

---

# Impulsive Consumption: Gender, Personality Traits and Emotions

Marco Giovanni Mariani<sup>1</sup>, Chiara Biselli<sup>2</sup>, Salvatore Zappalà<sup>1</sup>

<sup>1</sup> *Department of Psychology, University of Bologna, Italy*

<sup>2</sup> *Human Resource Psychologist, freelance professional, Italy*

---

✎ **ABSTRACT.** La ricerca indaga la relazione tra l'acquisto impulsivo di capi di abbigliamento, i tratti di personalità e le emozioni degli acquirenti. I partecipanti sono stati 311 consumatori italiani adulti. I risultati hanno mostrato che, per le donne, l'acquisto impulsivo è un mediatore totale tra le emozioni (positive/negative) e la spesa mensile per l'abbigliamento. Invece, per gli uomini, l'acquisto impulsivo è un mediatore solo parziale rispetto alle stesse variabili.

---

✎ **SUMMARY.** *Introduction: This research investigates the relation between impulsive purchases of clothing, personality traits and emotions of purchasers. It is also investigated if impulsive purchases differ across genders. Aim: The model hypothesizes that: impulsive clothing consumption is affected by extroversion, conscientiousness, negative emotions and positive emotions; moreover, impulsive clothing consumption influences monthly clothing expenditure. Method: Participants were 311 Italian adult consumers; data were collected via a structured questionnaire. Structural equation models were used to test the model. Results: Results showed that, for women, impulsive purchase is a full mediator between emotions (positive/negative) and monthly clothing expenditures. Instead, for men, impulsive purchase is a partial mediator between the same variables. Conclusion: Consumers seem to be more prone to purchasing products impulsively when they experience positive consumption-related emotions and less prone when negative emotions are felt.*

**Keywords:** *Impulsive consumption, Gender, Personality, Emotions*

---

## INTRODUCTION

When purchasing a product, consumers not only try to satisfy a purely utilitarian need (e.g. Scarpi, Pizzi & Visentin, 2014), but also look for the “added value” of excitement, amusement, sensory satisfaction and gratification, which are connected to the shopping experience per se.

Research on impulsive consumption has highlighted that shopping is a way to alleviate negative feelings (MacInnis, Patrick & Park, 2006) and the desire to improve one's own mood can increase the probability to buy some product. Impulsive consumption is so common that Mattila and Wirtz (2008) believe that from 27% to 62% of stores purchases are impulsive or unplanned purchases. In addition, some studies show that

gender plays a relevant role in this phenomenon; Tifferet and Herstein (2012), for instance, found that in comparison to men, women report higher level of impulse buying. However, previous studies have not yet examined the relative weight that some determinants of impulsive buying behavior have on buying behaviors of men and women. Thus, the present paper aims to investigate the relationship among impulsive purchase, consumers' personality traits and emotions. It also examines if these associations do differ with respect to consumers' gender. This paper contributes to the existing literature by testing, in a single causal model, a set of predictors of impulsive buying behavior, and checking if these predictors do affect differently the impulsive buying behavior of men and women. Finally, although literature suggests that any item can be purchased on impulse (e.g. Kacen & Lee, 2002), this paper focuses on the impulsive consumption of a specific product, namely clothing. Clothes are one of the most frequent items of impulse shopping (Canadian press, 2012), and many studies on impulsive purchase consider this type of item (e.g. Hulten & Vanyushyn, 2014). In addition, as "beauty" (in terms of aesthetics and style) is considered an "Italian obsession" (Bauer, 2001), this study is conducted in Italy. This "obsession" is an integral part of the self-image and identity of Italians and concerns the importance attributed to clothing and other controllable aspects of external appearance.

## CONCEPTUAL BACKGROUND

### Impulsive consumption

Even if several studies have taken into account impulsive consumption, a shared definition of the impulsiveness concept is not yet available (Lin, Shih & Huang, 2009): Engel and Blackwell (1982) defined it as "a buying action undertaken without a problem previously having been consciously recognized or a buying intention formed prior to entering the store" (p. 552). In the same way, Beatty and Ferrell (1998) described impulsive purchase as "a sudden and immediate purchase with no pre-shopping intentions either to buy the specific product category or to fulfill a specific buying task" (p. 170). The two definitions underline that the purchaser does not intend to buy a product before entering the shop and that satisfying a planned task (for example buying a present for a friend or relative) cannot be considered an impulsive purchase. In addition, the idea of "impulsiveness" implies a spontaneous act that does not consider consequences.

Definitions agree on the fact that an impulsive purchase occurs when individuals buy suddenly, in an occasional way and without reflection (Rook & Fisher, 1995). Previous studies have underlined the relation between a reduced self-control and impulse purchases (Baumeister, 2002) and the reduction of regulatory resources and a stronger urge to buy and actually do spend more money in unanticipated buying situations (Vohs & Faber, 2007). If individuals that tend to spend impulsively do not control their expenses, or the frequency of their expenses, we expect that this behavior influences, and increases, the amount of their expenditures. Thus, we hypothesize the following (Figure 1):

