



SOCIAL SCIENCES

Received: July 2009
Accepted: September 2009
Series : 3C
ISSN : 1308-7444
© 2009 www.newwsa.com

Eda Purutçuoğlu
Ankara University
epurutcu@yahoo.com
Ankara-Turkey

THE MATERIALISTIC VALUES OF UNIVERSITY STUDENTS BY GENDER

ABSTRACT

As markets gain worldwide dominance and as children and adolescents increasingly take on the role of consumers; today it is common to see that we are becoming increasingly materialistic. Thus this paper has been planned and conducted on 480 respondents (240 female, 240 male) to investigate the materialistic values of university students by gender. The sample has been selected by a simple random sampling method from the university students who attend in the first and the fourth classes of state and private university located in central Ankara, Turkey. From the statistical analysis, it is found that gender has a significant relationship with centrality ($p<0.01$). Although boys have less centrality orientations than girls, they typically possess higher levels of materialism.

Keywords: Materialism, Materialistic Values, Consumption, University Students, Gender

CİNSİYETE GÖRE ÜNİVERSİTE ÖĞRENCİLERİNİN MATERYALİST DEĞERLERİ

ÖZET

Pazarın evrensel olarak üstünlük kazandığı, çocukların ve gençlerin tüketici rolünü daha çok üstlendikleri günümüzde giderek daha materyalist hale geldiğimizi görüyoruz. Bu nedenle çalışma cinsiyet değişkenine göre üniversite öğrencilerinin materyalist değerlerini belirlemek amacıyla 480 denek (240 kız, 240 erkek) üzerinde planlanmış ve yürütülmüştür. Örneklem, Ankara il merkezindeki vakıf ve devlet üniversitelerinde okuyan birinci ve dördüncü sınıf öğrencileri arasından eşit dağıtım yöntemi ile seçilmiştir. İstatistik analiz sonucunda, cinsiyet ile merkezîyetçilik arasında anlamlı bir ilişkinin olduğu bulunmuştur ($p<0.01$). Erkekler yüksek düzeyde materyalist olmalarına karşın kızlara göre daha az merkezîyetçi bir eğilime sahiptirler.

Anahtar Kelimeler: Materyalizm, Materyalist Değerler, Tüketim, Üniversite Öğrencileri, Cinsiyet



1. INTRODUCTION (GİRİŞ)

The consumption is an activity to provide the basic physiologic needs and a sign which reflects the social and cultural process with symbols and images showing the social class and recognition in the society [1, 2, 3, and 4]. When a society places a strong emphasis on individual economic accomplishments, people tend to develop extrinsic aspirations involving financial goals, materialistic assets and acquisitions, and success with social recognition. In this sense, due to the growing role of material life, consumption-based orientation to happiness seeking called materialism is seen as a common value among people in industrialized capitalistic cultures [5].

2. RESEARCH SIGNIFICANCE (ÇALIŞMANIN ÖNEMİ)

Today our lives are dominated by the material objects. Wherever we go, it becomes very common to hear material messages which encourage us to purchase more and more. Therefore, it is increasingly winning the centre stage in life throughout the world [6 and 7]. The messages increase as markets gain worldwide dominance and models for social organization, as advertising grows ever more pervasive, and as children and adolescents increasingly take on the role of consumers [6]. In Turkey, considering the proportion of the young people over all population, it is observed that young people affect the major part of the market. Indeed, when the experiences, values, and attitudes gained in youth form following periods of the human life, the importance of behaviors and attitudes of the young population is more clearly seen. Thereby the study begins as an investigation of how young people understand materialism. Accordingly the aim of this research is to determine the materialistic values of university students and to test our hypothesis which is "Gender influence materialistic values: Boys are more materialist than girls".

