Materialism, narcissism and the attitude towards conspicuous consumption

Branko Velov, Vesna Gojković, and Veljko Đurić
“Dr Lazar Vrkatić” Faculty for Law and Business Studies, Novi Sad, Serbia

Conspicuous consumption (purchase of expensive goods and services in order to visibly demonstrate buying power) is a frequent and widely spread type of consumer behavior. Besides its economic dimension, conspicuous consumption certainly also has its – for now under studied – psychological dimension. So far, it has been reported that positive attitude towards conspicuous consumption is associated with conformity, high esteem of authority, social anxiety, Machiavellism, and ruthless self-advancement. In this study, using a sample of 272 high school students (aged 16–18) we studied predictive relationship between narcissism and materialism, and the attitude towards conspicuous consumption. The data indicated that materialism was a significant predictor of the attitude towards conspicuous consumption, quite in line with some previous research. In spite of a significant correlation between narcissism and materialism, narcissism was not a significant predictor of the attitude towards conspicuous consumption. Thus, this study has widened nomological network of the attitude towards conspicuous consumption and clearly delineated two seemingly similar psychological constructs: materialism and the attitude towards conspicuous consumption.

Key words: conspicuous consumption, materialism, narcissism

Thorsten Veblen (1902) has used phrase ‘conspicuous consumption’ to designate purchase of luxurious goods with a primary intention to impress others. His view of conspicuous consumption emphasized the symbolic function of purchase since acquisition of expensive goods and services, and other demonstrations of wealth, are often used as a vehicle for gaining social recognition. The pleasure and benefits of owning and accumulating expensive things cannot be explained solely by their functional and aesthetic values but also by the social prestige gained through public display of one’s possessions. Historical accounts abound with examples of conspicuous consumption (Berkovitz, 2001; Bloch, Rao, & Desai, 2004; Schoep, 2004; Zuckerman, 2007; Calzi & Corno, 2007; Wisman, 2009). However, it have been argued that this Veblenian form of conspicuous consumption may not be a sufficient...
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explanation of present-day status-seeking practices (Chaudhuri & Majumdar, 2010; Chaudhuri, Majumdar, & Ghoshal, 2011).

To some people, this status-bearing value of purchase will be more important than its functional value. Nevertheless, there are relatively few psychological studies exploring the connection between psychological factors (such as personality traits, beliefs, interpersonal values and the upbringing) with the attitude towards conspicuous consumption (ATCC). Contemporary evolutionary psychology posits that human conspicuous consumption is a manifestation of costly signaling for a purpose of achieving and maintaining of favorable social status which in turn is associated with greater reproductive success (Saad, 2007; De Fraja, 2009; Nelissen & Meijers, 2011; Sundie, Kenrick, Griskevicius, Tybur, Vohs, & Beal, 2011).

Since our preliminary findings have indicated that conspicuous consumption, like gossip, seems to be widely practiced yet reluctantly admitted practice, we have decided to take an indirect approach in studying psychological underpinnings of conspicuous consumption. Thus, instead of directly asking our subjects about their own experience in practicing conspicuous consumption we opted for studying their ATCC. However, since attitudes cannot be treated as proxies for behavior (Ajzen & Cote, 2008) in the ensuing interpretations ATCC was treated only as an indication of the actual inclination towards conspicuous consumption.

Nevertheless, in spite of the fact that conspicuous consumption has an obvious psychological dimension, today we don’t have an adequate and complete answer to the question: who are the people who have a positive attitude towards conspicuous consumption? In order to widen nomological network of the ATCC, here we investigated its relationship with two psychological constructs (narcissism and materialism) that are frequently referred to in the context of self-centered and self-indulgent purchase of goods and services (Sedikides, Gregg, Cisek, & Hart, 2007; Podoshen & Andrzejewski, 2012).

Narcissism

Entitlement, self-focus, self-absorption but also persistent need to impress others are among defining characteristics of narcissism. Contemporary longitudinal studies (Twenge, Konrath, Foster, Campbell, & Bushman, 2008; Twenge & Campbell, 2009) demonstrate that this „perverse self-love” (Holmes, 2001) is undergoing continuing rise, perfectly matching the growing consumerism of the day. Given that conspicuous consumption may be defined as spending for the purpose of ego inflation and self-aggrandizement, one can expect that narcissists will often and readily use conspicuous consumption as a relatively inexpensive (it pays only with money) way to obtain so badly needed self-respect.