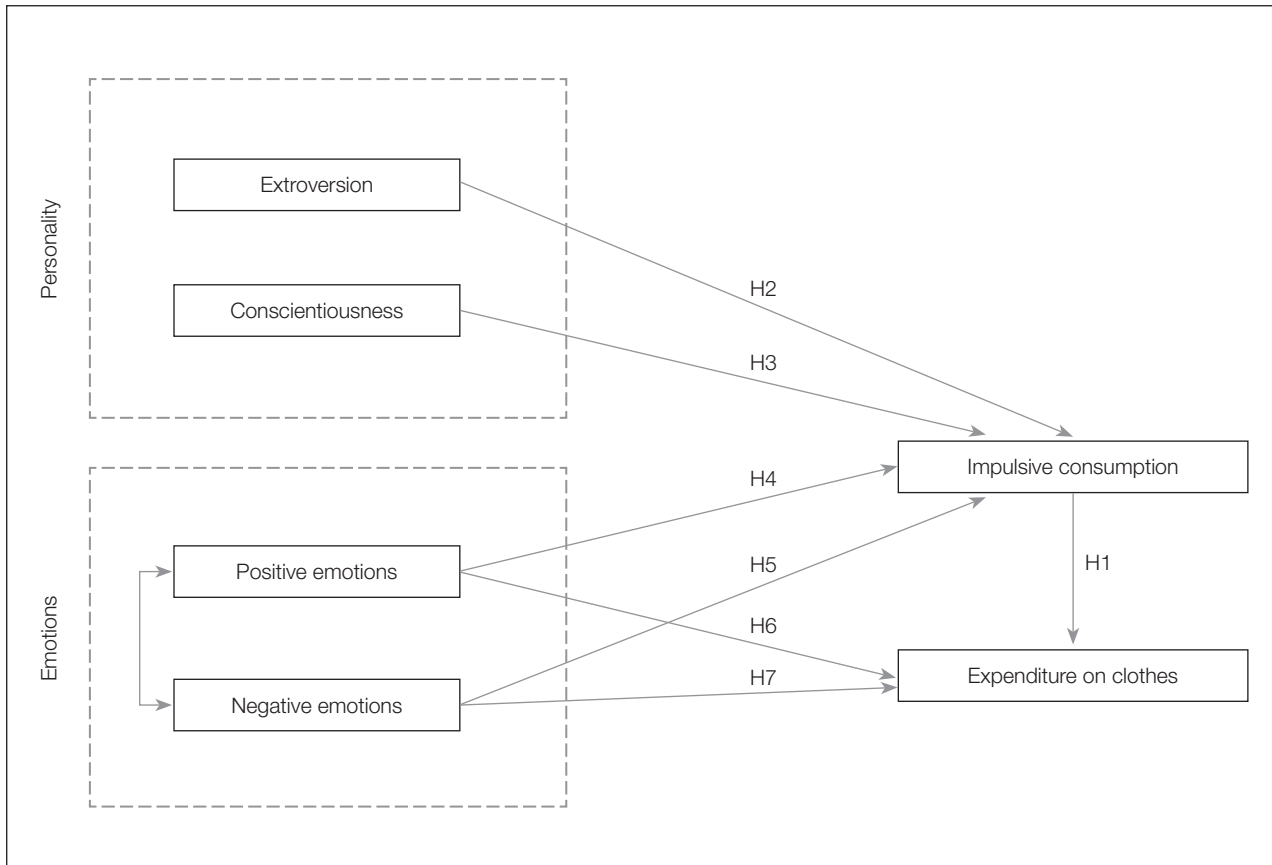
- *Hypothesis 1a*: Impulsive consumption, positively, affects the monthly expenditure on clothes.

Tifferet and Herstein (2012) observed that women reported higher level of impulse buying than men. Similarly, Lin and Lin (2005) and also Lai (2010) showed that female teenagers are more impulsive in their purchases than male teenagers. Other studies suggest that while women tend to buy impulsively more fashion products, men do so for electronics and music ones (Coley & Burgess, 2003). This different behavior is attributed to the fact that, when making purchases, women are more interested in clothes, beauty and accessories than men (Bloch, 1993). Gąsiorowska (2011) highlights that the tendency to impulsive purchases provides women a high level of stimulation that is related to the emotions originated from the purchase process or from owning a new product. On the contrary, the same scholar claims that, for men, the tendency to impulsive purchases has a major instrumental character, which facilitates quick decisions using a reduced level of attention. The tendency to impulsive purchases for men is related to temporal orientation, immediate gratification and the utility that can derive from what is bought. On the other side, using interviews after the purchase and shopping diaries, Herabadi, Verplanken and van Knippenberg, (2009) did not observe any statistically significant difference between men and women in the tendency toward impulsive purchases. However, even if there is some evidence of the different levels of impulsive purchases across genders, at present few studies have examined if the impulsive consumption of men and women has different predictors and outcomes. In other words, we assume that the impulsive purchase behavior is influenced by the same factors regardless of the gender of consumers.

Following this reasoning, we hypothesize the following:

- *Hypothesis 1b*: The effect of impulsive consumption to monthly cloth expenditure is constant across genders.

Figure 1 – The hypothesized model



### Extroversion, conscientiousness and impulsive consumption

Personality characteristics of consumers have been previously considered in literature, because they seem to influence consumers’ purchase style.