3. THEORETICAL FRAMEWORK (KURAMSAL TEMEL)

A number of different, though similar, definitions of materialism have been advanced over time. It is variously defined as an economic orientation to life giving precedence to economic values over other values such as freedom, civil power, aesthetics, and friendship. It can also be represented as the ceaseless pursuit of the "good life" through consumption, the importance which a consumer attaches to worldly possessions, the belief in the desirability of acquiring and possessing things, a way of life, opinion, or tendency based entirely upon material interests or a cluster of values and traits that focus on possessions [8, 9, and 10]. Materialism also presents a min-set or constellation of attitudes regarding the relative importance of acquisition and possession of objects in one's life. For materialists, possessions and their acquisition are at the forefront of personal goals that dictate "ways of life" [9]. To summarize materialism as a word or trait is typically viewed in a very negative sense and a phenomenon, thereby, is broadly considered to be part of the dark side of consumer behaviour [11 and 12].

From the time they are born, people receive implicit and explicit messages endorsing the importance of money and possessions. These endorsements take the form of parental values, the materialistic lifestyles of family members and peers, and the materialistic messages frequently found in popular culture, such as in the media [7 and 13]. People often accept such messages, take on materialistic goals, and strive to attain them since humans have a fundamental tendency to adopt ambient cultural and familial values and behavioural regulations [7]. In other words the socialization and learning process lead people to become more or less materialistic [6 and 13].

When individual's psychological needs are not met, they tend to move towards materialism as a type of compensatory strategy to lessen the distressing effects of feelings of insecurity [7]. In the sense that parental styles and practices which do not fully meet children's needs are associated with materialism. Rindfleisch *et.al.* [14] observe that family structure is related to both materialism and compulsive consumption. Young adults whose parents are divorced or separated demonstrate higher levels of both material values and compulsive



buying than those whose parents are not divorced or separated. On the other hand Chan *et.al.* [13] determine that the contents and effects of family and peer communication are in the opposite direction in such a way that family communication is a negative predictor of the materialism score while peer communication is a positive predictor. It means that those adolescents who scored higher in materialism tend to communicate less with their parents and communicate more with their peers. Similarly, Flouri [15] finds that materialism in adolescents is positively related to peer influence and is negatively related to satisfaction with one's mother, religious service attendance, and economic socialization. Economic deprivation is another developmental source that leads to materialism. Cohen and Cohen [16] show that high tendency of materialism in teenagers comes from socially and economically disadvantaged backgrounds. Accordingly, people living in poorer countries are more materialistic than those living in richer countries because of the fact that poor economic conditions can cause feelings of insecurity for which people sometimes compensate by turning to materialistic pursuits [17]. On the other side materialistic values are frequently found in popular culture via the media and advertisements. From the evidence of empirical data it is seen that there is a positive correlation between both exposure to television versus and exposure to advertising versus materialism in children as well as in adolescents. People who expose to materialistic models is more likely to take on the materialistic values through modeling and internalization of these values [13].

As a result materialistic values cause many external consequences in the choice of our lovers, our children, our neighbours, and our society since the desire for wealth, status, and image directs our behaviour [4].

4. MATERIAL AND METHOD (MATERYAL VE YÖNTEM)

This research paper has been planned and conducted to investigate the materialistic values of university students by gender. A total sample of 480 respondents (240 female, 240 male) who attend in the first and the fourth classes of state and private university located in central Ankara are selected by simple random sampling method during October-November 2006 and May 2007. For the collection of the research materials we use the questionnaire technique. Self-administered questionnaires are filled out by students

4.1. Preparation of the Interview Form (Görüşme Formunun Hazırlanması)

To determine the level of materialism in an individual we apply two widespread adult materialism scale which are known as Belk [3] and Richins and Dawson [9]' scales. Belk [3] measures materialism as a personality trait including three subscales: (a) possessiveness, (b) nongenerosity, (c) envy, whereas Richins and Dawson [9] see materialism as a personal values which is consist of three components: (a) success, (b) centrality, and (c) happiness.