Indeed, results of some recent studies support this assumption. Narcissism is a good predictor of luxurious purchases (Cunningham & Darke, 2010). Narcissists utilize purchase of luxury products for protection of their fragile selves and in order to maintain and strengthen their greatly exaggerated self-view (Rucker...
Therefore, one can expect positive association between the narcissism and the ATCC, leading to the first question: is there an association between narcissism and the ATCC? To the best of our knowledge, there are no empirical studies that have examined this relationship.

Materialism

Regardless of the veracity of the thesis that conspicuous consumption is one among several ways for gratification of narcissistic urges, it is obvious that conspicuous consumption has its material side as well. Narcissism can be expressed in various fashions but conspicuous consumption always implies possession of some prestigious commodity. In psychology, the notion of materialism entails personal orientation towards possession of material goods, strong conviction that possession and accumulation of material objects is the key for happiness and social affirmation.

According to Ger and Belk (1990), there are four dimensions of materialism: possessiveness (inclination and tendency to retain control or ownership of one’s possessions, concern about losing ownership), nongenerosity (an unwillingness to give possessions to or share possessions with others, unwillingness to loan or give away), envy (displeasure and ill will at the superiority of another person in happiness, success, reputation or the possession of anything desirable) and tangibilization (collecting events, experiences and memories in a material form).

Recent research has approached materialism and conspicuous consumption as related yet different constructs (Podoshen, Li, & Zhang, 2011; Segal & Podoshen, 2013). While amassing of material possessions is a defining element of materialism, public demonstration of possessions is the essential feature of conspicuous consumption. Historically, materialism has been operationalized by Richins and Dawson’s (1992) and Belk’s (1984) psychometric scales while conspicuous consumption has been operationalized by psychometric scales developed by Marcoux, Filiatrault and Cheron (1997) and Chung and Fischer (2001). Our decision to study ATCC leads to the second question: what is the relationship between materialism and the ATCC?

Wong (1997) argued that desire to demonstrate one’s possessions is common to both materialism and conspicuous consumption. Podoshen, Li & Zhang (2011) reported statistically significant correlation between materialism and conspicuous consumption. Rindfleisch, Burroughs & Wong (2009) concluded that existential insecurity underlies both materialism and personal connection with prestigious brands.

It seems that examination of its associations with narcissism and materialism could further elucidate psychological underpinnings of the ATCC. Particularly since there have been no empirical studies simultaneously involving these three constructs. If, as we have expected, narcissism and materialism are important aspects of the ATCC, it makes sense to pose the third question: is there an association between narcissism and materialism?
Finally, since the main objective of this study was to further investigate psychological basis of the ATCC we have also asked the fourth question: whether narcissism and materialism are significant predictors of the ATCC?

Methods

Sample. The study was performed on 272 Serbian high school students (150 girls and 122 boys) aged 16–18 during November–December 2011. All respondents were tested in their respective high school classrooms. Three different psychometric scales were administered to each respondent during a single 30–45 minute session.

Psychometric scales. ATCC was evaluated by use of our standard 5-point Likert-type scale (ATCC–55, Appendix). All 55 items consisted of statements related to purchase and wearing of brand name clothes, a manifestation of conspicuous consumption that was familiar to our sample. The colloquial (and most likely teenager-invented) Serbian phrase ‘firmirana garderoba’—here translated as ‘brand name clothes’—literally translates into ‘labeled clothing’ and relates to all recognizable garment brands. Although loosely defined, among Serbian high school students this category includes for the most part such brands as Adidas, Nike, Lacoste, Benetton, Zara, Mango etc. Our previous study (Vukičević & Đurić, 2012) on 12–13 year old Serbian children of both sexes reported high awareness, aspiration and relatively common use of these brands. Our preliminary data indicated that wearing brand name clothes is among the most common ways of gaining prestige among Serbian high school students of both sexes.

In our attempt to minimize socially desirable responses all statements were formulated in the third person e.g. “A beautiful girl looks even more attractive when she is wearing brand name clothes” or as a general declaration e.g. „Wearing brand name clothes makes other people envious”. This use of ‘nominative technique’ (Krumpal, 2013) requires the respondent to act as a knowledgeable informant by reporting about socially undesirable practices of other people. By nominating others and keeping his/her anonymity intact, the respondent can provide valuable information that would otherwise be concealed from the researcher. The scale has already demonstrated high reliability and relatively stable latent structure (Mitić, Velov, & Đurić, 2010; Kosanović, Vukičević, & Đurić, 2012).