The Big Five model, proposed by McCrae and Costa (1990), describes five dimensions of personality (extroversion, agreeableness, conscientiousness, neuroticism and openness to experience), composed in turn by sub-factors called facets. To clarify the nature of impulsivity, Whiteside and Lynam (2001), relying on the five factor model, administered many of the most widely used measures of impulsivity and found four dimensions that well describe the four impulsivity traits of the five factor model. The first dimension is urgency, which refers to the tendency to feel strong impulses, often stimulated by negative feelings. This dimension of impulsivity is associated with the neuroticism

factor dimensions of NEO-PI-R (Costa and McCrae, 1992). The second dimension – (lack of) premeditation – refers to the tendency to think and reflect on the consequences of an action before acting; this dimension was in the same factor of the NEO-PI-R scales of conscientiousness. The Big-Five factor of conscientiousness was associated also with the third dimension of impulsivity, lack of perseverance. Perseverance refers to the ability to remain focused on a task that is becoming boring or difficult. The last dimension is sensation seeking, which incorporates two aspects: 1) the tendency to enjoy and pursue activities that are exciting; 2) openness towards new experiences that can be, or become, dangerous. The sensation seeking dimension was associated to the extroversion factor of the big five model.

In another study, Verplanken and Herabadi (2001) found that impulsive purchase tendency was positively related to extroversion and negatively related to conscientiousness. The typical impulsive purchaser is, in fact, described as an

extroverted individual (Sun, Wu & Youn, 2004) with limited conscientiousness (Mowen & Spears, 1999). Considering that studies consistently show the influence of extroversion and conscientiousness on impulsive buying behavior, we posit the following hypotheses:

- *Hypothesis 2*: Extroversion, positively, affects impulsiveness in purchases (a); this effect is constant across genders (b).
- *Hypothesis 3*: Conscientiousness, negatively, affects impulsiveness in purchases (a); this effect is constant across genders (b).

## Emotions during shopping and impulsive consumption

Literature on affect and social cognition shows that affective states play a major role in how individuals learn, think, remember, take risks and evaluate complex social information (e.g. Berkowitz, Jaffee, Jo & Troccoli, 2000). Emotions and mood are identified as variables that greatly influence many actions, among which is impulsive behavior. Research has highlighted the fact that impulsive consumers experience emotional instability (Mowen & Spears, 1999) and purchase items in an attempt to “regulate or repair” their emotions, particularly negative emotions (Dittmar, Long & Bond, 2007). Even Herabadi et al. (2009) observed that emotions are related to the experience of impulsive purchases.

Previous studies support the idea that shopping involves a vicious circle of emotions (negative emotions before shopping, positive emotions while making purchases and negative emotions after shopping). However, in an ethnography study with 22 young consumers in a northern European country, Saraneva and Sääksjärvi (2008) found that respondents had positive emotions before shopping and a mix of negative and positive emotions during and after the purchase. Negative emotions experienced during the purchase can also influence negatively the impulsive purchase; however, the effects of negative moods on the purchasing behaviour are not so consistent and clear (Clark & Isen, 1982).

Based on the conceptual remarks and empirical results mentioned, we expect that:

- *Hypothesis 4*: Positive emotions during the shopping trip affect positively the impulsive purchase of specific products, in this case of purchasing clothing items (a); this effect is constant across genders (b).

- *Hypothesis 5*: Negative emotions during the shopping trip affect negatively the impulsive purchase of specific products, in this case of purchasing clothing items (a); this effect is constant across genders (b).

Moreover Pollai, Hoelzl and Possas (2010) observed that individuals that buy shoes more frequently experience more positive emotions related to the purchase compared with individuals that purchase shoes less frequently. Thus, if individuals that during the purchase experience more frequently positive emotions, and these emotions are related to a repeated impulsive purchase, then we expect:

- *Hypothesis 6*: Positive emotions during a dress shopping trip strengthen the shopping experience and, making more likely to repeat the clothing purchase, directly affect positively the monthly expenditure on clothes (a). This effect is constant across genders (b).
- *Hypothesis 7*: Negative emotions during a dress shopping trip, weaken the shopping experience and making less probable to repeat the clothing purchase, directly affect negatively the monthly expenditure on clothes (a). This effect is constant across genders (b).

Finally, following Chaudhuri (1998), the model includes a negative correlation between positive and negative emotion indexes.

## METHODOLOGY

### Sample and data collection

This study uses a convenience sample of 311 Italian consumers of whom 58% are women and the average age is 25 years old (min. 20 - max. 35 years; SD 2.71). About 53% of respondents has a university degree and 47% a high school degree; 55% are students and 27% workers. Clothing was considered as enough important by 50% of participants and very important by 20% of them; 60% shopped for clothing once or twice per month and 49% usually purchased clothes in clothes shops and 22% in malls. There is no significant association between gender and the other demographic measures.

Participants spent on average € 80 per month for clothing (min. € 10 - max. € 500; SD € 75.39). Data were collected by means of an online questionnaire investigating experiences on clothing consumption. Participation were recruited from social networks and internet sites often used by university

students and young workers; respondents did not receive any type of incentive or reward.

About the ethical standards for research, the study adhered to the latest version of the Declaration of Helsinki revised in Fortaleza (World Medical Association [WMA], 2013).

