MARKETING | RESEARCH ARTICLE

Rising materialism in the developing economy: Assessing materialistic value orientation in contemporary Bangladesh

Muhammad Rehan Masoom1* and Md Moniruzzaman Sarker1,2

Abstract: Measuring people’s values Orientation for Materialism has been a popular area for the research in social sciences since 1990’s. Among the plethora of materialism scales, perhaps Marsha Richins and Scott Dawson formulated scale for measuring materialism is the most popular and widely used. This research examines the consumerism of Bangladesh using Richins’ Scale of seventeen items categorized in three variables to measure materialism. Exploratory Research Design is applied to address the clusters of attitudes that may emerge from the data gathered by mall intercept from a convenience sample of 1,259. “Factor analysis” was conducted to devise a valid scale to measure consumerism in this culture. Research findings suggest that a new set of items can measure the level of materialism with acceptable reliability and validity for the culture of Bangladesh. When the relationships between demographics and materialism were assessed, with the exception of age, a non-consistent pattern emerged. Hardly any effort has made so far to unveil the nature of consumerism in the developing economy context; hence, the research may benefit to outline the value shift that leans toward materialism value orientation.

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PUBLIC INTEREST STATEMENT

The economic progress of the country and financial prosperity of the people often provokes changes in the normative values. It is often seen that the middle-class of the developing nations such as Bangladesh, during the period of rapid economic progression, tend to spend money for more both for their purpose of living and devouring of pleasure, leading toward forming the materialistic values. The research considers ‘Materialism’ as a valuable concept for consumer behavior theory, and tends to test and refine the Richins and Dawson materialism scale. Research findings suggest that a new set of items (commonly known as the statements for Likert scale) can measure the level of materialism with acceptable reliability and validity for the developing economy. The findings may have significant values for the branding and advertising agencies to prepare a proper scheme, where the core values of the consumers need to be conveyed through the marketing strategies.
1. Introduction

Materialism is a mindset that expresses the interest of getting and spending (Rassuli & Hollander, 1986). It is the formative experiences of the people, who consider their possessions as part of themselves (Belk, 1985). Materialists perceive themselves as successful to the degree to which their possessions project the desired images in their perceived perfect life (Campbell, 2005). Possessions obtain social meaning not merely due to its instrumental usage in sustaining everyday lives but they represent identity, personality and self-expression (Dittmar & Pepper, 1994). Materialism is the pursuit of personal material well-being (Easterlin & Crimmins, 1991) or an economic orientation to give priority to materialistic needs over concerns for civil power, freedom and convictions (Inglehart, 1990). A materialist may prefer to work longer hours to earn more money rather than using the same time for leisure pursuits (Richins & Dawson, 1992). It is a lifestyle of a high degree of material consumption that acts as a goal and serves as plans (Daun, 1983). It refers to “a cultural system in which material interests are not made subservient to other social goals” (Mukerji, 1983, p. 8). It is also described as “a personal value that encompasses concern with material things, competitiveness, and emphasis on making a profit as opposed to human well-being” (Beutel & Marini, 1995). It is a prominent individual difference variable often viewed as a personality trait (Belk, 1985) or a unique set of values of the consumers (Kasser, 2002). These values guide people’s behavior and preferences in various situations, such as the type and quantity of goods acquired and the allocation of resources like time and effort (Richins & Dawson, 1992). If a large segment of any society avidly aspires to consume goods for non-utilitarian reasons such as status seeking or modernity, a “consumer culture” is said to exist (Rassuli & Hollander, 1986). Hence, materialism is no longer a unique value for the people of the “developed economy”, neither it distinctive in “Western culture”; it is believed to be general traits existing in individuals across subcultures and cultures. The intensity of materialism is certainly associated with the standard of living that plays a substantial role in making things more salient to one’s self-concept. The general psychometric results of researches confirm materialism as a pervasive construct that exists in the different culture of the world (Griffin, Babin, & Christensen, 2004). People’s desire for higher social status or esteem that can be achieved merely by acquiring and exhibiting luxury goods enhances the demand for luxury brands (Han, Nunes, & Drèze, 2010). Nonetheless, the obvious contrast in structural, economic, environmental and social factors among the discrete cultures lead fairly to predict the variation regarding the relative influence of materialism within the culture.