The questionnaire is composed of two parts. The first part contains eleven questions and is intended to measure demographic profile. The second part, on the other hand, includes 18 questions and aims to quantify materialistic values of the students. In order to select the appropriate scale for our purpose, we initially generate a toy sample which has 20 respondents in different ages and gender and ask 16 open-ended questions to evaluate their opinions of materialism. According the results of the questions since we observe that the sample treat materialism as a value rather than personal trait, we implement the Likert scale developed by Richins and Dawson [9]. This scale classifies the answers in 5 distinct levels ranging from 1=strongly agree to 5= strongly disagree (2=agree, 3=undecided, 4=disagree) and is typically preferred in consumer researches. In this scale, as addressed before hand, the success, centrality, and happiness construct the main body. Since materialists tend to judge their own and others' success by the number and quality of possessions accumulated, there is a wide agreement that high materialists are more status conscious than other consumers and see material possessions as



extremely important in defining the self[9, 18]. The centrality is the other important value which materialists attach to possessions because of the fact that possessions play a central role in their lives [6]. Besides the human striving for property is frequently considered as insatiable. After obtaining a desired good, the early satisfaction often fades quickly and new desires emerge. This tends to induce a general feeling of dissatisfaction. Different studies have found negative or zero correlations between materialism and happiness [19]. But their relationship is, indeed, so complex. For instance people who spend in pursuit of experiential goals tend to be happier than those who spend in pursuit of purely material goals [20].

In our analysis the validity of the translated and adopted version of the materialistic orientation scale is carried out 130 university students in order to get their opinions on the items. For the materialistic orientation scale, we perform the exploratory factor analysis and the reliability assessment on all 18 items which are listed in the Likert scale. From these analyses we find that 14 over 18 items behave consistently across the samples and possess adequate reliability. Moreover according to the assessment of factor analysis with varimax rotations we obtain three dimensions similar to Richins and Dawson's [9] original scale and identify them as the use of possessions to judge the success of others and oneself, the centrality of possessions in a person's life, and the belief whose possessions and their acquisition leads to happiness and life satisfaction. Then we compute the alpha coefficient of these three factors. The associated results support our factors. From the varimax rotation it is showed that the first factor has an eigenvalue of 2.75 and accounts for 46.0% of the total variance, the second factor with an eigenvalue of 2.27, explains 45.3% of the total variance and the last factor with eigenvalue of 1.49, corresponds 50.0% of the total variance, respectively. To show the relationship among scale items, we construct Table 1 by the matrix produced via the rotated component analysis and the item total correlation.

4.2. Assessment of Data (Verilerin Deđerlendirilmesi)

The answers from the questionnaires are coded and analyzed by using SPSS 10.0 For all variables initially the frequencies and descriptive statistics are computed. Then the gender is chosen as predictor variable for all items. In order to evaluate the statements, the scores were given from 1 to 5 and performed the t-test analysis for each statement to determine the differences by gender ($p < 0.05$, $p < 0.01$).



Table 1. Factor analysis and items loading of materialistic values scale

(Tablo 1. Materyalist değerler ölçeğine ilişkin factor analizi ve madde analizi sonuçları)

Success	Rotated component analysis	Items loading
1. I admire people who own expensive homes, cars, and clothes (R).	0.62	0.50
2. Some of the most important achievements in life including acquiring material possessions (R).	0.70	0.56
3. The things I own say a lot about how well I'm doing in life (R).	0.67	0.52
4. I like to own things that impress people (R).	0.67	0.53
5. I'd be happier if I could afford to buy more things (R).	0.71	0.55
6. It sometimes bothers me quite a bit that I can't afford to buy all the things I'd like (R).	0.55	0.37
Eigenvalue 2.75 Accounted variance: %46.0		Alpha: 0.76
Centrality		
7. I usually buy only the things I need.	0.60	0.47
8. I try to keep my life simple, as far as possessions are concerned.	0.53	0.47
8. I enjoy spending money on things that aren't practical. (R)	0.71	0.41
10. Buying things gives me a lot of pleasure (R)	0.62	0.40
11. I like a lot of luxury in my life. (R)	0.64	0.51
Eigenvalue 2.27 Accounted variance: %45.3		Alpha: 0.70
Happiness		
12. I don't place much emphasis on the amount of material objects people own as a sign of success.	0.65	0.30
Happiness (continue)		
13. I don't pay much attention to the material objects other people own.	0.70	0.36
14. The things I own aren't all that important to me.	0.62	0.30
Eigenvalue 1.49 Accounted variance: %50.0		Alpha: 0.48