## Measurement of variables

The Buying Impulsiveness Scale (BIS), by Rook and Fisher (1995), is a Likert-type scale composed by nine items (e.g. "I bought things without thinking"). Instructions were adapted and participants were asked to answer considering the last clothing purchase. To translate the scale from the original English version into Italian, the following procedure was used: *a*) two experts, familiar with the construct and English language, translated the items into Italian; *b*) the two versions of the experts were compared to produce a single version; *c*) this version was back-translated by an English mother-tongue, that did not know the original items; *d*) the final version of the scale was developed based on the entire translation process. Respondents were asked to answer the nine items referring to the last clothing purchase. With the present sample, confirmatory factor analysis suggests a good construct validity (Table 1) and Cronbach's alpha shows an excellent internal homogeneity ( $\alpha = .91$ )

The Italian version (Chiorri, Bracco, Piccinno, Modafferi & Battini, 2015) of the Ten-Item Personality Inventory (Gosling, Rentfrow & Swann, 2003) was used. The measure refers to the five-factor model of personality. The scale uses a seven-point Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree) and measures five constructs. The version of Chiorri et al. (2015) reached adequate levels in terms of convergent/discriminant validity and in terms

of test-retest reliability. Specifically, in this study only two scales attained a sufficient level of reliability: extroversion (Cronbach alpha of .71) and conscientiousness (Cronbach alpha of .70). We did not plan to use the other scales, however, for completeness, we report that these other scales showed an alpha lower than .60.

Eight words representing four positive and four negative emotion, derived from the scales of Chaudhuri (1998) and Beatty and Ferrell (1998), were used. The four positive emotion are excitement, enthusiasm, pride and delight and the four negative emotion are worry, irritation, distress and disappointment. The items use a 7-point Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree).

To translate the emotion items into Italian the same procedure used for the BIS was implemented. The scale of positive emotion showed a Cronbach's alpha of .91 and the one of negative emotion a Cronbach's alpha of .92. Results of the confirmatory factor analysis show a good construct validity (Table 1).

## Statistical analysis

The psychometric properties of the scales used in the study were analyzed using SPSS 23 to measure Cronbach's alpha and AMOS 23 for the confirmatory factor analysis and structural equation models.

Structural equation models were used to test the multi-group invariance across genders. As suggested in the literature (Byrne, 2001), GFI, AGFI, CFI and RMSEA were adopted to consider the fit of the models. A threshold of .90 of GFI, AGFI and CFI was considered as acceptable and values of .95 or higher as indicative of excellent fit (Hu & Bentler, 1999). For RMSEA, values up to .08 represent reasonable

**Table 1** – SEM: fit indexes of confirmatory factor analysis

|                      | $\chi^2$ | DF | Chi2/df | GFI  | AGFI | CFI  | RMSEA |
|----------------------|----------|----|---------|------|------|------|-------|
| Buying Impulsiveness | 73.39    | 27 | 2.71    | .974 | .946 | .992 | .055  |
| Emotions             | 33.17    | 19 | 1.75    | .948 | .910 | .970 | .077  |

*Legenda.* GFI = Goodness of Fit Index; AGFI = Adjusted Goodness of Fit Index; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation.

errors of approximation (Browne & Cudeck, 1993).

In order to test invariance across genders, firstly the baseline model was tested considering all respondents; then it was tested separately for each group with no invariance constraints and finally the two groups were jointly assessed to see the model fit. This last model was used as a basis for the assessment of more constrained models. The constraints are placed in a sequence of nested models.

To compare the models, we used the  $\chi^2$  score to test the equality constraints (Byrne, 2001). If the difference between the  $\chi^2$  statistics is not statistically significant then statistical evidence shows no cross-group differences between the constrained parameters. If the  $\chi^2$  difference is statistically significant, then there is evidence of cross-group inequality.

## RESULTS

Table 2 shows the descriptive statistics of scales used in this study, and results of ANOVA between groups. Results show that women have significant higher means than men in three measures: Buying Impulsiveness scale ( $F_{(1, 309)} = 13.50$ ,  $p < .001$ ), Positive emotions ( $F_{(1, 309)} = 95.81$ ,  $p < .001$ ) and Monthly clothing expenditure ( $F_{(1, 309)} = 4.25$ ,  $p < .05$ ). On the contrary, men got a significant higher mean than women in Negative emotions index ( $F_{(1, 309)} = 80.63$ ,  $p < .001$ ).

Before conducting the multi-group analysis of structural invariance, the model-data fit and parameter estimates were examined for the entire sample (Model 0 – All participants), for the male group (Model 0 – Men) and for the female group (Model 0 – Women) (see Table 3). Fit indexes were good for the entire sample and for male group and sufficient for the female group.

Since fit indexes were substantially adequate, we went further with the multi-group analysis of structural invariance.

Subsequently, the structure was tested simultaneously across the men and women groups and the parameters were estimated for the two groups at the same time. The fit was good (Model 0 – Multigroup) and so this estimated model was used to provide the baseline value against which all the subsequently specified models were compared. The baseline chi-square for the equal pattern model is 30.23 with 14 d.f. These results indicate that the same pattern of parameters fits the data for each group. All regression structural weights of

the model are significant (for  $p < .05$ ), except those concerning Negative emotions, that did not influence the monthly clothing expenditure in both groups. So we tested Model 1 which did not include this relation. Since the chi-square difference between Model 0 and Model 1 ( $\Delta \chi^2 = 1.20$ ;  $\Delta$  d.f. = 2) was not significant, the more parsimonious model (Model 1) was chosen. Thus, on the basis of this latter result, we can claim that the level of influence of extroversion and conscientiousness on buying impulsiveness does not change in the two samples.

Each regression structural weight of the two personality constructs (extroversion and conscientiousness) on the Buying Impulsiveness Scale (BIS) was forced to be equal across the two groups in Model 2. Model 2 has a good fit. The chi-square difference between Model 2 and Model 1 tests the invariance of structural weights. Since the measurement model appears to be invariant across subgroups ( $p = .76$ ), we can claim that the level of influence of extroversion and conscientiousness on buying impulsiveness does not change in the two samples.

