MEASURING IMPULSIVE BUYING TENDENCIES IN CROATIA: TOWARDS A PARSIMONIOUS MEASUREMENT SCALE

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ABSTRACT

Departing from an English instrument proposed by Verplanken and Herabadi (2001), we propose a preliminary scale comprising eight items to parsimoniously measure impulsive buying tendencies in Croatia. The preliminary scale assesses two facets of impulsive buying tendencies, namely cognitive aspects (e.g. lack of planning and deliberation) as well as affective aspects (e.g., feeling of pleasure, excitement, compulsion, lack of control, regret). We describe the development steps involved, present data on the scales´ measurement model, and portray possible applications and avenues for future research.

Keywords: impulsive buying, measurement scale, customer segmentation

MJERENJE TENDENCIJA IMPULZIVNOG KUPOVANJA U HRVATSKOJ: PREMA PARSIMONIJSKOJ SKALI MJERENJA

Znanstveni rad

SAŽETAK

Na osnovu engleskog instrumenta, kojeg su uveli Verplanken i Herabadi (2001), autori predlažu preliminarnu skalu od osam čestica kako bi parsimonijski izmjerili tendencije impulzivnog kupovanja u Hrvatskoj. Preliminarna skala procjenjuje dvije strane impulzivnog kupovanja: kognitivne aspekte (npr. odsutnost planiranja i razmišljanja) i afektivne aspekte (npr. osjećaji zadovoljstva, uzbuđenja, prisile, nedostatka kontrole, žaljenja). Autori opisuju razvojne korake, prezentiraju podatke o modelu mjerne skale te opisuju moguće primjene i puteve daljnjeg istraživanja.

Ključne riječi: impulzivno kupovanje, mjerna skala, segmentacija potrošača

BACKGROUND AND OVERVIEW

Irrational consumption is a growing area of concern in most countries and therefore subject of both academic and well as applied research endeavours. Most prominently, impulsive purchasing tendencies have been of interest. Early research used the terms impulse buying and unplanned buying synonymously[1]. This conceptualization led researchers to classify products in terms of whether they were likely to be purchased impulsively[2]. By the 1970s, however, researchers had begun to question whether products could reasonably be classified as impulse items and concluded that all products could be purchased impulsively.

In the 1980s, important works by Rook[3] and Rook and Hoch[4] clarified the nature of impulse buying. Rook and Hoch[5] aptly noted, "It is the individuals, not the products, who experience the impulse to consume." This statement led to a redefinition of impulse buying as a sudden and powerful urge that arises within the consumer to buy immediately[6]. Impulsive purchasing was now defined as involving spontaneous and unreflective desires to buy, without thoughtful consideration of why and for what reason a person should have the product[7][8]. Recent research has reflected this viewpoint by distinguishing between people who are "impulsive buyers" and those who are not[9]. Taken together, today's trait-theoretical conceptualizations of impulsive buying encompass two elements[10]: (1) a dispositional lack of thought and planning and (2) a propensity for grounding consumption decisions on emotions, resulting in almost instantaneous action after being exposed to the product/service.

In North America, estimates from market research studies indicate that up to 75% of purchases are made impulsively[11][12]. However, from a marketing perspective, impulsive buying tendencies may be desirable only in very limited contexts, such as low-involvement and low-cost products. In all other contexts, impulsive purchases impose serious difficulties both to the individual, as well as to the respective brand. For instance, it has been reported that about 80% of impulsive purchases are associated with negative post-purchase feelings (e.g. regret), and 60% of consumers repeatedly buying impulsively run into financial problems. As a consequence of these negative implications, impulsive purchases tend to be more frequently brought back to the retailer compared to planned ones, are less intensively used and quickly disposed, and may translate into negative brand-related word-of-mouth. Therefore, knowledge about a consumer segments′ propensity to purchase impulsively on a

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[1] Kollat, D.T. & Willett, R.P. (1969), „Is Impulse Purchasing Really a Useful Concept for Marketing Decisions?" *Journal of Marketing, 33*(January), 79–83.

[2] Applebaum, W. (1951), "Studying Consumer Behavior in Retail Stores", *Journal of Marketing, 16* (October), 172–78.

[3] Rook, D.W. (1987), "The Buying Impulse", *Journal of Consumer Research, 14*(September), 189–99.

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[5] Ibid.

[6] Beatty, S.E. & Ferrell, M.E. (1998), "Impulse Buying: Modeling Its Precursors", *Journal of Retailing, 74*(2), 169–91.