Materialism was assessed with a psychometric scale (MAT) that was constructed specifically for this study by aggregating items from psychometric scales designed by Ger & Belk (1990) and Richins & Dawson (1992). Since these two most widely used scales use diverse theoretical and operational approaches to materialism (Belk defined materialism as a personality trait while Richins and Dawson defined it as an interpersonal value), we have decided to amalgamate the two scales in order to obtain a multifaceted perspective on materialism. Thus, the MAT scale consisted of 41 (23 items from Ger & Belk’s scale and 18 items from Richins & Dawson’s scale) 5-point Likert-type items. Past research used different modifications of the original Belk’s scale (Ger & Belk, 1996) and recent research has also utilized amalgamation of Richins & Dawson’s (1992) and Belk’s (1984) scales (Podoshen, Li, & Zhang (2011). The higher score on the MAT scale indicated more intense manifestation of materialism.

Narcissism was evaluated through Narcissistic Personality Inventory (NPI–40; Raskin & Terry, 1988) consisting of 40 dichotomous items. On each item, respondent is asked to choose between the statement that indicates a narcissistic feature and the statement that indicates a non-narcissistic feature. Total score on NPI–40 was calculated by summing narcissistic answers (ranging from 0 to 40). The higher score on NPI–40 was taken as an indication of more pronounced narcissism.

Statistical analysis. Reliability of psychometric scales was assessed by use of Cronbach’s alpha coefficient. The Kaiser-Meyer-Olkin measure of sampling adequacy (KMO) was used to compare observed and partial correlation coefficients, and the Bartlett’s test of sphericity was used to check for variable independence in conjunction with the ensuing exploratory factor analysis involving method of principal components followed by Varimax rotation.
Bivariate linear associations among constructs and their latent structures were analyzed by Pearson’s index of linear correlation. Predictive power of narcissism and materialism relative to ATCC was examined by stepwise multiple regression. Level of statistical significance was defined at alpha = 0.05 level.

**Results**

**Scale ATCC–55**

Responding to scale ATCC–55 our subjects displayed different levels of agreement with statements relating to conspicuous consumption, from complete agreement to complete disagreement. The overall arithmetic mean for the whole scale ATCC–55 was 2.992 with a standard deviation of 0.529, skewness = 0.050, kurtosis = 0.014. Cronbach’s alpha coefficient ($\alpha = 0.911$) indicated high reliability of the scale. Criteria for the ensuing factor analysis were met by KMO = 0.832 and the Bartlett’s sphericity test ($\chi^2_{1485} = 6148.466, p < 0.001$). Exploratory factor analysis extracted 5 factors accounting for 39.800% of total variance. Due to their high reliability (from $\alpha = 0.719$ to $\alpha = 0.856$) and interpretable psychological content (Table 1) these latent factors were used as variables in the ensuing statistical analyses.

| Latent factors          | Eigen value | % of explained variance | Cronbach’s alpha | Content coalescing items pointing at brand name clothes as |
|-------------------------|-------------|-------------------------|-------------------|-----------------------------------------------------------|
| Prestige                | 10.494      | 19.080                  | 0.781             | a mean to display economic status, affluence, prestige, luxury and success |
| Attractiveness          | 4.574       | 8.315                   | 0.856             | a way for obtaining attention and a way for enhancing physical attractiveness of the person who wears it |
| Peer competition        | 2.591       | 4.711                   | 0.809             | an efficient device for boosting one’s value in the intersexual– and the intrasexual competition among peers truly of better quality and fit, more aesthetically pleasing, universally more acceptable |
| Value                   | 2.201       | 4.002                   | 0.742             | a way to obtain high esteem from other people, and indirectly a way to boost one’s self-respect |