Efforts are scant to know about the general development of materialism or its determinants and consequences in the developing economy. Economic growth of Bangladesh (as according to the World Bank’s latest estimate, now a lower middle-income country, with annual incomes of $1,046 to $4,125) discernibly reflects through the spending habits of its people. Reports indicate that nearly about two million Bangladeshis join the ranks of middle-class and affluent consumer class each year (Munir, Olivier, & Vivek, 2015). This rising middle class is not only very optimistic about the future economic growth and value international brands, but also the leap onto the “digital bandwagon”. It is often said, “Culturally omnipresent consumer cues are obvious candidates for serving as triggers of situational materialism” (Bauer, Wilkie, Kim, & Bodenhausen, 2012, p. 517). In addition, evidently, Bangladesh is facing a “culture shift” where a new set of social values is about to be formed (Masoom, 2015a). Hence, it would not be exaggerating to say, the growing trend of increasing consumerism in Bangladesh may incorporate “Materialism” as a cultural value that acquires material possessions act as the key element for the pursuit of “Good life” (Richins, 1994).

This paper presents an inquiry that tests whether or not such decisions can be made using Richins and Dawson’s (1992) materialism scale. The Scale that is developed over two decades ago is still
commonly measuring materialism. This study attempts to ascertain if the materialism scale of Richins and Dowson can be appropriately applied in a developing economy like Bangladesh and whether any cross-cultural differences exists in people's value orientation toward materialism. If these can be established, cross-cultural comparisons remain an option. If not, more emphasis on the nature and measurement of materialism is needed. The key objective of this study is to test the measurement equivalency of Richins and Dawson's (1992) materialism scale when applied to Bangladesh, hence a careful equivalent measurement scales be utilized, and the metric equivalence must be tested. With the exception of age, they find insignificant correlations between levels of materialism and demographic factors such as gender, the level of education, marital status, household size and income. In order to investigate these matters thoroughly, having a good measurement instrument for materialism is vital. The study aims at constructing an instrument that can cast insights to materialism research conducted among different cultural segments. Prior to the discussion of scale validation, the assumptions of materialism are addressed and previous attempts to measure this constructs are reviewed.

2. Literature review

The materialism construct has received exceptional attention in the behavioral studies since the early 1980s. Perhaps, Moschis and Churchill (1978) are the first to infer “materialistic attitudes” as one of the properties of social behavior and operationalize the definition of materialism as an orientation toward possession and wealth that leads to happiness. Belk (1985) implies materialism as an attribute variable, which indicates the importance an individual adheres to the worldly possessions. Belk indicated that “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” (1985, p. 291). He is one of the forerunners to construct a scale to measure materialism that has three subscales—possessiveness, nongenerosity, and envy. Richins and Dawson (1992) treated materialism as a value as it confers the importance that any person ascribes to attaining and having possessions as imperative or desired conduct that guide his or her consumption preferences. They said that people who are high in material values contemplate acquiring possessions as a central life affair that brings happiness and success (Richins & Dawson, 1992, p. 308). Richins and Dawson (1992) define materialism as (a) material centrality (the degree to which people put possessions at a central place in their life), (b) material happiness (to what extent people consider possessions and acquisition of materials bring happiness and life satisfaction), and (c) material success (the degree to which people evaluate the success of others in terms of possessions). Their scale is distinct as it intends to assess not all beliefs associated with material values at a cultural level, rather those that emerged from the analysis of the theoretical notions associated with consumerism. These conceptualizations and the two respective assessments have had substantial application in personality psychology and behavioral research.

Nevertheless, both of the aforementioned scales have their own limitations. A limitation of the Belk scales, as mentioned by Richins and Dowson in their article, is its inconsistency and reliability. They found the coefficient alpha for the Belk scales ranged from 0.09 to 0.81 with a median reliability of 0.54. In addition, a measure summed across the three scales had a median reliability of 0.62. On the other hand, widespread applications of Richins and Dawson’s (1992) materialism scale (MVS) unveiled that the scale works adequately as a unidimensional construct (Richins, 2004). Hence, the scale is may not be sufficiently fit for cross-cultural comparisons due to potential problems affiliated with reverse-worded items (Griffin et al., 2004). Nonetheless, this scale is still widely used in different cross-cultural research (Griffin et al., 2004). However, one thing needs to bear in mind, the arrangement of items loaded in different factor may require operationalizing the concepts with different terms. Presume the fact that, people who are living is a developing economy may consider the material possession essential, and yet not regard that as the center of their lives. Further, as the aforementioned problems of reverse wording, a parallel and converse concept of “material centrality” (i.e. “Voluntary Simplicity” or “Material Simplicity”) need to be counted. “Voluntary simplicity” as opposed to “material centrality” is defined as “the degree to which an individual selects a lifestyle intended to maximize his/her direct control over daily activities and to minimize his/her consumption
and dependency” (Rogers & Leonard-Barton, 1979, p. 3). It is a value orientation of “the avoidance of exterior clutter, of many possessions irrelevant to the chief purpose of life” (Gregg, 1936, p. 133). Richins and Dowson have mentioned about “Voluntary Simplicity” in their paper by quoting from Rudin and Kilbourne (1992), “the essential feature of voluntary simplicity is not the manifest behavior, but the underlying values and beliefs which … motivate that behavior.” Avraham Shama regards “Material Simplicity” as “buying and consuming less or only what one needs is better than over-consuming or catering to one’s want” (1981, p. 126). With all things considered, much to be gained to apply the model in the developing economy context.