5. FINDINGS AND DISCUSSION (BULGULAR VE TARTIŞMA)

5.1. Demographic Characteristics of Students

(Öğrencilerin Demografik Özellikleri)

The demographic data of the students surveyed in this study are tabulated in Table 2. The sample is generated in such a way that the proportion of boys and girls are equal.



Table 2. Demographic characteristics of students
 (Tablo 2. Öğrencilerin demografik özellikleri)

Demographic characteristics	N=480 (%)
<i>Gender</i>	
Female	240 (50.0)
Male	240 (50.0)
<i>Age</i>	
17-19	210 (43.7)
20-22	223 (46.5)
23-25	42 (8.8)
26 or older	5 (1.0)
$\bar{x} : 21.67 \pm 0.67$	
<i>Marital status</i>	
Single	478 (99.6)
Married	2 (0.4)
<i>The number of family member</i>	
Two	9 (1.9)
Three	73 (15.2)
Four	243 (50.6)
Five or over	155 (32.3)
$\bar{x} : 4.13 \pm 0.73$	
<i>Educational level of mother</i>	
Illiterate	10 (2.1)
Primary school	104 (21.7)
Secondary school	29 (6.0)
High school	131 (27.3)
University	170 (35.4)
Postgraduate	36 (7.5)
<i>Educational level of father</i>	
Illiterate	3 (0.6)
Primary school	51 (10.6)
Secondary school	35 (7.3)
High school	102 (21.3)
University	235 (49.0)
Postgraduate	54 (11.2)
<i>Occupation of mother</i>	
Civil servant (public)	104 (21.6)
Self-employed	35 (7.3)
Worker	10 (2.1)
Specialist	44 (9.2)
Housewife	236 (49.2)
Retired	51 (10.6)
<i>Occupation of father</i>	
Civil servant (public)	128 (26.7)
Self-employed	154 (32.1)
Worker	37 (7.7)
Specialist	63 (13.1)
Retired	98 (20.4)
<i>Family income (monthly)</i> (1 New Turkish Liras=1.61\$)	
Under 500 TL	16 (3.3)
501-1000 TL	72 (15.0)
1001-1500 TL	67 (14.0)
1501-2000 TL	73 (15.2)
2001-2500 TL	63 (13.1)
2501-3000 TL	46 (9.6)
3001 or over TL	143 (29.8)
<i>Allowance of students (monthly)</i>	
Not answered	49 (10.2)
Under 250 TL	131 (27.3)
251-450 TL	115 (24.0)
451-650 TL	94 (19.5)
651 or over TL	91 (19.0)
$\bar{x} : 326.00 \pm 3.25$	

When we pool the data (i.e. boys and girls are combined), the average age of students is found as 22 with a standard deviation of 0.67 years. From the evaluation, we also see that majority of the samples are single (99.6%) and on average have 4 members in their



families. Furthermore the result indicates that 35.4% of mothers of students are graduated from university, and 27.3% graduated from high school. In addition, almost half of the fathers of students (49.0%) have university degrees and 21.3% of them are graduated from high school. The employment statuses of parents are divided in different categories. But the major components of the parents' occupations can be stated as follows. 49.2% and 21.6% of the mothers are housewives and the government employees, respectively, while 32.1% and 26.7% of the fathers have their own jobs and are the government employees, in order. The monthly family incomes of the respondents are grouped in three main levels. 29.8% has 3001 TL or more incomes, 15.2% own incomes from 1501 to 2000 YTL, and 15.0% gets between 501 and 1000 YTL. With respect to the proportion of students' allowance we find that 27.3% of the students received less than 250 YTL income while the average allowance is 326 TL.