**Scale NPI–40**

The overall arithmetic mean for NPI–40 was 15.845 with a standard deviation of 7.765, skewness = 0.531, kurtosis = 0.000. Cronbach’s alpha ($\alpha = 0.875$) indicated high reliability of the scale. Criteria for the ensuing factor analysis were met by KMO = 0.822 and the Bartlett’s sphericity test ($\chi^2_{780} = 2576. 989, p < 0.001$). Exploratory factor analysis extracted four latent dimensions accounting for 32.255 % total variance. These latent factors were used as variables in the ensuing statistical analyses (Table 2).
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Table 2. The latent structure of the psychometric scale NPI–40

| Latent factors | Eigen value | % of explained variance | Cronbach’s alpha | Content coalescing items that relate to self-aggrandizement, self-absorption and positioning oneself above the others |
|----------------|-------------|-------------------------|------------------|------------------------------------------------------------------------------------------------------------------|
| Entitlement    | 7.334       | 18.334                  | 0.702            | relate to self-aggrandizement, self-absorption and positioning oneself above the others                           |
| Leadership     | 1.974       | 4.935                   | 0.620            | relate to power, leadership, and the urge to be admired by the others                                             |
| Exhibitionism  | 1.838       | 4.594                   | 0.591            | point at pretentious behavior and desire to be eye-catching                                                      |
| Self-confidence| 1.756       | 4.391                   | 0.593            | relate to self-confidence and self-absorption                                                                   |

Scale MAT

The arithmetic mean on Scale MAT was 2.992 with a standard deviation of 0.378, skewness = 0.239, kurtosis = –0.268. Cronbach’s alpha (α = 0.739) indicated acceptable reliability of the scale. Criteria for the ensuing factor analysis were met by KMO = 0.752 and the Bartlett’s sphericity test ($\chi^2_{820} = 2724.716$, p < 0.001). Factor analysis identified four factors (accounting for 31.957 % total variance) that were considered as variables in the ensuing statistical analyses (Table 3).

Table 3. The latent structure of the psychometric scale MAT

| Latent factors | Eigen value | % of explained variance | Cronbach’s alpha | Content coalescing items that support belief that happiness and pleasure emanate from possession of material goods |
|----------------|-------------|-------------------------|------------------|------------------------------------------------------------------------------------------------------------------|
| Happiness      | 5.334       | 13.009                  | 0.760            | support belief that happiness and pleasure emanate from possession of material goods                              |
| Possessiveness | 3.493       | 8.520                   | 0.690            | stress the importance of accumulation of material goods, possession and ownership have a paramount priority over all other activities |
| Tangibilization| 2.225       | 5.427                   | 0.703            | indicate tendency to convert experience to material form, amass souvenirs and photographs, make collections of objects regarded as being of value |
| Nongenerosity  | 2.051       | 5.002                   | 0.595            | point at tightfisted behavior, stinginess and unwillingness to give and share one’s possessions                     |

Linear associations among psychometric scales and their latent structures

We have investigated bivariate correlations among total scores of the three psychometric scales and among the latent factors that were extracted from each psychometric scale. This type of analysis provided us with better insight in relationships among the three constructs that were of key interest in this study: ATCC, materialism and narcissism. Bivariate coefficients of correlation are summarized in Tables 4–6.
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### Table 4. Linear association between psychometric scales ATCC–55 and NPI–40

| ATCC–55                  | Total score | Prestige | Attractiveness | Peer competition | Value | Respect |
|--------------------------|-------------|----------|----------------|------------------|-------|---------|
| Total score r            | 0.102       | 0.021    | 0.187          | 0.049            | 0.193 | 0.130   |
| p                        | 0.092       | 0.732    | 0.002          | 0.418            | 0.001*| 0.032   |
| Entitlement r            | 0.022       | −0.027   | 0.015          | 0.019            | 0.108 | 0.093   |
| p                        | 0.722       | 0.661    | 0.808          | 0.749            | 0.076 | 0.126   |
| Leadership r             | 0.110       | 0.087    | 0.083          | 0.053            | 0.143 | 0.138   |
| p                        | 0.129       | 0.041    | 0.191          | 0.053            | 0.198 | 0.150   |
| Exhibitionism r          | 0.070       | 0.154    | 0.173          | 0.380            | 0.019 | 0.023   |
| p                        | 0.129       | 0.041    | 0.191          | 0.053            | 0.198 | 0.150   |
| Self-confidence r        | −0.004      | −0.066   | 0.108          | 0.015            | 0.117 | 0.038   |
| p                        | 0.951       | 0.280    | 0.075          | 0.807            | 0.054 | 0.533   |

r – Pearson’s product moment correlation; p – level of statistical significance

* statistically significant adjusting for Bonferroni correction at α = 0.0016 level

Obviously, the correlation between total scores of the scales ATCC–55 and NPI–40 has failed to reach the standard criterion of statistical significance at α = 0.05 level. In addition, two factors of the scale ATCC (Prestige and Peer competition) correlate neither with the total score of NPI–40 nor with any of its four latent factors. Only 9 out of 30 correlations were statistically significant at the α = 0.05 level and none of them was higher than 0.20. Adjusting for Bonferroni correction only two correlations (between Value and the total NPI–40 score and between Value and Exhibitionism) were found to be significant. This indicated a very weak psychometric association between the ATCC (scores on ATCC–55) and narcissism (scores on NPI–40). Thus as the answer to the first question posed above, it is quite clear that our data did not support the notion about the positive linear association between narcissism and the ATCC.