3. Methods

Exploratory Research Design is applied to address the clusters of attitudes that may emerge from the data to get a clearer understanding and form insights on materialism in the developing economy. Nonetheless, to address the statistical accuracy concerning the measurement of the model, certain fundamental research questions need to be taken into account. First, does the materialism scale yield acceptable psychometric properties in the culture of Bangladesh? Second, if valid and reliable psychometric properties are present, do structural differences exist across cultures? For over two decades, there has been reiterated appeals for cross-national validation of Richins and Dowson Scale of Materialism (Parameswaran & Yaprak, 1987), and only a few of scales have been validated with Asian samples. Does Richins and Dowson Scale prove to be the pervasive construct existing in the socio-cultural context of the developing economy of the South Asian region? In this line of thought, the materialism scale must be applied and analyzed in multinational samples to verify its reliability and validity. Concretely, the study is interested in determining if materialism is prevalent in societies that have a developing economy. Like the original scale, “the interview schedule” contains 18 items. Material centrality (7 items), material happiness (5 items), and material success (6 items) are measured. In addition, some basic demographic variables, such as Age, Education and Socioeconomic Class of the family are given consideration. Since a large number of respondents were reluctant to give their level of education, the study discards this variable for further analysis. The items for “material centrality” measures the weight of (expensive) possessions, the items for “material happiness” acquires the pleasure they get out of owning certain (expensive) possessions, and for “material success” infers the degree to which they consider that more (expensive) possessions are more worthy to acquire. The causal relationships among the statistic may find to be interesting; however, before applying any sort of statistical calculation, the construct validity of the factors and reliability of the measurement scale need to be achieved. Therefore, the primary would be to validate the scale to measure materialistic values. Since providing a general and comprehensive examination of the items of the scale and establishing metric is required and scalar invariance are required due to adopting the scale in completely discrete cultural context, Exploratory factor analysis is initiated. Covariance matrices were estimated for the 18 items to assess the pertinence of the estimation.

A convenience sampling technique is applied to collect information from 1259 respondents belonging to 10 to 87 years of age. This non-probability procedure used to select units for inclusion in the sample due to the absence of sampling frame and a large and wide variety of populations. Nonetheless, due to the strong theoretical reasons, the subjective judgments need to be applied for the choice of units; hence this can also be particularly helpful in this exploratory research where the aim is to find out the intricacies among the developed and developing nations as long as materialism is concerned. The data were collected through a survey in March and April in 2016; the participants (53 percent males, 47 Percent females) of the survey stated themselves to be a part of the middle-income family. All the respondents have the completed their primary education; the responses of the 51 of surveyed individuals have been discarded since they were proclaimed to be the high-income family. Since Richins and Dawson state significant correlations between materialism scale scores and age, a particular effort was carried on to guarantee an adequate level of variance among this demographic factor. The respondents belong to six distinct age cluster; childhood (9 to 12), adolescence (13 to 19), early adulthood (20 to 29), middle adulthood (30 to 39), late adulthood (40 to 59), and old age (60+). An especial effort is given to maintain the equal ratio to the all the age
The Kaiser-Meyer-Olkin (KMO) statistic (0.804), the significance of Bartlett’s Test of Sphericity ($\chi^2 = 3,471, \text{df} = 153$), the values of the Standard Error of Skewness (0.07) and Standard Error of Kurtosis (0.141) implies that the sample is adequate to evaluate any further statistical analysis. The values for asymmetry and kurtosis remain within the range of −2 and +2, also confirm that the sample is normal univariate distribution (George, 2011).