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[8] Verplanken, B. & Herabadi, A. (2001), "Individual Differences in Impulse Buying Tendency: Feeling and No Thinking", *European Journal of Personality, 15*, Special Issue on Personality and Economic Behavior, S71–S83.

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[10] Verplanken, B. & Herabadi, A. (2001), op. cit.

[11] LaRose, R. (2001, April), "On the negative effects of e-commerce: A sociocognitive ex-ploration of unregulated on-line buying", *Journal of Computer-Mediated Communication, 6*(3) [Online-Journal], (accessed January 12, 2006), [available at http://jcmc.indiana.edu/vol6/issue3/larose.html].

[12] Spool, J. (2002). "What causes consumers to buy on impulse?" [Online-Paper]. User Interface Engineering, (accessed May 30, 2006), [available at http://www.uie.com/publications/ whitepapers/ImpulseBuying.pdf].

dispositional level is of theoretical as well as of practical relevance. However, while numerous measurement approaches exist in foreign languages, we are not aware of any scale for the Croatian context. To fill this gap, the overall goal of this contribution is to propose a preliminary Croatian instrument for the parsimonious measurement of impulsive buying tendencies.

The instrument development process described in this paper encompasses two steps. In the first step, we have translated and tested an originally English questionnaire-based instrument firstly introduced by Verplanken and Herabadi[13] with the aid of a confirmatory factor analysis. The measurement model we departed from will be described in the following section. In the second step of the scale development process, we have revised this instrument to optimize the measurement models fit. This second step resulted in a parsimonious set of eight items assessing two facets of impulsive buying tendencies in Croatia, namely cognitive aspects as well as affective aspects. In the closing part of this paper, we will portray possible applications and managerial implications of the scale, and will discuss limitations associated with the preliminary scale proposed.

THE VERPLANKEN AND HERABADI (2001) SCALE

Verplanken and Herabadi proposed an English scale assessing two facets of impulsive buying tendencies, namely cognitive aspects (e.g. lack of planning and deliberation) as well as affective aspects (e.g., feeling of pleasure, excitement, compulsion, lack of control, regret). The scale encompassing 20 items was developed and validated in two studies. In the first study, a preliminary pool of 52 items assumed to measure the antecedents and consequences of impulsive purchasing were administered to 106 subjects. One part of the 52 candidate items were generated by the authors, another part was derived from already published scales. Subjects had to rate these 52 items on seven-point agree-disagree scales. Based on a principal component analysis, the ten highest loading items from each of two factors were selected to form a 20-item instrument measuring the two components of impulsive buying (cognitive and affective components). Coefficient alphas for the two subscales ranged from .91 (for the cognitive component) to .83 (for the affective component). In the second study performed by Verplanken and Herabadi, the scale was validated by relating the instrument in study 1 to actual impulsive purchases and a number of personality factors. Several theoretically meaningful correlations with selected personality factors emerged, such as a significant positive correlation with Extraversion, and negative correlations with Conscientiousness and Autonomy. Furthermore, the 20-item instrument significantly correlated with the number participants reported to have bought on impulse during the previous two weeks (r= .25 for the whole sample, r= .32 for the male subsample). In Table 1, the original wording of the 20-item instrument proposed by Verplanken and Herabadi (2001) are summarized, along with the respective Croatian translation used in our own research.

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[13] Verplanken, B. & Herabadi, A. (2001), op. cit.

Table 1: The Impulse Buying Tendency Scale as proposed by Verplanken and Herabadi (2001) along with the Croatian translation used in this study