### Table 5. Linear association between psychometric scales ATCC–55 and MAT

| ATCC–55                  | Total score | Prestige | Attractiveness | Peer competition | Value | Respect |
|--------------------------|-------------|----------|----------------|------------------|-------|---------|
| Total score r            | 0.401       | 0.274    | 0.350          | 0.240            | 0.293 | 0.307   |
| p                        | 0.001*      | 0.001*   | 0.001*         | 0.001*           | 0.001*| 0.001*  |
| Happiness r              | 0.358       | 0.250    | 0.303          | 0.179            | 0.254 | 0.235   |
| p                        | 0.001*      | 0.001*   | 0.001*         | 0.003            | 0.001*| 0.001*  |
| MAT Possessiveness r     | 0.312       | 0.198    | 0.352          | 0.169            | 0.280 | 0.207   |
| p                        | 0.001*      | 0.001*   | 0.001*         | 0.005            | 0.001*| 0.001   |
| Tangibilization r        | 0.062       | 0.017    | 0.008          | 0.088            | −0.183| 0.020   |
| p                        | 0.307       | 0.782    | 0.896          | 0.146            | 0.002 | 0.738   |
| Nongenerosity r          | 0.193       | 0.167    | 0.201          | 0.049            | 0.261 | 0.226   |
| p                        | 0.001*      | 0.006    | 0.001*         | 0.417            | 0.001*| 0.001   |

r – Pearson’s product moment correlation; p – level of statistical significance

* statistically significant adjusting for Bonferroni correction at α = 0.0016 level
On the other hand, inspection of Table 5 points at statistically significant association among total scores achieved on ATCC–55 and MAT and their latent dimensions. Two out of four factors from the MAT scale (Happiness and Possessiveness) significantly correlated with the total score on ATCC–55 and also with all five factors extracted from ATCC–55. Nongenerosity significantly correlated with the total ATCC–55 score and also with Attractiveness, Value and Respect. Interestingly, Tangibilization correlated neither with the total ATCC–55 score nor with any of its latent factors. Linear association between the two psychometric scales that was summarized in Table 5 rather convincingly favors the positive answer to the second question posed above: there is a significant linear association between materialism and the ATCC.

We have established statistically significant correlations between total scores on MAT and NPI–40 as well as among their latent dimensions. Latent factors Entitlement, Leadership and Exhibitionism that were extracted from the scale NPI–40 significantly correlated with the total MAT score and also with MAT-extracted factors Happiness, Possessiveness and Nongenerosity. Latent factor Self-confidence that was extracted from NPI–40 significantly correlated with MAT’s Possessiveness and Nongenerosity. Again, Tangibilization had no statistically significant correlations with either the total NPI–40 score or with any of its latent factors. Taken together, the data strongly support a positive answer to the third question that was posed above: there is a positive linear association between narcissism and materialism.

Narcissism and materialism as predictors of ATCC

The answer to the fourth question (whether materialism and narcissism predict ATCC) was obtained by means of multiple regression. The criterion variable was defined as the total score on ATCC–55; predictors were total scores on NPI–40 and MAT. The analysis was performed in a single step resulting in a multiple regression coefficient $R = 0.401$; identifying materialism as a sole
predictor variable \( F(1,270) = 51.647; p = 0.001 \). Narcissism was not included in
the model. Coefficient of determination \( R^2 = 0.161 \) indicates that predictor and
criterion variables had approximately 16% of variance in common.

| Model          | Non-standardized coefficients | Standardized coefficients | Correlations |
|---------------|-------------------------------|---------------------------|--------------|
|               | \( B \)          | \( SE \)          | \( \beta \)   | \( t \) | \( p \) | Zero-order | Partial | Semi-partial |
| 1 (Constant)  | 72.388           | 12.927           | 5.600         | 0.001  |        |            |          |              |
| Materialism   | 0.751            | 0.105            | 0.401         | 7.187  | 0.001  | 0.401      | 0.401    | 0.401        |

t = Student \( t \)– test of statistical significance; \( p \) = level of statistical significance; \( SE \) = standard error of estimate.