To gather the data, the trained and appointed interviewers in 12 shopping malls of 6 zones of Dhaka city stopped a number of shoppers if they screened as appropriate for the study and requested them whether would be willing to participate in the research. If they agreed to be part of the research, the interview was conducted with a predefined “interview checklist” (very often called questionnaire). The method is commonly known among the researchers as “Mall Intercept”. The procedures were alike in every location. Previous studies indicate that materialism is undeniably associated with attitude toward buying since shopping connects people with the material accretions they aspire to own (Goldsmith, Flynn, & Clark, 2011). Therefore, ideal respondents to measure “materialistic value orientation” are the people who roam around the shopping malls to acquire or purchase the material goods and have the affirmative attitude toward shopping. It was imperative to translate the items of the questionnaire into the Bengali language before administering the survey particularly for those the children (and sometimes, for the adolescents) assuming that it may face difficulties to comprehend what are required from them (Bottomley, Kuliś, Arnott, Greimel, & Koller, 2011). For analysis, the missing values are substituted for the series means (SM). The covariances between the error-terms are calculated and the model fit indices are estimated in accordance with the proposed survey model.

4. Results

The materialism scale is intended 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 & Dawson, 1992, p. 307). Richins and Dawson (1992) identify three common traits: materialists are presumed to put possessions and acquisitions at the heart of their lives, consumption at an unusually high level serves as a lifestyle to them. The second dimension, acquisition as the pursuit of happiness, implying that priority is placed on acquisitions over personal relationships and achievement. The third dimension infers that people high on materialism set material well-being as a mark of success and social status.

The general findings indicate that the people living in developing economy implicatively insinuates that they may admire less to have sumptuous homes, cars, and clothes ($\bar{x} = 4.51$), or feels not relishing spending money on things that are not that much practical ($\bar{x} = 4.84$), buy only the things they need ($\bar{x} = 4.91$) and endeavor to keep lives simple as far as possessions are concerned ($\bar{x} = 5.15$). They do not place much attention on the amount of material objects, people own as a denotement of prosperity ($\bar{x} = 4.34$) and also put less accentuation on material things than most people they know ($\bar{x} = 4.54$) or not paying much attention to the material objects other people own ($\bar{x} = 4.45$). They consider that they have all the things they require to enjoy their lives ($\bar{x} = 4.23$) (see Table 1 for detail of descriptive statistics).

Refining and Formulating the model to measure “materialism” as a latent variable requires Exploratory Factor Analysis (EFA) to ensure the items loadings properly. The Principal Components Analysis (a very common form of EFA) with the survey data indicates the items do not exactly load like the findings of the Richins and Dawson (1992), and a modified model is constructed. The off-diagonal values of the correlation matrix of items, found in this study, are non-zeros, implying that is not an identity matrix.

The amount of variance accounted for in the items’ variance-covariance matrix for each of the three factors extracted factors (those with an eigenvalue greater than 1) and cumulatively for all the factors account for 38.399 percent of the variance in the items’ variance-covariance matrix. The scree plot suggests that three of those factors can explain the utmost variability, and because the
The line starts to straighten after factor 4, the remaining factors may render a small proportion of variability that is to be likely insignificant. Further, none of the factor scores is related, which suggests the factors themselves are not related (see Table 1 for Exploratory Factor Analysis of Materialism Items).