5.2. Materialistic Values of Students by Gender (Öğrencilerin Cinsiyete Göre Materyalist Değerleri)

We implement the factor analysis for the results obtained for students' materialistic values and find three main categories (success, centrality, and happiness) which divide the significant 14 items as identified by Richins and Dawson [9]. In this section, the *t*-test is done to explore whether there is any differences between boys and girls to understand the statements of materialism via success, centrality, happiness tabulated in Table 3.

Table 3. The results of *t*-test on materialistic values of students by items
 (Tablo 3. Maddelere göre öğrencilerin materyalist değerlerine ilişkin *t*-testi sonuçları)

Success (1=strongly agree to 5=strongly disagree)	Gender				t
	Female n=240		Male n=240		
	\bar{X}	S	\bar{X}	S	
1. I admire people who own expensive homes, cars, and clothes (R).	3.804	0.997	3.795	1.137	0.085
2. Some of the most important achievements in life including acquiring material possessions (R).	4.004	0.974	3.750	1.162	2.596**
3. The things I own say a lot about how well I'm doing in life (R).	3.504	0.959	3.362	1.170	1.450
4. I like to own things that impress people (R).	2.962	1.032	2.833	1.184	1.274
5. I'd be happier if I could afford to buy more things (R).	3.266	1.036	3.070	1.237	1.879
6. It sometimes bothers me quite a bit that I can't afford to buy all the things I'd like (R).	2.604	0.969	2.675	1.091	0.759
Centrality					
7. I usually buy only the things I need.	3.320	1.067	3.470	1.070	1.537
8. I try to keep my life simple, as far as possessions are concerned.	3.458	1.042	3.358	1.205	0.972
9. I enjoy spending money on things that aren't practical. (R)	3.975	0.872	4.158	0.900	2.265*
10. Buying things gives me a lot of pleasure (R)	2.304	0.969	2.845	1.205	5.424***
11. I like a lot of luxury in my life. (R)	3.633	1.119	3.666	1.191	0.316
Happiness					
12. I don't place much emphasis on the amount of material objects people own as a sign of success.	3.904	1.032	3.862	1.139	0.420
13. I don't pay much attention to the material objects other people own.	3.850	0.834	3.766	0.948	1.022
14. The things I own aren't all that important to me.	2.716	1.091	2.658	1.182	0.562

R= reverse-coded items **p*<0.05, ***p*<0.01, ****p*<0.001



When we examine this table in success subscale we observe that both groups of students most disagree with item 2 with $\bar{X}=3.877$, and item 1 with $\bar{X}=3.800$ while most agree with item 6 with $\bar{X}=2.639$. However in general statistically significant difference is seen only one statement on success subscale of which is denoted as item 2 ($t_{478}=2.596$; $p<0.01$). We investigate that mean levels of the girls is higher than boys. This result may imply that boys tend to the value possessions as the evidence of success. But according to the previous studies where gender has been included as a factor, there are not any consistent findings. For example from the study of Chan et.al. [13] in Hong Kong among Chinese boys and girls, it is reported both groups display similar level of materialism.

According to the centrality subscale Table 3 shows that the lowest agreement among students are seen in item 9 with ($\bar{X}=4.066$) whereas the highest agreement is for item 10 with ($\bar{X}=2.575$). From these assessments, hence we conclude that although the students tend not to purchase useless things and do not prefer luxuries they like to purchase and acquire possessions. Finally, from the results of t-test analysis, it is showed that the independent variable of gender has significant differences in item 9 ($t_{(478)}=2.265$; $p<0.05$), and in item 10 ($t_{(478)}=5.424$; $p<0.001$).