Subsequently, we tested for the invariance of the effect of positive emotions on buying impulsiveness across the two samples. This model (Model 3) has a substantially good fit. So we compared the chi-square of Model 3 with the chi-square of the model 2 with equality imposed constraint across groups: the difference was not significant ( $p = .54$ ) and we chose Model 3 and we claim that the level of influence of positive emotions on buying impulsiveness does not change in the two samples.

In the next model, the invariance, across genders, of the effect of positive emotions on Monthly Clothing Expenditure was tested (Model 3 vs Model 4). Results showed a significant chi-square, so we chose Model 3 and we can assert that the level of influence of positive emotions on the monthly clothing expenditure variable changes in the two samples.

Subsequently, we tested for the invariance of the effect of negative emotions on Monthly Clothing Expenditure across the two samples. When the effect of negative emotions on the monthly clothing expenditure variable was constrained to be equal across genders (Model 5), the fit indices were generally good. The change in the chi-square is significant ( $\Delta \chi^2 = 4.43$ ;  $\Delta$  d.f. = 1) at a level of alpha = .05, so we chose Model 3 and we can assert that the level of influence of negative emotions on the monthly clothing expenditure variable changes in the two samples.

**Table 2** – Descriptive statistics of scales and ANOVA between genders

|         | Entire sample<br>(n = 311) |       | Men<br>(n = 129) |       | Women<br>(n = 182) |       | ANOVA                         |
|---------|----------------------------|-------|------------------|-------|--------------------|-------|-------------------------------|
|         | M                          | SD    | M                | SD    | M                  | SD    |                               |
| Ext.    | 4.32                       | 1.44  | 4.32             | 1.51  | 4.32               | 1.38  | F <sub>1,309</sub> = 1.87     |
| Con.    | 4.86                       | 1.38  | 4.73             | 1.44  | 4.95               | 1.33  | F <sub>1,309</sub> = .03      |
| Pos. E. | 3.53                       | 1.53  | 2.64             | 1.07  | 4.15               | 1.50  | F <sub>1,309</sub> = 95.81*** |
| Neg. E. | 2.21                       | 1.25  | 2.89             | 1.53  | 1.73               | .68   | F <sub>1,309</sub> = 80.63*** |
| BIS     | 2.49                       | .84   | 2.29             | .71   | 2.64               | .90   | F <sub>1,309</sub> = 13.50*** |
| MCE (€) | 81.12                      | 75.39 | 70.66            | 75.88 | 88.51              | 74.37 | F <sub>1,309</sub> = 4.25*    |

Note. Ext. = Extroversion; Con. = Conscientiousness; Pos. E. = Positive Emotions; Neg. E. = Negative Emotions; BIS = Buying Impulsiveness Scale; MCE = Monthly Clothing Expenditure in Euro.

\*  $p < .05$ ; \*\*\*  $p < .001$

**Table 3** – SEM: fit indexes of path analysis

|                             | $\chi^2$ | DF | Chi2/df | GFI  | AGFI | CFI   | RMSEA | Nested model   | $\Delta\chi^2$<br>( $\Delta$ DF) | Significance level |
|-----------------------------|----------|----|---------|------|------|-------|-------|----------------|----------------------------------|--------------------|
| Model 0<br>All participants | 13.31    | 7  | 1.90    | .986 | .958 | .969  | .054  |                |                                  |                    |
| Model 0<br>Men              | 8.16     | 7  | 1.16    | .982 | .945 | .979  | .036  |                |                                  |                    |
| Model 0<br>Women            | 21.24    | 7  | 3.03    | .971 | .899 | .912  | .083  |                |                                  |                    |
| Model 0<br>Multi-group      | 30.23    | 14 | 2.16    | .969 | .908 | .922  | .061  |                |                                  |                    |
| Model 1                     | 31.43    | 16 | 1.96    | .968 | .916 | .925  | .056  | 0 vs. <u>1</u> | 1.20 (2)                         | .54                |
| Model 2                     | 31.98    | 18 | 1.78    | .968 | .925 | .932  | .050  | 1 vs. <u>2</u> | .55 (2)                          | .76                |
| Model 3                     | 32.35    | 19 | 1.70    | .967 | .928 | .935  | .048  | 2 vs. <u>3</u> | .37 (1)                          | .54                |
| Model 4                     | 41.22    | 20 | 2.06    | .959 | .914 | .897  | .048  | <u>3</u> vs. 4 | 8.87 (1)                         | .00                |
| Model 5                     | 36.78    | 20 | 1.79    | .964 | .924 | .924  | .051  | <u>3</u> vs. 5 | 4.43 (1)                         | .03                |
| Model 6                     | 33.47    | 20 | 1.57    | .966 | .929 | .9235 | .047  | 3 vs. <u>6</u> | 1.12 (1)                         | .28                |

Legenda. GFI = Goodness of Fit Index; AGFI = Adjusted Goodness of Fit Index; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation.

Note. Model 1= Without the effect of Neg.E. on MCE; Model 2 = Ext. → BIS and Con. → BIS are invariant across the genders; Model 3 = Pos.E. → BIS is invariant across the genders; Model 4 = Pos.E. → MCE is are invariant across the genders; Model 5 = Neg.E. → MCE is are invariant across the genders; Model 6 = BIS → MCE is are invariant across the genders. In the “Nested model” column, the accepted model is underlined.

