above, several issues guided the development of a new measure of Native specific scale of materialism. First, materialism was a complex construct with multiple components related or orthogonal. Second, any definitions of materialism should be valued neutrally and shouldn't be the reflection of some normative prescriptions of its authors. Material possessions do serve an important role in establishing and maintaining a positive affective state.

In this study, the researchers designed a native value scale of materialism and report the preliminary results of

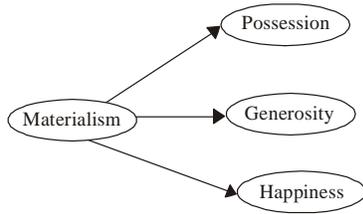


Fig. 1: Conceptual model of research

research in progress to develop a system of measurement of these dimensions in terms of demographic divisions.

MATERIALS AND METHODS

This Study was done in two phases both qualitative and factor analysis and it was an applied research with analytical, descriptive and cross-sectional research method. To determine the qualitative aspects 30 expert in marketing, 5 of whom with high academic education with high expertise in Iranian market and 25 of the students were the Ph.D. Marketing student, data collection tools were questionnaire with 5 Likert scale and direct interview. The main variables were possession, happiness, generosity, envy, centrality, success, terminal materialism and instrumental materialism with having the experts as source of information as far as the survey was concerned including possession, generosity and happiness which were determined in conceptual model of the research (Fig. 1). During the survey time from October 2011 till January 2012, 300 students in three Azad university branches studying for B.S., M.S. and Ph.D. participated in the survey out of which 251 were valid. Discriminate, criterion and concept validity were used and composite reliability with 251 data as well as internal consistency with 30 data were tested and the next step was considering construct validity with the explorer factor analysis and Varimax Rotation and finally confirmatory factor analysis was used. Also Friedman was performed for weighting the items to indicate that which item has been more effective in materialism.

RESULTS

Qualitative results: After reviewing the literature and working on the findings of domestic and foreign research projects, the initial conceptual model of materialism was developed. In this model 6 factors as, possession, happiness, generosity, envy, centrality and success were identified. Then this model was then proposed by the vote of experts (N = 30) and the possession, generosity, happiness factors were selected with 100% agreement.

- **Factor adequacy:** Before conducting the analysis, tests of sampling adequacy were conducted first. The Kaiser-Meyer-Olkin (KMO) statistic was for the first

Table 1: Factor loadings and Composite Reliability (CR)

Factor items and Composite Reliability (CR)	Factor loading
Happiness (CR = 65.432)	0.706
Q36	0.635
Q37	0.609
Q38	0.664
Q39	0.638
Q40	0.673
Q41	0.661
Q42	0.661
Q43	0.739
Q44	0.894
Q45	0.872
Q46	0.785
Possession (CR = 68.299)	0.637
Q2	0.638
Q3	0.558
Q4	0.646
Q5	0.751
Q6	0.673
Q7	0.619
Q8	0.585
Q9	0.678
Q10	0.749
Q11	0.727
Q12	0.587
Q13	0.646
Q14	0.642
Q15	0.750
Q16	0.673
Q17	0.788
Q18	0.873
Q19	0.863
Q20	0.806
Q21	0.640
Q22	0.628
Generosity (CR = 70.767)	0.933
Q24	0.782
Q25	0.758
Q26	0.559
Q27	0.674
Q28	0.628
Q29	0.575
Q30	0.549
Q31	0.613
Q32	0.596
Q33	0.665
Q34	0.750

Table 2: Discriminat validity matrix

	Possession	Generosity	Happiness
Possession	0.448		
Generosity	0.379	0.530	
Happiness	0.319	0.392	0.561

variable (possession) 0.82, second suggested variable was (generosity) 0.89, the last variable (happiness) was 0.86 and it was the total of 0.87 which were significantly greater than the recommended cut off of 0.60. Additionally the Bartlett test of sphericity was also significant, at the 0.9% level.