### Discussion

The main finding of this study was demonstration of predictive relationship
between materialism and ATCC as was indicated by the significant positive
correlation between the two constructs. This finding is in line with previous
reports (Podoshen, Li, & Zhang, 2011; Podoshen & Andrzejewski, 2012).
This relationship seems to be logical since accumulation of material goods is
a defining element of materialism and display of the accumulated wealth is a
defining characteristic of conspicuous consumption. Based on the positive linear
relationship between the two constructs we can conclude that higher scores on
materialism are associated with a more positive ATCC. This conclusion was
further validated by associations among latent dimensions of the two constructs.
Latent factors of the scale ATCC–55 significantly correlated with materialism (as
indicated by the total MAT score) and all its latent factors except Tangibilization.
This finding indicates that propensity of our respondents to collect souvenirs,
photographs and other memorabilia is not associated with ATCC and that latent
dimension Tangibilization rests outside the area defined by the variances shared
by materialism and ATCC. Happiness and Possessiveness were two MAT’s
latent dimensions that had highest and most consistent correlations with ATCC.
This suggests that positive ATCC among people who score high on materialism
mostly depends on the materialists’ belief that possession of material goods is a
source of their happiness and that accumulation of material goods is a focal point
of their lives (Richins, 1994). It is worth noting that the correlation between the
total MAT score and the total ATCC–55 score was comparable to the correlation
between materialism and conspicuous consumption that was found in a combined
Chinese-American sample (Podoshen, Li & Zhang, 2011).

So far, we have reported positive correlations between the ATCC and
conformity (Velov, Bosiok, Mitić, & Đurić, 2010), the interpersonal value
“power” (Mitić, Velov, & Đurić, 2010; Vukičević, Velov, Mitić, & Đurić, 2011),
authoritarian personality (Dragojević, Kondić, & Đurić, 2011), Machiavellism
and ruthless self-advancement (Mitić, Vukičević, & Đurić, 2012) and social anxiety (Vukičević & Đurić, 2012). Together with the data presented here, our findings point toward a distinct personality profile nurtured by the contemporary culture of insatiable personal consumption.

More interesting, less predictable and more puzzling was the association between narcissism and ATCC. Contemporary studies (Cunningham & Darke, 2010) report that narcissists are very enthusiastic about possession of luxurious goods. However, the present study has found almost no evidence for the predictive relationship between narcissism and ATCC. There was no statistically significant correlation between total scores on ATCC–55 and NPI–40 and narcissism did not enter the predictive model of ATCC. Value was the only latent factor extracted from ATCC–55 that significantly correlated with two NPI–40 derived factors: Entitlement and Exhibitionism. We speculate that a possible reason for absence of the expected positive relationship between narcissism and ATCC may be found in theoretical assumptions that were embedded in the NPI–40. Namely, the NPI–40 was designed without taking into consideration that materialism may be an essential structural feature of narcissism. On the other hand, the observed absence of association between narcissism and ATCC is in line with the approach that doesn’t necessarily view conspicuous consumption as a compensatory activity aimed at quenching lack of self-confidence (Chaudhuri, Majumdar, & Ghoshal, 2011).

The analysis of the relationship among the three constructs reveals that the variance shared by materialism and narcissism was greater than the variance shared by ATCC and materialism and also greater than the variance shared by ATCC and narcissism. Therefore, the association between materialism and narcissism seems quite interesting and worthy of further clarification. The NPI–40 derived factor Exhibitionism was strongly associated with the total score on MAT and also with all MAT-derived factors except for Tangibilization. On the other hand, MAT-derived factors Possessiveness and Nongenerosity significantly correlated with narcissism and all of its latent dimensions. It is worth noting that NPI–40 derived factor Exhibitionism and MAT-derived factor Possessiveness had some 27% variance in common. Evidence of strong psychometric association between the two constructs suggests that narcissism is (among other things) burdened with the faith in importance of accumulation of material goods.

Our finding about the strong connection between narcissism and materialism is in accordance with some previous observations pointing at materialism as one of the basic characteristics of narcissistic personality structure (Campbell & Foster, 2007). Possession of things and people (since for narcissists people are objects whose importance depends on their usefulness for promotion of narcissist’s personal status) is a vehicle for inflation of her/his grandiose self (Campbell, Brunell, & Finkel, 2006).