### Table 1. Descriptive statistics and exploratory factor analysis of materialism items

<table>
<thead>
<tr>
<th>Item code</th>
<th>Items</th>
<th>Descriptive statistics*</th>
<th>Factor loading*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>( \bar{x} )</td>
<td>( \sigma )</td>
</tr>
<tr>
<td>H4</td>
<td>I'd be happier if I could afford to buy more things</td>
<td>3.43</td>
<td>2.10</td>
</tr>
<tr>
<td>C6</td>
<td>I like a lot of luxury in my life</td>
<td>4</td>
<td>2.17</td>
</tr>
<tr>
<td>C5</td>
<td>Buying things give me a lot of pleasure</td>
<td>3.11</td>
<td>2.03</td>
</tr>
<tr>
<td>H5</td>
<td>It sometimes bothers me quite a bit that I can't afford to buy all the things I like</td>
<td>3.75</td>
<td>2.10</td>
</tr>
<tr>
<td>H2</td>
<td>My life would be better if I owned certain things I don't have</td>
<td>3.26</td>
<td>2.02</td>
</tr>
<tr>
<td>S5</td>
<td>I like to own things that impress people</td>
<td>3.95</td>
<td>2.2</td>
</tr>
<tr>
<td>S2</td>
<td>Some of the most important achievements in life include acquiring material possessions</td>
<td>3.97</td>
<td>1.9</td>
</tr>
<tr>
<td>S1</td>
<td>I admire people who own expensive homes, cars, and clothes</td>
<td>4.51</td>
<td>2.03</td>
</tr>
<tr>
<td>C2</td>
<td>I try to keep my life simple, as far as possessions are concerned*</td>
<td>5.15</td>
<td>1.97</td>
</tr>
<tr>
<td>C1</td>
<td>I usually buy only the things I need*</td>
<td>4.91</td>
<td>2.07</td>
</tr>
<tr>
<td>S3</td>
<td>I don't place much emphasis on the amount of material objects, people own as a sign of success*</td>
<td>4.34</td>
<td>1.9</td>
</tr>
<tr>
<td>C7</td>
<td>I put less emphasis on material things than most people I know*</td>
<td>4.54</td>
<td>1.76</td>
</tr>
<tr>
<td>S6</td>
<td>I don't pay much attention to the material objects other people own*</td>
<td>4.45</td>
<td>2.08</td>
</tr>
<tr>
<td>S4</td>
<td>The things that I own say a lot about how well I'm doing in life</td>
<td>3.48</td>
<td>1.87</td>
</tr>
<tr>
<td>H3</td>
<td>I wouldn't be any happier if I owned nicer things*</td>
<td>3.47</td>
<td>2.02</td>
</tr>
<tr>
<td>C3</td>
<td>The things I own aren't all that important to me*</td>
<td>3.65</td>
<td>1.99</td>
</tr>
<tr>
<td>H1</td>
<td>I have all the things I really need to enjoy life*</td>
<td>4.23</td>
<td>2.05</td>
</tr>
<tr>
<td>C4</td>
<td>I enjoy spending money on things that aren't practical</td>
<td>4.84</td>
<td>2.06</td>
</tr>
</tbody>
</table>

*The survey implies seven-point Likert Scale rather than five-point Likert Scale applied in the original scale for more specific values. Any mean value above 4 indicates the predilection toward a response that needs to be taken into account. To understand the changes of the item loaded, please consider item codes.

*Extraction method of factor analysis, Principal Component Analysis is applied. An asterisk indicates reverse-scored items. Since the original materialism scale of Richins and Dawson (1992) considered the items loadings greater than 0.35, the study also considers the same cut-off point. Hair, Anderson, Tatham, and Black (1998) suggest, for practical significance, if the sample size exceeds 350, any loading value larger or equal to 0.30 can be taken into account (p. 112). Hence, the theory supports the loading values.
The construct validity of the newly developed model need to be confirmed, and “the magnitude and direction of all of the characteristics and only the characteristics of the construct it is purported to assess” need to be ensured (Peter, 1981, p. 134). The model fit indices indicate the relative acceptability of the modified model; the Minimum discrepancy-degrees of freedom ratio (CMIN/DF = 4.810), Comparative-fit index (CFI = 0.873), Goodness-of-fit-index (GFI = 0.951), Adjusted goodness-of-fit index (AGFI = 0.931) and Root-mean-square error of approximation (RMSEA = 0.056) values confer the level of validity of the modified model. Lomax and Schumacker (2012) specify that any value of the relative chi-square (CMIN/DF) less than 5 is acceptable. Although a common consideration for the acceptance of CFI is any value that exceeds 0.90 (Hu & Bentler, 1999). Kenneth Bollen (1989) indicates that in the study in which the previous model generates CFI values of as low as 0.70 only, a CFI value of as high as 0.85 represents progress, hence can be accepted. Hu and Bentler (1999) confer that any RMSEA value less than or equal to 0.06 indicates acceptable model fit. The Bentler-Bonett Normed fit index (NFI) values below 0.90, by convention, indicate a need to re-specify the model, however, Satorra and Bentler (1994) have used a more liberal cut-off of .80 to validate models. Therefore, the model, based on the indices mentioned above can be considered as acceptable (see Table 2 for the detail of model fit indices).