Afterwards, we tested for the invariance of the effect of buying impulsiveness on the monthly clothing expenditure variable across the two samples. Also, this model (Model 6) shows a good fit. We compared the chi-square of Model 3 with the chi-square of the model with equality imposed constraint across groups. The difference ( $\Delta \chi^2 = 1.12$ ;  $\Delta$  d.f. = 1) was not significant, so we chose Model 6 and we can assert that the level of influence of buying impulsiveness on monthly clothing expenditure does not change in the two samples.

Model 6, which we accepted, explains 27% of the Buying Impulsiveness Scale variance in the group of men and 29% in the group of women; moreover, the independent variables explain 38% of the monthly clothing expenditure variance for male participants and 17% of the monthly clothing expenditure variance for female participants. Table 4 shows the specific standardized regression coefficients of the Model 6. They are all significant for  $p < .001$ , except, for women, the effect of positive and negative emotions on monthly clothing expenditures.

## DISCUSSION AND CONCLUSIONS

The main aim of the present research was to study the impulsive purchase of clothing, examining if personality traits and emotions of purchasers are associated to that behavior. Particular attention has been paid to gender differences. The present study is, at our knowledge, the first study that, taking into account gender, examines the impulsive clothing purchasing in an Italian sample.

The explained variance of the Buying Impulsiveness Scale is more than sufficient. Buying impulsively seems to influence the monthly clothing expenditures of the two genders, supporting **H1b**. These results are in line with previous research that highlighted that the amount of money that a person thinks to be able to spend is correlated with the impulsive purchase behavior, which functions as a facilitator in the purchase of the desired object (Beatty & Ferrell, 1998).

In our research, negative emotions affect the monthly clothing expenditures only of men (**H7a**). Following Baumeister (2002), we think that when people have to choose whether to save some money or to spend it to feel better, emotional distress can move the decision in favor of the purchase. Emotional distress, therefore, contributes to putting down self-control: Baumeister (2002) highlighted

that, indeed, when people experience negative emotions, the goal to feel better has precedence over the self-control goals and therefore people tend much more to make purchases which help them achieve the goal that has become the priority. Beatty and Ferrell (1998), examining this aspect, too, discovered that available resources tend to influence the mood of a person: a lack of money produces negative feelings, while perception of the availability of money produces positive feelings and has a positive influence on the impulsive purchase behaviour (Beatty & Ferrell, 1998). However, this study suggests a gender difference: negative emotions do not seem to affect the monthly clothing expenditure of women. The explained variance of the monthly clothing expenditure, although good for the group of men, is sufficient for the group of women. In addition, confirming **H6a**, positive emotions have an effect on monthly clothing expenditures; however, this is valid only for men but not for women, thus disconfirming **H6b**.

Hypotheses **H2a** and **H3a**, which suggests that extroversion and consciousness, respectively positively and negatively, affect impulsive purchases are supported. These results confirm previous studies which observed a positive relationship between extroversion and impulsive purchases (Badgaiyan & Verma, 2014; Sun et al., 2004; Verplanken & Herabadi, 2001) and a negative relationship between conscientiousness and impulsive purchases (Mowen & Spears, 1999; Verplanken & Herabadi, 2001). Our study contributes to this literature showing that these relationships are invariant across genders, thus supporting **H2b** and **H3b**.

This study confirms that emotions are an important component of consumer responses. In fact, as **H4** suggested, positive emotions affect impulsive purchases and this effect is invariant across genders, thus **H4b** is supported too. These results are not surprising, because several authors (e.g. Isen, 1984) highlighted that positive emotions drive people “to reward themselves” more generously and to feel free to act and to execute behaviors that maintain this mood. Park, Kim & Forney (2006), considering specifically the impulsive purchase behavior of consumers, observed a positive relationship between positive emotions and impulsivity in purchases. It is instead unclear if negative emotions experienced during purchases facilitate the enactment of a proactive behaviour (like the purchase one) or not (Clark & Isen, 1982). In our research, **H5** hypothesis is not supported, and results suggest that negative emotions do not influence buying impulsiveness either for men or for women.



**Table 4** – Results of the path model number 6 (N = 311)

| Standardized Regression coefficients      | Men     | Women   |
|---|---------|---------|
| Extroversion → Impulsive consumption      | .18***  | .15***  |
| Conscientiousness → Impulsive consumption | -.22*** | -.16*** |
| Positive emotions → Impulsive consumption | .44***  | .49***  |
| Positive emotions → MCE                   | .36***  | .04     |
| Negative emotions → MCE                   | -.19*** | -.05    |
| Impulsive consumption → MCE               | .31***  | .38***  |
| Standardized Covariance                   |         |         |
| Positive emotions ← → Negative emotions   | -.12*   | -.21*** |

Note. MCE = Monthly Clothing Expenditure. \*  $p < .05$ ; \*\*\*  $p < .001$ .

Our findings suggest several practical implications, especially for marketers. Firstly, we affirm that consumers seem to be more open to impulsive purchases when they experience positive consumption-related emotions. Therefore, advertising and sale strategies should try to stimulate positive emotions linked to the purchase of specific goods and services. At the same time, one should try to prevent negative consumption-related emotions and this is particularly important for men because, as our research highlighted, men tend to spend less money when they experience negative emotions during the transaction, like distress, anxiety, irritation and discontent. It is to notice that we are talking about emotions linked to a low sense of agency, that is, emotions linked to vulnerability and to a lower control of the situation (e.g. Wiggins, 1982) and that, for this reason, are considered uncorrelated with the male stereotype. Therefore, it may be important to avoid, during the shopping, feelings that male consumers may consider as socially undesirable emotional manifestations. However, to control their behaviors, impulsive consumers should try to procrastinate the purchasing decision (Mariani & Ferrari, 2012).