- **Reliability of scales:** All the scales were reliable, with the composite reliabilities ranging from 0.62 to 0.77, all greater than the benchmark of 0.50. Table 1 shows the reliability level for each scale and factor loadings for each item in the scale. Also with the internal consistency (Cronbach’s Alpha) for each variables reported the possession = 0.979, generosity = 0.98, happiness = 0.97 and for the total was 0.99.

Table 3: Absolute and relative frequency

		Number	Percent
Sex	Female	76	30.2
	Male	171	67.2
Educational level	Bachelors	60	23.8
	Master	120	47.6
	Ph.D.	68	27
Age	<20	31.2	
	20-30	90	35.7
	30-40	128	50.8
	>40	28	11.1
Monthly income (in Rials)	<2000000	10	4
	2000000-5000000	109	43.3
	5000000-10000000	102	40.5
	>10000000	18	7.1

- Validity of scales:** Discriminant which was the constructs Fornell and Larcker (1981) test. Table 2 presents the relevance table, with the square root of the average variance extracted represented by the diagonal. In all cases, as can be seen by the information in Table 2, the Fornell and Larcker (1981) test used for all pairs of constructs. That is, there was discriminant validity; the constructs are distinctly different from each other. Also, it was also confirmed the concept and Criterion validity confirmed.

Factor analysis results: Logical model derived from the qualitative study was examined by factor analysis. Thus the entire model contains two parts: the first part of the 4 questions had the questions on personal and demographic

profiles and the second section includes 48 questions about the variables affecting on materialism, 384 scholars were involved and 251 questions were returned valid. Personal and demographic result was shown in Table 3. Descriptive statistics indicate that the most student who are participate in the research were male 62.2% (N = 171), most of them have master degree 46.7% (N = 120), they range were 30-40 years old 50.8% (N = 128) and their monthly income were between 2000000-5000000 Rials, 43% (N = 109).

Exploratory factor analysis identified the most important and most influential component of materialism as well as the identification of variables loading on each of the main components of exploratory factor analysis. Possession including 5 factors with the variance of 69.81, Generosity including 3 factors with the variance of 65.45 and happiness with 3 factors with the variance of 70.76 explained. The results for each suggested variables were prioritized separately in 3 tables (Table 4, 5, 6).

While studying the literature and considering the domestic and foreign research projects, 5 factors identified in EFA factor number 1 which was related to Belk (1994) research and was related to possession and according to Richins (1994) could be related to centrality. Factor number 2 related to terminal materialism which Csikszentmihalyi and Rochberg-Halton (1981) explained in their research, factor number 3 was related to the possession as well as the other factors like envy, terminal materialism and possession.

The three factors which were identified in EFA were supercilious, generosity and envy. As nongenerosity, envy

Table 4: Factors identify for possession

No	Possession's items	Number of factors				
		1	2	3	4	5
7	While traveling took a lots of photos	0.619				
8	Never throw out old pictures	0.621				
9	Having expensive things is important	0.619				
10	Having too much money is important	0.721				
11	Having expensive clothes is important	0.759				
5	Prefer to buy a device that would need to borrow it from someone		0.417			
17	Appreciate people who have an expensive house, car and things.		0.852			
18	The success in life, means having many material possessions in life.		0.922			
19	Evaluating the success from the financial assets		0.918			
20	Things people have in the life show the life style		0.878			
10	Having too much money is important			0.407		
12	Having an expensive brand is important			0.657		
13	Having the high ability to buy, is important			0.694		
14	Having gift in my birthday is important			0.668		
15	Growing assets, feeling happy			0.804		
16	Feeling uncomfortable in case of having the things that I want,			0.523		
1	Owing things is more attractive than renting				0.638	
4	Feeling very upset in case of losing baggage				0.633	
5	Prefer to buy a device that would need to borrow it from someone				0.709	
6	Having the ownership of your possessions in other's hands makes me worried				0.780	
7	When I travel I take lots of photos				0.469	
1	Possessing is more attractive than renting					0.423
2	Inever believe on throw away thing out things					0.782
3	If something is stolen, I'm very upset, even if it has low value					0.723
16	If not having the things that I want, feeling uncomfortable					0.424