Impulsive Buying Facet	Item code	Original English items	Croatian translation
Cognitive items	IK1	I usually think carefully before I buy something.	Obično pažljivo promislim prije nego li nešto kupim.
	IK2	I usually only buy things that I intend to buy.	Obično kupim samo one stvari koje sam namjeravao/la kupiti.
	IK3	If I buy something, I usually do that spontaneously.	Kada nešto kupim obično to uradim spontano.
	IK4	Most of my purchases are planned in advance.	Većinu svojih kupovina pažljivo isplaniram unaprijed.
	IK5	I only buy things that I really need.	Kupujem samo one stvari koje stvarno trebam.
	IK6	It is not my style to just buy things.	Nije u mojem stilu da nešto, bez razmišljanja, jednostavno kupim.
	IK7	I like to compare different brands before I buy one.	Volim uspoređivati različite robne marke prije nego li se odlučim.
	IK8	Before I buy something I always carefully consider whether I need it.	Prije nego li nešto kupim, pažljivo razmotrim treba li mi to.
	IK9	I am used to buying things ´on the spot´.	Navikao/la sam kupovati stvari kada ih vidim u dućanu.
	IK10	I often buy things without thinking.	Često kupujem stvari bez razmišljanja.
Affective items	IK11	It is a struggle to leave nice things I see in a shop.	Teško mi je ne kupiti lijepe stvari koje vidim u dućanu.
	IK12	I sometimes cannot suppress the feeling of wanting things I see in shops.	Ponekad ne mogu potisnuti osjećaj želje za stvarima koje vidim u dućanu.
	IK13	I sometimes feel guilty after having bought something.	Ponekad se osjećam krivim/om nakon što nešto kupim.
	IK14	I'm not the kind of person who ´falls in love at first sight´ with things I see in shops.	Nisam tip osobe koja se "zaljubi na prvi pogled" u stvari koje vidim u dućanu.
	IK15	I can become very excited if I see something I would like to buy.	Ako vidim nešto što bih želio/la kupiti, osjetim uzbuđenje.
	IK16	I always see something nice whenever I pass by shops.	Uvijek kad prolazim pored dućana vidim nešto lijepo.
	IK17	I find it difficult to pass up a bargain.	Teško mi je ne iskoristiti dobru priliku za kupnju.
	IK18	If I see something new, I want to buy it.	Ukoliko vidim nešto novo, poželim to kupiti.
	IK19	I am a bit reckless in buying things.	Pomalo sam nepromišljen/a pri kupovanju stvari.
	IK20	I sometimes buy things because I like buying things, rather than because I need them.	Ponekad kupim stvar zato što volim kupovati, a ne zato što mi treba.

Note. The response scale for each item encompassed seven categories. The endpoints were labelled "fully agree" and "fully disagree" ("potpuno se slažem" i "uopće se ne slažem"). For item coding instructions, see Appendix.

METHOD

Subjects and Procedure. A convenience sample comprising $N=170$ of Croatian women was used for this research. Participants were between the ages 23 years and 54 years ($M=$ 5.13, $SD=$ 8.2), all were employed, and their monthly income ranged from 3500 to 5000 Croatian Kunas. 51.5% were living with a partner (most of them were married), 35% were single, and 13.5% divorced or widowed. Formal educational level was distributed as follows: 55.2% completed highschool education, 42.9% completed post-highschool education, 1.8% completed University education.

Measurement Model. The measurement model we departed from was taken from Verplanken and Herabadi (2001) and encompassed two latent factors (cognitive impulsive buying component, affective compulsive buying component), each comprising ten indicators. Latent factors were allowed to intercorrelate. The exact item wordings along with their corresponding latent factor is summarized in Table 1 (see above).

RESULTS

Verplanken and Herabadi (2001) Measurement Model. To assess construct validity of the translated item set, the two-factor measurement model proposed by Verplanken and Herabadi (2001) was subject to a confirmatory factor analysis (CFA). The two components of impulsive buying (cognitive and affective) were measured by ten items each (see also Table 1 and Figure 1). The CFAs was conducted with EQS 6.1b[14].Because the data violated multivariate normality, maximum likelihood robust estimation method[15] and raw data were used as input, from which the respective covariance matrices were computed by the EQS program.

Unfortunately, the measurement model tested was not consistent with our hypothesized structure. The Satorra-Bentler scaled chi^2 (SB-chi2= 393.58, df= 169, p< .01), as well as the ROBUST CFI, NNFI, MFI, and RMSEA fit statistics (ROBUST CFI= .85; NNFI= .84; MFI= .50; RMSEA= .09, 90% CI: .08, .10) are all indicative of a poor fit. Factor loadings of the indicators for each construct were statistically significant, but for selected indicators not sufficiently high (e.g., .36 for IK7, .51 for IK14). An inspection of the standardized residuals revealed that some items substantially correlated with indicators belonging to the respective other factor (e.g., IK15 and IK7, IK6 and IK17), pointing to a problematic convergent and discriminant validity.

Revised Measurement Model. As a consequence of the poorly fitting measurement model as proposed by Verplanken and Herabadi (2001), we pursued and exploratory strategy and revised the measurement model by including only those items which had (a) sufficiently high loadings on the theoretically designated factor and (b) no residual correlations to other indicators within and between constructs. As a result of this inductive process, we derived a two-factor measurement model with four indicators each (see Figure 1).

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[14] Bentler, P. (2003), *EQS 6 structural equations program manual*. Encino, CA: Multivariate Software Inc.