This study presents some limitations. The participants are a convenience sample of young Italian adults, mainly university students. Therefore, further research should control whether

similar results are observed in subjects that differ for ages, life situation and role, from participants of this study. At the same time, cross-cultural research should clarify whether what observed in this study is more peculiar of Italian consumers or whether it is, on the contrary, generalizable to other cultural contexts. Besides, in our study we asked subjects to remember the emotions felt during their last clothing purchase. It would be interesting to examine the emotions felt before and after having purchased the product, in order to investigate in a more punctual way the nexus of the behaviour of impulsive purchases. Lastly, clothing was the product selected for this research. Future research could use other products than clothing and could study the impact of impulsive purchases in online consumption (Mariani & Zappalà, 2012).

In conclusion, our results show that impulsive consumption fully mediates between positive emotions and monthly clothing expenditure only for female participants. A partial mediation model appears for male participants, because emotions (positive and negative) have also a direct effects on impulsive purchase and on monthly clothing expenditure. This result contributes to support the importance that emotions play in consumer behavior as proposed by theoretical models (Bagozzi, Gopinath & Nyer, 1999).

## References

- BADGAIYAN, A.J. & VERMA, A. (2014). Intrinsic factors affecting impulsive buying behaviour-evidence from India. *Journal of Retailing and Consumer Services*, 21, 537-549. DOI:10.1016/j.jretconser.2014.04.003.
- BAGOZZI, R.P., GOPINATH, M. & NYER, P.U. (1999). The role of emotions in marketing. *Journal of the Academy of Marketing Science*, 27, 184-206.
- BAUER, B. (2001) Commentary 2. In M. Nasser, M.A. Katzman & R.A. Gordon (Eds.), *Eating disorders and cultures in transition* (pp. 143-147). New York: Brunner-Routledge.
- BAUMEISTER, R.F. (2002) Yielding to temptation: Self-control failure, impulsive purchasing and consumer behavior. *Journal of Consumer Research*, 28, 670-676.
- BEATTY, S.E. & FERRELL, M.E. (1998). Impulse buying: Modeling its precursors. *Journal of Retailing*, 74, 169-191.
- BERKOWITZ, L., JAFFEE, S., JO, E. & TROCCOLI, B.T. (2000). On the correction of feeling induced judgmental biases. In J.P. Forgas (Ed.), *Feeling and thinking: The role of affect in social cognition* (pp. 131-152). New York: Cambridge University Press.
- BLOCH, P. (1993). Involvement with adornments as leisure behavior: An exploratory study. *Journal of Leisure Research*, 25, 245-262.
- BROWNE, M.W. & CUDECK, R. (1993). Alternative ways of assessing model fit. In K.A. Bollen & J.S. Long (Eds.), *Testing structural equation models* (pp. 136-162). Beverly Hills, CA: Sage.
- BYRNE, B.M. (2001). *Structural equation modeling with AMOS: Basic concepts, applications, and programming*. Mahwah, NJ: Lawrence Erlbaum Associates.
- CANADIAN PRESS (2012). *Canadians Spend \$3,720 a Year on Impulse Buys, Survey Finds*. <<http://www.cbc.ca/news/business/story/2012/09/25/bmo-impulse-shopping-survey.html>>.
- CHAUDHURI, A. (1998). Product class effects on perceived risk: The role of emotion. *International Journal of Research in Marketing*, 15, 157-168. (2015). Psychometric properties of a revised version of the ten item personality inventory. *European Journal of Psychological Assessment*, 31, 109-119. DOI:10.1027/1015-5759/a000215.
- CHIOU, J.S. (2001). Horizontal and vertical individualism and collectivism among college students in the United States, Taiwan and Argentina. *Journal of Social Psychology*, 141(5), 667-678.
- CLARK, M.S. & ISEN, A.M. (1982). Toward understanding the relationship between feeling states and social behavior. In A. Hastorf & A. Isen (Eds.), *Cognitive social psychology* (pp. 73-108). New York: Elsevier.
- COLEY, A. & BURGESS, B. (2003). Gender differences in cognitive and affective impulse buying. *Journal of Fashion Marketing and Management*, 7, 282-95.
- COSTA, P.T. & McCRAE, R.R. (1992). *Revised NEO personality inventory manual*. Odessa, FL: Psychological Assessment Resources.
- DITTMAR, H., LONG, K. & BOND, R. (2007). When a better self is only a button click away: Associations between materialistic values, emotional and identity-related buying motives, and compulsive buying tendency online. *Journal of Social and Clinical Psychology*, 26, 334-361.
- ENGEL, J. & BLACKWELL, R. (1982). *Consumer behavior*. Dryden Press, Chicago.
- GAŚIOROWSKA, A. (2011). Gender as a moderator of temperamental causes of impulse buying tendency. *Journal of Customer Behaviour*, 10, 119-142.
- GOSLING, S.D., RENTFROW, P.J. & SWANN, W.B. Jr. (2003). A very brief measure of the Big Five personality domains. *Journal of Research in Personality*, 37, 504-528.
- HERABADI, A.G., VERPLANKEN, B. & van KNIPPENBERG, A. (2009). Consumption experience of impulse buying in Indonesia: Emotional arousal and hedonistic considerations. *Asian Journal of Social Psychology*, 12, 20-31.
- HU, L.T. & BENTLER, P.M. (1999). Fit indices in covariance structure modeling: Sensitivity to underparameterized model misspecification. *Psychological Methods*, 3(4), 424-453.
- HULTÉN, P. & VANYUSHYN, V. (2014). Promotion and shoppers' impulse purchases: the example of clothes. *Journal of Consumer Marketing*, 31, 94-102.
- ISEN, A. (1984). The influence of positive affect on decision-making and cognitive organization. In T. Kinnear (Ed.), *Advances in consumer research* (Vol. 11, pp. 534-537). Ann Arbor, Mi: Association for Consumer Research.
- KACEN, J.J. & LEE, J.A. (2002). The influence of culture on consumer impulsive buying behavior. *Journal of Consumer Psychology*, 12, 163-176.
- LAI, C.-W. (2010). How financial attitudes and practices influence the impulsive buying behavior of college and university students. *Social Behavior and Personality*, 38, 373-380.
- LIN, C.-H. & LIN, H.-M. (2005). An exploration of Taiwanese adolescents' impulsive buying tendency. *Adolescence*, 40, 215-223.
- LIN, S.P., SHIH, H.C. & HUANG, Y.C. (2009). Emotional states before and after impulsivity. *Social Behavior and Personality: An International Journal*, 37, 819-824.