The ATCC–55 scale has once more demonstrated its high reliability and repeatable, interpretable and meaningful latent structure. The MAT scale, although designed by aggregating items from two different psychometric scales (Ger & Belk, 1990; Richins & Dawson, 1992) has also demonstrated good
psychometric characteristics. Its latent structure resembled the latent structures of the original psychometric scales that were used in its compositing. MAT-derived factors Happiness and Possessiveness involved mainly items from Richins & Dawson’s (1992) scale, while factors Tangibilization and Nongenerosity involved mostly the items from Ger & Belk (1990). We conclude that conjoint use of these two independently designed psychometric scales provides reliable and valid data.

The total NPI–40 score demonstrated high reliability, similar to one reported by Raskin & Terry (1988). Nevertheless, reliability of NPI–40 derived factors was questionable. In addition, the latent structure of the inventory was rather instable and quite sensitive to minimal changes in the data base. This inadequate reliability of the latent factors and instability of the NPI–40’s latent structure is most likely a consequence of dichotomous nature of the respondents required. In our future studies of narcissism’s nomological network we intend to use a Likert scale based version of NPI–40.

There is an ongoing debate about the exact factor structure of NPI (Ackerman, Witt, Donnellan, Trzesniewski, Robins & Kashy, 2011). The original 7-factor solution accounting for 52% of variance (Raskin & Terry, 1988) has been criticized for poor reliability (Del Rosario & White, 2005). Further studies failed to replicate this model and advocated 2- or 3- factor solutions (Kubarych, Deary, & Austin, 2004; Corry, Merritt, Mrug, & Pamp, 2008). Using a non-clinical sample of 338 Scottish undergraduates (aged 18 to 22) Kubarych, et al. (2004) proposed a 3- factor solution accounting for 27% of variance. This is quite in line with more recent American (Corry et al., 2008) and Dutch (Barelds & Dijkstra, 2010) studies proposing 2-factor solutions explaining 20% and 33.7% total variance, respectively. Similarly, in a comprehensive study on materialism spanning over 12 nations and 1496 respondents Ger and Belk (1996) reported that their 4-factor solution accounted for 28% of variance in the overall sample while in the country-specific analyses variance explained ranged between 26 and 39%. Thus, our 4-factor solution of NPI–40 explaining 32.25% variance and our 4-factor solution of MAT explaining 31.96% variance are well in line with relevant literature.

Our sample consisted of students who were enrolled in public (state) high schools comprising wide variation among their parents’ actual resources. Nevertheless, the data presented here are very much in line with findings of a recent study that involved high school students who were enrolled in the most prestigious private high school in the country (Vukičević, 2013). This indicates that, at least among Serbian high school students, the attitude towards brand name clothes may not be entirely resource-dependant.

The outcome of multiple regression analysis indicated that materialism was a good predictor of ATCC. Contrary to our expectations, narcissism was not found to be a good predictor of ATCC. It turned out that, although closely related, materialism and narcissism diverged in their relationship with the ATCC. Hopefully, our future studies will determine whether there is no real connection between narcissism and the ATCC or that this study failed to demonstrate this
connection due to psychometric imperfections of NPI–40. Additional research may be needed in order to overcome imperfections of our sample that was limited to Serbian high school students, their understanding of conspicuous consumption and their financial resources.

Since narcissists are more self-centered and more thoughtless about views and opinions of other people it may well be that the lack of correlation between narcissism and the ATCC may be an uninvited consequence of our decision to formulate all statements comprising ATCC–55 psychometric scale in the third person. Indeed, it has been reported that individuals who score higher on narcissism tend to use more first person singular pronouns and fewer first person plural pronouns (Raskin & Shaw, 1988).

All these limitations thwart external validity of our study. For instance, the lack of correlation between Tangibilization and ATCC (or any of its latent dimensions) reported above, may be a consequence of limitations pertaining to our sample.

In conclusion: the relationship between materialism and the ATCC and their respective relationships with narcissism suggest that materialism and the ATCC are related yet quite distinct constructs. Their future study will probably be beneficial for further understanding of psychological mechanisms at the foundation of modern consumer behavior.