The reliability statistic was examined for the 17 item versions of the scale to consider the usability. The reliability of model depicted predicts that responses to the items, which can be explained by three first-order factors, Material Essentiality, material simplicity and material happiness (for detail of the items loading, see Table 1). However, only one of the newly generated factors has Cronbach’s Alpha more than 0.5, and other two factors, “Material Simplicity” and “Happiness due to the acquisition of materials” fail to reach an acceptable limit as per general practice. The reliability of the item “Simplicity” improves from 0.425 to 0.527 if the item “The things that I own say a lot about how well I’m doing in life” (S4) is dropped. Resulting in the Cronbach’s Alpha of overall scale of these 17 items improves from 0.708 to 0.724 that is higher than that of the original 18 items. Since the study involves in assessing the unobservable “latent” constructs, Structural Equation Model (SEM) is used leading the test reliability by Average Variance Extracted (AVE) and Composite Reliability (CR). To measure Material simplicity Richin proposed six items that yielded non-significant values (AVE = 0.261; CR = 0.515, Cronbach’s $\alpha = 0.0425$, Cronbach’s $\alpha$ based on Standardized Items = 0.419), whereas deletion of Item S4 from that construct not only increases the value of construct but also contributes to the acceptance of over-all model (For detail, see Table 3).

All items have a non-zero loading on the first-order factor it was intended to measure, and negligible loadings on the two other first-order factors. Very few error terms related to the observed items are correlated. Through the original set of items for “Material Centrality” was found to measure a number of determinants in various studies, nonetheless, replacing the expression with “Material Essentiality” may provide a more concrete appraisal with the belief that it precisely estimates the essentialness of the possessions in various aspects of life. This is to be more in line with the whole

<table>
<thead>
<tr>
<th>Table 2. Model fit indices</th>
</tr>
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<tbody>
<tr>
<td><strong>Model fit index</strong></td>
</tr>
<tr>
<td>Minimum discrepancy/degrees of freedom (CMIN/DF)</td>
</tr>
<tr>
<td>Comparative-fit index (CFI)</td>
</tr>
<tr>
<td>Goodness-of-fit-index (GFI)</td>
</tr>
<tr>
<td>Adjusted goodness-of-fit index (AGFI)</td>
</tr>
<tr>
<td>Root-mean-square error of approximation (RMSEA)</td>
</tr>
<tr>
<td>The Bentler-Bonett Normed fit index (NFI)</td>
</tr>
<tr>
<td>Incremental fit index (IFI)</td>
</tr>
<tr>
<td>Tucker-Lewis-index (TLI)</td>
</tr>
</tbody>
</table>

Notes: The missing values are replaced by the series means (SM). The model fit indices of the survey model estimated after drawing the covariances between the error-terms in accordance with the proposed modification indices.
concept of materialism in the developing economy context (Trinh & Phau, 2012). The items loaded (after the exclusion of the original item S4) in the second-factor exhibit all that are essential features of voluntary simplicity or material simplicity. The third factor (Happiness) tends to become statistically unreliable factors, hence not been accentuated any further. Although the value of AVE and CR of the overall model may reach the acceptability, nonetheless only Material Essentiality as an observable construct reaches the acceptable value. At the end, the scale has become a two-dimensional measurement tool; a set of items comprises with positive feelings, and the other items display the negativity toward materialism.

Based on equal percentile based on Scanned Cases, the materialism variables are categorized into three distinct categories (i.e. high, Medium, low). High level of essentiality, simplicity, and happiness is considered to unveil the pattern of relations with age (gender is not considered because of non-significance and low value of Pearson’s $R$) (Figure 1 shows visual binning of the materialism variables).

A number of previous attempts have been made to identify the materialism value orientations in terms of demographics. One frequently studied demographic factor has been gender. Kasser and Ryan (1993) noted that males put greater importance on economic success than women. Moschis and Churchill (1978) found that males tended to be more materialistic than females. Eastman, Fredenberger, Campbell, and Colvert (1997), in their comparative analysis of undergraduate samples, revealed that males were more materialistic than females in the Chinese culture, but no differences found as such in the Mexico and the USA sample. The sample from Bangladesh also fails to get any correlation between the gender and value orientation (for detail, see Table 4).