- MacINNIS, D.J., PATRICK, V.M. & PARK, C.W. (2006). Looking through the crystal ball: The role of affective forecasting and misforecasting in consumer behaviour. *Review of Marketing Research*, 2, 43-79.
- MARIANI, M.G. & FERRARI, J.R. (2012). Adult inventory of procrastination scale (AIP): A comparison of models with an Italian sample. *TPM - Testing, Psychometrics, Methodology in Applied Psychology*, 19(1), 3-14. DOI:10.4473/TPM19.1.1.
- MARIANI, M.G. & ZAPPALÀ, S. (2012). Risk perception in online shopping. In S. Zappalà & C. Gray (Eds.), *Impact of E-Commerce on Consumers and Small Firms*. London: Ashgate.
- MATTILA, A.S. & WIRTZ, J. (2008). The role of store environmental stimulation and social factors on impulse purchasing. *Journal of Services Marketing*, 22, 562-567.
- MCCRAE, R.R. & COSTA, P.T. Jr. (1990). *Personality in adulthood*. New York: Guilford Press.
- MOWEN, J. & SPEARS, N. (1999). Understanding compulsive buying among college students: A hierarchical approach. *Journal of Consumer Psychology*, 8, 407-425.
- PARK, E.J., KIM, E.Y. & FORNEY, J.C. (2006). A structural model of fashion-oriented impulse buying behavior. *Journal of Fashion Marketing and Management*, 10, 433-446.
- POLLAI, M., HOELZL, E. & POSSAS, F. (2010). Consumption-related emotions over time: Fit between prediction and experience. *Marketing Letters*, 21, 397-411.
- ROOK, D.W. & FISHER, R.J. (1995). Normative influences on impulsive buying behavior. *Journal of Consumer Research*, 22, 305-313.
- SARANEVA, A. & SÄÄKSJÄRVI, M. (2008). Young compulsive buyers and the emotional roller-coaster in shopping. *Young Consumers*, 9, 75-89.
- SCARPI, D., PIZZI, G. & VISENTIN, M. (2014). Shopping for fun or shopping to buy: Is it different online and offline? *Journal of Retailing and Consumer Services*, 21, 258-267. DOI:10.1016/j.jretconser.2014.02.007.
- SUN, T., WU, G.M. & YOUN, S. (2004). Psychological antecedents of impulsive & compulsive buying: A hierarchical perspective. In SCP (Society for Consumer Psychology), *Proceedings of the Society for Consumer Psychology 2004 Winter Conference*. San Francisco, California, 19-21 February 2004. San Francisco, CA. [WWW document]. URL <http://www.myscp.org/pdf/SCP2004Proceedings.pdf> (accessed on 19th January 2011).
- TIFFERET, S. & HERSTEIN, R. (2012). Gender differences in brand commitment, impulse buying, and hedonic consumption. *Journal of Product & Brand Management*, 21, 176-182.
- VERPLANKEN, B. & HERABADI, A. (2001). Individual differences in impulse buying tendency: Feeling and no thinking. *European Journal of Personality*, 15, S71-S83.
- VOHS, K.D. & FABER, R.J. (2007). Spent resources: Self-regulatory resource availability affects impulse buying. *Journal of consumer research*, 33(4), 537-547.
- WHITESIDE, S.P. & LYNAM, D.R. (2001). The Five Factor Model and impulsivity: Using a structural model of personality to understand impulsivity. *Personality and Individual Differences*, 30, 669-689.
- WIGGINS, J.S. (1982). Circumplex models of interpersonal behavior in clinical psychology. In P.C. Kendall & J.N. Butcher (Eds.), *Handbook of research methods in clinical psychology*. New York: Wiley.
- WORLD MEDICAL ASSOCIATION [WMA] (2013). World Medical Association Declaration of Helsinki ethical principles for medical research involving human subjects. *Journal of the American Medical Association*, 310, 2191-2194. DOI: 10.1001/jama.2013.281053.