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Appendix

Psychometric scale ATCC – 55

| Statement                                                                 | I totally disagree | I mostly disagree | I am not sure | I mostly agree | I totally agree |
|--------------------------------------------------------------------------|--------------------|-------------------|---------------|---------------|----------------|
| People are buying brand name clothes to accentuate their appearance     | 1                  | 2                 | 3             | 4             | 5              |
| People are buying brand name clothes to be out of the ordinary, to have clothes that other people don’t have | 1                  | 2                 | 3             | 4             | 5              |
| People are buying brand name clothes in order to be modern and stylish   | 1                  | 2                 | 3             | 4             | 5              |
| By wearing brand name clothes people aim to gain liking of other people | 1                  | 2                 | 3             | 4             | 5              |
| People use brand name clothes in order to feel more important            | 1                  | 2                 | 3             | 4             | 5              |
| By wearing brand name clothes one conveys her/his material comfort       | 1                  | 2                 | 3             | 4             | 5              |
| Brand name clothes have more value than the no-name clothes              | 1                  | 2                 | 3             | 4             | 5              |
| People want to have the same brand name clothes as their friends and colleagues | 1              | 2                 | 3             | 4             | 5              |
| People want to have the same brand name clothes as their neighbors       | 1                  | 2                 | 3             | 4             | 5              |
| People want to have the same brand name clothes as celebrities           | 1                  | 2                 | 3             | 4             | 5              |
| People want to have the same brand name clothes as everybody else        | 1                  | 2                 | 3             | 4             | 5              |
| People are buying brand name clothes in order to show off and gain attention | 1                  | 2                 | 3             | 4             | 5              |
| Brand name clothes symbolize one’s social status                         | 1                  | 2                 | 3             | 4             | 5              |
| Brand name clothes symbolize success and standing                        | 1                  | 2                 | 3             | 4             | 5              |
| Brand name clothes mean wealth                                           | 1                  | 2                 | 3             | 4             | 5              |
| Brand name clothes go along with other expensive things                  | 1                  | 2                 | 3             | 4             | 5              |
| Successful people wear solely brand name clothes                         | 1                  | 2                 | 3             | 4             | 5              |
| A person who wears brand name clothes certainly knows why she/he is wearing them | 1                  | 2                 | 3             | 4             | 5              |
| People who wear brand name clothes look more composed                   | 1                  | 2                 | 3             | 4             | 5              |
| Statement                                                                 | 1 | 2 | 3 | 4 | 5 |
|--------------------------------------------------------------------------|---|---|---|---|---|
| People who wear brand name clothes look more dignified                   | 1 | 2 | 3 | 4 | 5 |
| Wearing brand name clothes is a sure way of self-promotion               | 1 | 2 | 3 | 4 | 5 |
| Brand name clothes are more conspicuous than the no-name clothes          | 1 | 2 | 3 | 4 | 5 |
| Brand name clothes are more vivid than the no-name clothes                | 1 | 2 | 3 | 4 | 5 |
| Brand name clothes are of better cut than the no-name clothes             | 1 | 2 | 3 | 4 | 5 |
| Brand name clothes convey identity and life style of a person wearing them| 1 | 2 | 3 | 4 | 5 |
| Brand name clothes help people to get recognized among others who share their opinions and beliefs | 1 | 2 | 3 | 4 | 5 |
| Girls wear brand name clothes to boost their value in boys’ eyes          | 1 | 2 | 3 | 4 | 5 |
| Girls wear brand name clothes to boost their value in the eyes of other girls | 1 | 2 | 3 | 4 | 5 |
| Boys wear brand name clothes to boost their value in girls’ eyes          | 1 | 2 | 3 | 4 | 5 |
| Boys wear brand name clothes to boost their value in the eyes of other boys| 1 | 2 | 3 | 4 | 5 |
| A beautiful girl looks even more attractive when she is wearing brand name clothes | 1 | 2 | 3 | 4 | 5 |
| A handsome boy looks even more attractive when he is wearing brand name clothes | 1 | 2 | 3 | 4 | 5 |
| Most boys and girls look more attractive wearing brand name clothes       | 1 | 2 | 3 | 4 | 5 |
| It is easier for boys to notice a girl if she is wearing brand name clothes | 1 | 2 | 3 | 4 | 5 |
| Boys wearing brand name clothes look more courageous                      | 1 | 2 | 3 | 4 | 5 |
| Boys wearing brand name clothes look more mature                          | 1 | 2 | 3 | 4 | 5 |
| People who wear brand name clothes are more attractive than the others    | 1 | 2 | 3 | 4 | 5 |
| Wearing brand name clothes helps people to feel more self-assured         | 1 | 2 | 3 | 4 | 5 |