Table 5: Factors identify for generosity

No	Gemerosity items	1	2	3
23	Enjoy having guests at home	0.931		
24	Sharing things with others is enjoyable	0.855		
25	Never borrowing things except the good friends	0.819		
26	Want to buy a treadmill and share it with the neighbors	0.716		
27	Others who have not a car could not drive my car		0.664	
28	Helping charity organization is enjoyable		0.735	
29	Envyng the people who buy very things		0.758	
30	Enjoyng my friends success in a champion			0.701
31	It seems that most rich people feel that is appropriate for them to talk to average people			0.701
32	There are specific people who prefer doing business with them			0.827
33	Sufferng from not having the things that friends have			0.730
34	Feeling uncomfortable in case of having the things that I want			0.720

Table 6: Factors identify for happiness

No	Happiness items	1	2	3
35	I have all the things to enjoy life.	0.821		
36	Life will be better with the things that I haven't had yet	0.814		
37	Feeling happier with owing beautiful things in the life	0.780		
38	Feeling happier with the higher ability to purchase	0.694		
39	Getting upset because of not being able to buy everything wanted	0.793		
40	Purchasing something which is not useful in life	0.796		
41	Simplify life that not concerned about material possessions	0.677		
42	Owing things not important	0.756		
43	Spending money in things that do not have a lot of performance	0.409	0.670	
44	Purchasing cause happiness	0.439	0.831	
45	Looking for luxury in life	0.450	0.790	
46	Paying more attention to possession in comparison with others			0.954

(Belk, 1984) and happiness (Richins, 1994). Also the items 21 and 22 didn't participate in any factors analysis and were omitted automatically

By the use of EFA and reviewing the literature two factors found related to happiness variable including luxury and happiness, because of overlapping with the first item the second factor omitted and third factor omitted because of the low number of items.

As shows in Fig. 2, materialism was a second-order construct in material factors, as it explored in EFA; However, in order to decide whether the first-order factors was well-defined each factors with its items in separated CFA model was defined. In each model, error terms of items with corresponding population (for instance item 7, 8, 9 and 10 which all refer to 'possession') were allowed to correlate.

Root, Mean, Square Error of Approximation (RMSEA) and the Comparative Fit Index like CFI values between 0.90 and 0.95 and/or RMSEA values between 0.05 and 0.08 indicated an acceptable model fit and CFI values were larger than 0.95 and/or RMSEA values were smaller than 0.05 which indicated a good model fit (Kline, 2005).

Confirmatory factor analysis explained that, the measurement model for identifying 5 factors about possession worked satisfactorily. The fit indices were greater than the 0.90 benchmark, with GFI = 0.93, AGFI = 0.92 and CFI = 0.93. These indices indicated that the data fitted the model. Similarly, the levels of misfit was

Table 7: Friedman test for possession

Mean	Rank
F1P	3.65
F2P	2.03
F3P	3.19
F4P	2.75
F5P	3.38

Table 8: Friedman test for generosity, Friedman test for happiness

Mean	Rank
F1G	1.97
F2G	1.74
F3G	2.29
Mean	Rank
F1H	1.81
F2H	1.19

tolerable, with RMSEA = 0.084, all below the relevant benchmark of 0.08. The chi-square was 544.2 (204 degrees of freedom), $X^2 = 2.9$ which was less than 3. Additionally the measurement model of generosity with 3 factors identified in exploratory factor analysis (Table 5) with the use of confirmatory factor analysis works satisfactorily. The misfit indices like RSMEA = 0.053 which indicates that the model was in moderate situation, the chi-square was 87.42 (51 degrees of freedom), $X^2 = 1.7$ was less than 3. Finally the happiness measurement model with the three factors indicated in Table 6; by omitting the third factor the model worked satisfactorily and the oblique factor model resulted in an acceptable fit. So, all first-order factors were strongly correlated with each other. In order to rank the factors