[15] Satorra, A. & Bentler, P. (1994), "Correlations to test statistics and standard errors in covariance structure analysis", in *Latent variable analysis: Application for developmental research,* A. von Eye & C. C. Clogg, Eds. CA: Sage Publications, Thousands Oaks, 399-419.

Figure 1: CFA results for the revised Croatian impulsive buying scale (*N*= 170)
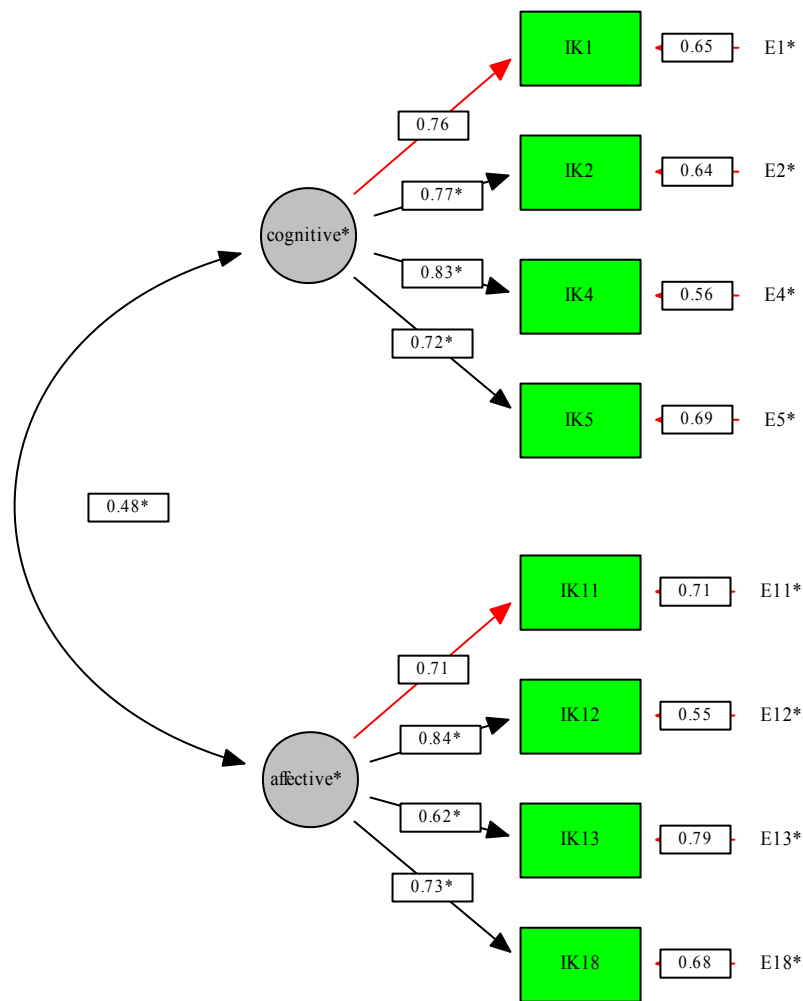
The model depicted in Figure 1 fitted the data well. The Satorra-Bentler scaled chi^2 (SB-chi2= 27.96, df= 19, p= .08), as well as the ROBUST CFI, NNFI, MFI, and RMSEA fit statistics (ROBUST CFI= .98; NNFI= .97; MFI= .97; RMSEA= .05, 90% CI: .00, .09) are all indicative of a good fit. Factor loadings of the indicators for each construct were all statistically significant, sufficiently high (above .7, except for IK13, see Figure 1), and largely varied only marginally, indicating that the indicators contributed equally to the formation of the respective constructs and converged as expected. Finally, internal consistencies as computed by Cronbach´s alpha were .83 for the total eight item set, .85 for the four items belonging to the cognitive facet, and .81 for the four affective items.

DISCUSSION

Our overall goal was to propose a Croatian scale measure impulsive buying tendencies by adapting an English instrument originally developed by Verplanken and Herabadi (2001). Because the original item set did not fit the data well, we extracted a subset of eight items forming a preliminary scale. This preliminary scale assesses two facets of impulsive buying tendencies, namely cognitive aspects as well as affective aspects.

The preliminary scale appears useful for a number of applied fields. For instance, the scale may aid market researchers to identify consumer segments prone to purchase goods and services impulsively. Because of the scales´ parsimony, it can be easily integrated in market

research studies, be it within an online questionnaire, a panel recruitment instrument, or some other self-administered assessment tool. In clinical contexts, the preliminary scale may be applied as a screener quickly assessing impulsive buying tendencies. In cases where concerns arise pointing to problematic consumption patterns, more comprehensive diagnostic instruments may be applied. To facilitate the integration of the instrument in applied contexts, we have included a sample questionnaire in the Appendix.