As an evaluation of the happiness subscale in the same table, one can see that almost all students strongly agree with the statements: item 12 with $\bar{X}=3.8833$, item 13 with $\bar{X}=3.8083$, and item 14 with $\bar{X}=2.6875$, respectively. However, based on the results of the t-test analysis, represented in Table 3, we state that there is not a statistically significant difference between values on happiness and gender ($p>0.05$).

On the other hand when we investigate the t-test analysis of subscales itself rather than items as listed in Table 3, we get the results drawn in Table 4.

Table 4. The results of t-test on materialistic values of students by Subscales

(Tablo 4. Alt-ölçeklere göre öğrencilerin materialist değerlerine ilişki-testi sonuçları)

	Gender							
	Female				Male			
	df	N	\bar{X}	S	N	\bar{X}	S	t
Success	478	240	20.145	3.696	240	19.487	4.977	1.645
Centrality	478	240	16.691	3.382	240	17.500	3.808	2.458*
Happiness	478	240	10.470	2.041	240	10.287	2.333	0.916

* $p<0.01$

The findings of the statistical analysis point out that merely the centrality dimension of materialism has significant difference in gender ($p<0.01$) and boys are significantly less likely than girls to place possessions and their acquisitions at the centre of their lives.

6. CONCLUSION (SONUÇ)

Materialistic values are defined as a "set of centrally held beliefs about the importance of [material] possessions in one's life" [9]. A person who endorses materialistic values believes that the acquisition of material goods is a key to self-definition and happiness, a central life goal, and a prime indicator of success. In that sense, strongly held materialistic values indicate a commitment to identity construction through material goods. Therefore materialism is quite complex phenomenon [19].

The purpose of this study is to extend the understanding relationship between gender and materialistic values. From the beginnings of this work we have expected that gender is a significant variable on materialistic values in the sense that boys are more materialist than girls. In statistical analysis, we have obtained the



following evidences which support our expectations. Whereas as a limitation of our research, since the sample is drawn from university students only in the first and the fourth class of four major Turkish universities, these listed findings would not extrapolate to the general population.

From the results of success, it is found that (a) the students believe they would be happier if they acquire more material possessions, (b) when they cannot afford to buy the things they would like, they feel uncomfortable and unhappy (c) when they possess material goods, they assess themselves as successful and this result is statistically significant on gender ($p < 0.01$). Concerning the *t*-test analysis carried out to examine the relationship between the attitudes of students related to success and gender, we observe that statistically significant differences ($p > 0.05$) do not exist among students.

According to the evaluation of the results based on centrality, it is seen that (a) the more things they purchase, the happiest they are (b) they do not like buying things which are not practical and useful. On the other hand, we find that the gender has a significant relationship with this subscale in the sense that the agreement levels of the boys are higher than those of the girls ($p < 0.01$).

Finally, from the assessment of the findings regarding to the happiness, it is indicated that the students do not pay attention and not place much emphasis on the amount of objects people own. On the other side the result of *t*-test analysis implies gender is not statistically significant under happiness subscale ($p > 0.05$).

As a further study of our work, we also suggest the extensions following: (a) More researches can be conducted on students in different ages and socio-economic status so that the effects of these two common variables on materialism can be evaluated (b) Further research can be considered for a multi-national approach so that the national differences on materialism can be compared and how globalization affects the attitudes of people can be observed under these conditions (c) New materialism scales can be developed for children, teenagers, and adolescents seeing that the most well-known scales (i.e. Belk [3], and Richins and Dawson [9] scales) in this field are constructed for merely adults.

NOTICE (NOT)

Data utilized in this article partly draw from the author's dissertation fieldwork conducted during her PhD studies at the Department of Family and Consumer Sciences, University of Ankara at Ankara, Turkey.