### Table 3. Reliability statistics

<table>
<thead>
<tr>
<th>Factors</th>
<th>Average variance extracted (AVE)</th>
<th>Composite reliability (CR)</th>
<th>Cronbach’s $\alpha$</th>
<th>Cronbach’s $\alpha$ (based on standardized items)</th>
<th>Number of items loaded</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Essentiality(^a)</td>
<td>0.391</td>
<td>0.836</td>
<td>0.794</td>
<td>0.794</td>
<td>8</td>
<td>1,205</td>
</tr>
<tr>
<td>2. Simplicity(^b)</td>
<td>0.278</td>
<td>0.650</td>
<td>0.547</td>
<td>0.548</td>
<td>5</td>
<td>1,201</td>
</tr>
<tr>
<td>3. Happiness</td>
<td>0.245</td>
<td>0.236</td>
<td>0.289</td>
<td>0.288</td>
<td>4</td>
<td>1,208</td>
</tr>
<tr>
<td>Over all</td>
<td>0.505</td>
<td>0.865</td>
<td>0.724</td>
<td>0.719</td>
<td>17</td>
<td>1,198</td>
</tr>
</tbody>
</table>

\(^a\)Richin’s scale termed the factor as “Centrality”, however due to the items loading differently for the factor and those items are more of values regarding the consideration of materials as the essential aspects of regular lives, the researchers termed the factor as “Material Essentiality”.

\(^b\)Excluding the item (S4), “The things that I own say a lot about how well I’m doing in life”.

![Figure 1. Visual binning of the materialism variables (based on equal percentile based on scanned cases, with 2 cut point).](image)

Notes: Higher score of Material Essentiality and Happiness indicates higher materialism. The lower value of simplicity implies higher materialism.
The survey findings suggest that material simplicity remains high in childhood and declines almost at a constant rate up to the early adulthood. From early adulthood to middle adulthood, the material simplicity remains steady and it again tends to decline from that point to the old age. Hence, life remains simple in terms of material possession in the childhood, and it becomes most complicated at the old age. Possession essentiality remains relatively low during the childhood and adolescence and slightly get upward during when people enters in early adulthood. This remains steady during early and middle adulthood and gets a sharp upward turn after that period of life. The possession essentiality tends to rise up to old age (for detail, see Figure 2; for statistical significance of findings, see Table 4).

5. Discussion

The overall psychometric results of the underlying research confirm materialism as a pervasive construct existing in the developing economy context. Richins and Dawson (1992, p. 303) once proclaimed that consumerism is evident in the societies in America, and formulated their materialism scale. Materialism measures have mostly been developed in the United States, the nation that leads the spread of a culture of consumption (Rassuli & Hollander, 1986). Studies indicate that due to the proliferation of information technology and worldwide integration of trade policies uni-dimensional ‘social values’ is about to surface (Masoom, Abdula, & Islam, 2016), materialism value is no exception. The original 18-item scale of has concentrated on the relationship between individual and his or her possession and implies that materialism is associated with conspicuous consumption, in which consumer satisfaction is derived from reaction rather than functionality of the item. The

<p>| Table 4. Correlation between demographic variables (age and gender) and materialism variables |</p>
<table>
<thead>
<tr>
<th>Demographic variables</th>
<th>Materialism variables</th>
<th>Pearson’s R</th>
<th>Asymp. std. error</th>
<th>Approx. T&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Approx. sig.</th>
<th>N of valid cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Essentiality</td>
<td>0.338</td>
<td>0.027</td>
<td>12.464</td>
<td>0.001&lt;sup&gt;c&lt;/sup&gt;</td>
<td>1,204</td>
</tr>
<tr>
<td></td>
<td>Simplicity</td>
<td>0.264</td>
<td>0.027</td>
<td>9.471</td>
<td>0.001&lt;sup&gt;c&lt;/sup&gt;</td>
<td>1,200</td>
</tr>
<tr>
<td></td>
<td>Happiness</td>
<td>0.147</td>
<td>0.029</td>
<td>5.149</td>
<td>0.001&lt;sup&gt;c&lt;/sup&gt;</td>
<td>1,207</td>
</tr>
<tr>
<td>Gender</td>
<td>Essentiality</td>
<td>0.033</td>
<td>0.029</td>
<td>1.152</td>
<td>0.249&lt;sup&gt;c&lt;/sup&gt;</td>
<td>1,205</td>
</tr>
<tr>
<td></td>
<td>Simplicity</td>
<td>0.087</td>
<td>0.029</td>
<td>3.01</td>
<td>0.003&lt;sup&gt;c&lt;/sup&gt;</td>
<td>1,201</td>
</tr>
<tr>
<td></td>
<td>Happiness</td>
<td>0.076</td>
<td>0.029</td>
<td>2.65</td>
<td>0.008&lt;sup&gt;c&lt;/sup&gt;</td>
<td>1,208</td>
</tr>
</tbody>
</table>

<sup>a</sup>Not assuming the null hypothesis.
<sup>b</sup>Using the asymptotic standard error assuming the null hypothesis.
<sup>c</sup>Based on normal approximation.
people of Bangladesh are, according to the research that used a refined 17-item scale, have found to have developed materialistic value orientation. How is this to be explained?