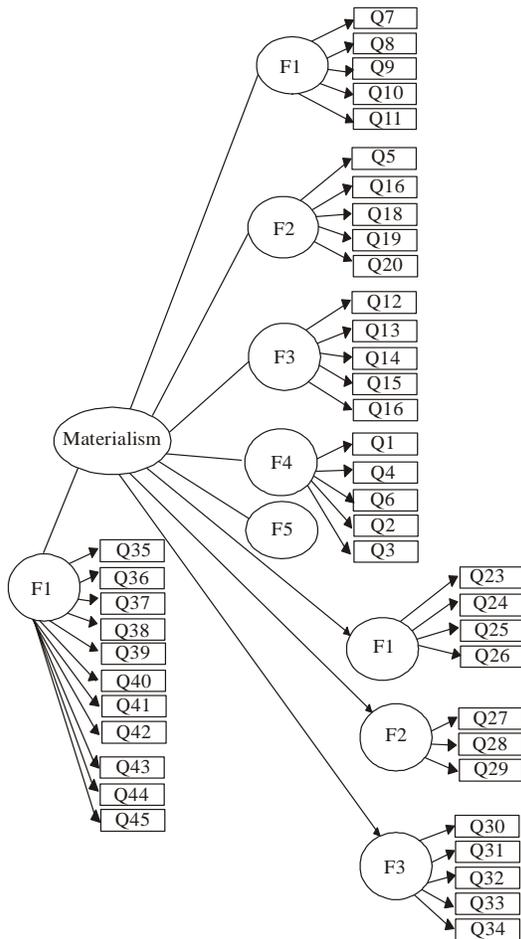


Fig. 2: The result of exploratory factor analysis

between five factors which are displayed in Fig. 2 Friedman test was used. The highest rate factors for possession as indicated in Table 7 were factor 2. So, the highest factors for generosity between three factors obtained were factor 2 namely generosity that previous works confirmed it. Finally to rank the Happiness factors, factor 2 had the highest rank between 2 factors namely luxury (Table 8).

DISCUSSION AND CONCLUSION

The aim of the present study was to develop and validate a new measurement instrument for native specific materialism. Such a measurement instrument was needed to investigate the general development of materialism for Iranians and to study the causes and consequences of materialism in Iranian culture especially among youths. In both society and academia it was widely believed that materialism leads to negative outcomes such as dissatisfaction and resentment as well as compulsive

buying and debt (Otero-López *et al.*, 2010; Roberts and Clement, 2007). However, these assumptions are yet to be tested. In order to create the Native Material Values Scale the researchers adapted the items from the original MVS. Then, in order to test its reliability and validity, NMVS-I was administered the on 384 student of Islamic Azad university branches. Factor analysis indicated that the materialism was a second-order construct with material factors.

The results of factor analysis identified 5 factors to determine the materialism first factor namely possession as it was shown in conceptual model and materialism as the second-order component was specified. In comparison with the qualitative stage (logical model) and from the point of experts possession was viewed as an asset of the materialism comparing to the other components. Also this factor has the highest importance items in this study (N = 22). Belk Studies in 1984 also confirmed that the possession was one of the most effective materialism factors and on the Richins and Dawson (1992) viewed centrality as a central factor influencing materialism. Possession was divided into 5 factors, but some of them overlap with each other namely ordinary ownership, possession, centrality and non-generosity as they were explained in literature review. The second factor which affected materialism in research's conceptual model was generosity (N = 12) and we identified 3 factors for this variable; it was also agreed by the expert in the qualitative stage of the research. The third factor as explained before was happiness (N = 12) as Richins and Dowson (1992) found it in their material value scale, it was identified 3rd factor for the present region specific research. They were called luxury and satisfaction because they are related to material, people and happiness.

The first main finding of this study was that materialism was a second-order construct with 11 underlying factors. Researchers could use the full set of NMVS-I items in order to study materialism as a general concept. Previous works suggested that youths mainly want possessions for the sake of having them (Chaplin and John, 2007; John, 1999).

Also, some causes of materialism should have a stronger impact on one factor than on the others and, conversely, certain consequences of materialism might be associated more strongly with one factor than with the others. The second main finding of this study was the NMVS-I perform just as well as the 43-items in terms of reliability and empirical usefulness for Iranians. In future research, the variety of population suggested is to be determined for other social groups as well. In addition, by using the NMVS-I for different social groups and also in different cultures in Iran materialism can be studied across the life span.

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