From a research perspective, a number of avenues for future research arise. By departing from an already established conceptual definition of the tendency to buy impulsively, and by departing from a corresponding instrument developed in another language, cross-cultural comparisons appear feasible. For instance, one might want to descriptively compare different cultures in terms of their propensity to purchase goods and services impulsively. Another line of research is to explore the cultural comparability of the generic base of such tendencies, i.e. by relating impulsive buying to more general personality traits in different cultures. A first step in this direction involving a Croatian sample was made by Bratko, Bandl and Bosnjak (2007, in this volume)[16]. Last, but not least, the two facets of impulsive buying may be conceptually linked to larger issues that are becoming more prevalent in the field. For example, on the emotional side, one might expect that people who are higher on this dimension for impulsiveness are also more satisfied with immediate visual and haptic experiences, and would therefore prefer retail store venues over online shopping. Furthermore, consumption experiences that are high in emotion or sensation may be dispositionally preferred. On the cognitive side, topics involving spending-related mid-term and long-term plans may emerge on the research agenda. For instance, those scoring high on cognitive impulsivity, compared to those scoring low on the same construct, should tend to violate long term spending and saving plans more often, and their ´mental account structure´ should be more susceptible to situational influences.

Despite the many avenues of future research appearing to emerge, the instrument proposed is far from being ideal for a number of reasons. First, the translation did not encompass the usual back-translation strategy when developing instruments in another language. Second, the sample was limited in the sense that only working women were surveyed. Third, the preliminary scale did not undergo a cross-validation study. Its measurement structure, which has been derived via respecification, may simply be the result of a capitalization on chance effect. A replication using a new sample appears indispensable. Future research may want to optimize the scale by taking these three limitations into account.

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[16] Bratko, D., Bandl, A. & Bosnjak, M. (2007), *Impulzivno kupovanje i model ´velikih pet´ faktora ličnosti [Impulsive buying and the ´Big Five´ factors of personality]*. Paper to be presented at the XXth Croatian Marketing Association (CROMAR) congress, October 25-27, 2007, Rijeka, Croatia.

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APPENDIX

<u>CIB-Scale</u>
(Bosnjak, Bandl & Bratko, 2007;
adapted from Verplanken & Herabadi, 2001)

Pred Vama se nalazi niz tvrdnji o VAŠEM ponašanju i doživljavanju prilikom kupovine.

Pored svake tvrdnje nalazi se ljestvica od jedan do sedam, pri čemu 1 znači da se uopće ne slažete, a 7 da se u potpunosti slažete s iznesenom tvrdnjom.

Molimo Vas da pokušate procjeniti u kojoj se mjeri slažete s svakom pojedinom tvrdnjom i taj stupanj slaganja označite zaokruživanjem odgovarajućeg broja.

Molimo Vas da postavljena pitanja odgovorite iskreno.

	(1): uopće se ne slažem potpuno se slažem: (7)
(IK12) Ponekad ne mogu potisnuti osjećaj želje za stvarima koje vidim u dućanu.	(1)___(2)___(3)___(4)___(5)___(6)___(7)
(IK11) Teško mi je ne kupiti lijepe stvari koje vidim u dućanu.	(1)___(2)___(3)___(4)___(5)___(6)___(7)
(IK2) Obično kupim samo one stvari koje sam namjeravao/la kupiti.	(1)___(2)___(3)___(4)___(5)___(6)___(7)
(IK3) Kada nešto kupim obično to uradim spontano.	(1)___(2)___(3)___(4)___(5)___(6)___(7)
(IK13) Ponekad se osjećam krivim/om nakon što nešto kupim.	(1)___(2)___(3)___(4)___(5)___(6)___(7)
(IK18) Ukoliko vidim nešto novo, poželim to kupiti.	(1)___(2)___(3)___(4)___(5)___(6)___(7)
(IK5) Kupujem samo one stvari koje stvarno trebam.	(1)___(2)___(3)___(4)___(5)___(6)___(7)
(IK1) Obično pažljivo promislim prije nego li nešto kupim.	(1)___(2)___(3)___(4)___(5)___(6)___(7)
(IK4) Većinu svojih kupovina pažljivo isplaniram unaprijed.	(1)___(2)___(3)___(4)___(5)___(6)___(7)

Note. The following items have to be RECODED before analysis: IK1, IK2, IK4, IK5