Surely, this is open to numerous interpretations. The items that are negatively worded can also create measurement problems in the developing economy context. Difficulties of understanding statements as such could reduce the reliability of the measurement. The integrity of the materialism scale that was developed over a decade ago can be questioned as well. It is possible that their values do not orient themselves toward defining people based upon their possessions. How to measure possession defined happiness in the developing economy context? This could have been an interesting finding, but one that the study is limited in its capacity to explain. The need for cross-cultural validation of marketing scales is well recognized. The scale has been proven itself in terms of reliability and empirical usefulness for the study. The study adopted the items to render a measurement instrument that is appropriate for the developing economy. What would be the methodological implications of the outcome of the study?

A substantial amount of recent studies has focused on reducing the length of measurement scales (Burton, Lichtenstein, Netemeyer, & Garretson, 1998; Podsakoff & MacKenzie, 1994). It is believed that if a shorter, more focused materialism measure can be generated that maintains reliability, validity and still capable of obtaining measurement equivalence, a major contribution has been made. In this respect, a key finding is that it constructed a variable “Material Essentiality” (8 items) with a highly reliable statistic. This research deals with an understanding of the expressions of materialism as voiced across cultures and shades lights on the traits of people concerning the materialistic values. It would be interesting for future research to conduct multiple groups EFA, including the data from the Western Culture as well. One major limitation must be considered while dealing with the findings of this research. The data were obtained from convenience samples and not from random probability samples. Although there is hardly any apparent reason to doubt the quality of the data, we need to be very careful about making generalizations. How can this research contribute to solving the practical problems and addressing the formulation of trade policies?

Materialism, as often believed, need not be negative personality traits, as Richins and Dowson noted, “the desire for goods on the part of employees may cause them to work harder or longer, enhancing their incomes and standard of living. High levels of consumption by consumers can increase the wealth of business institutions, increasing these firms’ ability to make capital improvements and invest in research and development, which in turn leads to greater productivity, technological breakthroughs, and again, higher living standards” (Richins & Dawson, 1992, p. 304). Although materialism has become a prevalent determinant in consumer research, particularly in luxury brand-related studies, efforts are scant to know about the general development of materialism or its determinants and consequences in the developing economy. It is said, “the market, as a complex dynamic of integrating the activities of buyers and sellers, has evolved itself to the most dominant global force that regulates almost all major features of social existence in the era of globalization” (Masoom, 2015b, p. 533). In addition, a substantial level of discussion has been formed to the question of whether marketing propagates materialism, and the critics posit advertising “proclaims the virtues of spending, using and displaying and thus fosters materialism” (Rassuli & Hollander, 1986, p. 8). The intensity of consumerism is certainly associated with the standard of living that plays a substantial role in making things more salient to one’s self-concept.

6. Conclusions
Materialism is a valuable concept for social behavior theory and testing and refining a materialism scale in the developing economy is a reasonable initiative in assessing its cross-cultural applicability. For measurement, the need for cross-cultural validation of materialism scales is well recognized. In this regard, the materialism scale of Richins and Dawson (1992) provides a good framework since it was built on the idea that materialism is a value that guides the conduct that center around three
dimensions of social lives; material success, material centrality, and material happiness. The scale appears to be psychometrically sound when applied to the Bangladesh sample. However, rotation of items with different factors yields a robust result. Based on the result EFA, three factors namely Material Essentiality, Material Simplicity and Material Happiness are constructed. Existing materialism scales for the people of Bangladesh seem to lean on only two of the three factors of materialism that were distinguished by Richins and Dawson. After reliability and validity assessments; the new 17-item materialism scale has been proved to be of a good standard and will provide reliable results in the developing economy context. The variations of the items used to assess, compare and relate the constructs materialism would be beneficial as it broadens the foundation for future research that aims to investigate relationships from multiple perspectives.

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