REFERENCES (KAYNAKLAR)

1. Edwards, T., (2000). Contradictions of consumerism, Open University Press, UK.
2. Slater, D., (1997). Consumer culture and modernity, Polity Press, Cambridge, UK.
3. Belk, R., (1985). Materialism: Trait Aspects of Living in the Material World. *Journal of Consumer Research*, Vol. 12, pp. 265-280.
4. Kasser, T., (2002). The High Price of Materialism, The MIT Press, Cambridge, Massachusetts, USA.
5. Chang, L., and Arkin, R.M. (2002). Materialism as an Attempt to Cope with Uncertainty. *Psychology and Marketing*, Vol. 19, No. 5, pp. 389-406.
6. Ahuvia, A.C., and Wong, N.Y., (2002). Personality and Values Based On Materialism: Their Relationship and Origins. *Journal of Consumer Psychology*, Vol. 12, No. 4, pp. 389-402.
7. Kasser, T., Ryan, R.M., Couchman, C.E., and Sheldon, K.M., (2004). Materialistic Values: Their Causes And Consequences. (in: Tim Kasser and Allen D. Kanner-Ed., *Psychology and Consumer Culture- The Struggle for A Good Life in A Materialistic World*, American Psychology Association, Washington D.C., pp. 11-96.
8. Inglehart, R., (1981). Post-Materialism in an Environment of Insecurity. *American Political Science Review*, Vol. 75, No. 4,



- pp. 880-900 (taken) Ger, G., and Belk, R., (1999). Accounting for Materialism. *Journal of Material Culture*, Vol. 4, No. 2, pp. 183-204.
9. Richins, M.L. and Dawson, S., (1992). A Consumer Values Orientation for Materialism and Its Measurement: Scale Development and Validation. *Journal of Consumer Research*, Vol. 19, pp. 303-316.
 10. Kilbourne, W., Grünhagen, M., and Foley, J., (2005). A Cross-Cultural Examination of the Relationship between Materialism and Individual Values. *Journal of Economic Psychology*, Vol. 26, pp. 624-641.
 11. Kaminen, R., (2005). Influence of Materialism, Gender and Nationality on Consumer Brand Perceptions. *Journal of Targeting, Measurement, and Analysis of Marketing*, Vol. 14, No. 1, pp. 25-32.
 12. Burroughs, J.E. and Rindfleisch, A., (2002). Materialism and Well-Being: A Conflicting Values Perspective. *Journal of Consumer Research*, Vol. 29, pp. 348-370.
 13. Chan, K., Zhang, H., and Wang, I., (2006). Materialism among Adolescent in Urban China. *Young Consumers: Insight and Ideas for Responsible Marketers*, Vol. 7, No. 2, pp. 64-77
 14. Rindfleisch, A., Burroughs, J.E., and Denton, F., (1997). Family Structure, Materialism, and Compulsive Consumption. *The Journal of Consumer Research*, Vol. 23, No. 4, pp. 312-325.
 15. Flouri, E., (1999). An Integrated Model of Consumer Materialism: Can Economic Socialization and Maternal Values Predict Materialistic Attitudes in Adolescents?. *Journal of Socio-Economics*, Vol. 28, pp. 707-724.
 16. Cohen, P. and Cohen, J., (1996). *Life Values and Adolescent Mental Health*, Mahwah, NJ: Erlbaum, (in: Kasser, T., (2002). *The High Price of Materialism*, The MIT Press, Cambridge, Massachusetts, USA.)
 17. Polak, E.L. and McCullough, M.E., (2006). Is Gratitude an Alternative to Materialism?. *Journal of Happiness Studies*, Vol. 7, pp. 343-360.
 18. Graham, J.F., (1999). Materialism and Consumer Behaviour: Toward a Clearer Understanding. *Journal of Social Behaviour and Personality*, Vol. 14, No. 2, pp. 225-241).
 19. Antonides, G. and Raaij Van, W.F., (1998). *Consumer Behaviour: A European Perspective*, John Wiley and Sons Ltd., England.
 20. Vargas, P.T. and Yoon, S., (2006). On The Psychology of Materialism: Wanting Things, Having Things, and Being Happy. *Advertising and Society Review*, <http://muse.jhu.edu/journals/asr>, [Accessed 26.02.2007]