# Is non-variety boring? The perception of consumers who incorporate variety or non-variety in their consumer choices 

Katarzyna Stasiuk ${ }^{1} \cdot$ Katarzyna Bochyńska $^{2} \cdot$ Paulina Śliwińska $^{2}$

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#### Abstract

Previous research has shown that self-presentation could be a relevant motive in explaining variety-seeking behavior. Individuals anticipate that sticking to a limited range of one's favorites would make a negative impression on others, and others might conclude that they are boring or narrow-minded (Ariely and Levav Journal of Consumer Research, 27, 279-290, 2000; Ratner and Kahn The Journal of Consumer Research, 29, 246-257, 2002). In our research, we wanted to investigate this lay assumption. We also hypothesized the moderating role of a consumer's gender. The results of study $1(N=211)$ confirmed that incorporating variety in consumer behavior may be a cue for social perception. Consumers who preferred non-variety in consumer choices were evaluated as less socially attractive than those who preferred variety. However, female consumers who preferred variety were evaluated as less responsible. These results were replicated in study $2(N=276)$. The study also revealed the mediational role of the evaluation of a consumer's predictability in the relationship between her variety seeking and social attractiveness. Study 2 also showed the moderating role of participant gender in the evaluation of a consumer's responsibility. The female consumer who incorporated variety in her consumer choices was evaluated as less responsible, but only when she was described as a mother and wife and only by female participants.


Keywords Variety seeking • Social perception • Self-presentation motive • Predictability • Gender stereotypes

Variety-seeking behavior, defined as the tendency for an individual to switch away from the item consumed on the last occasion (Givon 1984; Kahn et al. 1986), is considered to be an important issue in the field of consumer behavior. Ratner and Kahn (2002) indicated that consumers often choose considerable amounts of variety when allowed to select more than one item from a choice set, even when they are given the option of repeating the consumption of favored items. Variety is often chosen by consumers, even though they obtain less pleasure from the switch than they would have from a repeat (Tang and Chin 2007; Ratner et al. 1999). Researchers have discussed several motives for variety seeking to explain behavior from both a marketing and psychological perspective. Psychological explanations concentrate on individual factors such as satiation, need for stimulation, and uncertainty about future preferences.

[^0]Some researchers also assume that variety-seeking behavior can be connected to self-presentation motives. Previous research indicates that in some cases consumers incorporate more variety into their choices because they expect to be evaluated more favorably as a result (Ratner and Kahn 2002; Ariely and Levav 2000). Despite the attention devoted to this topic, some important issues still merit investigation. Among them is the question of whether and when those who seek variety are in fact evaluated favorably by others. Consequently, the purpose of the present studies is to investigate whether variety or non-variety behavior may create such an impression in the eye of the beholder.

## Theoretical Background

Previous research suggests that different factors encourage consumers to include variety in their choices over time. Kahn (1995) reported three main motivating factors for varietyseeking behavior. The first reason why consumers seek variety refers to internal or personal motivation. It is based on the assumption that each individual seeks to maintain an optimal level of environmental stimulation, which is determined by situationor stimulus-specific elements, such as novelty, surprise, change,
ambiguity, complexity, incongruity, and uncertainty (Michaelidou 2012). Consumers who reach an optimal level of an attribute feel satiated, which could lead to choosing a different attribute on the next occasion. Alternatively, current choices could satisfy consumers, but they are looking forward to novelty for the fun or thrill. This allows consumers to choose among familiar items or switch to new items to satisfy a desire for novelty or complexity in brand consumption.

The second motivating factor for variety seeking is external impact. The variety-seeking behavior occurs here in response to changing situations, such as price changes (Gonul and Srinivasan 1996), introduction of a new product, and the marketing mix elements (Tang and Chin 2007).

The third factor triggering variety-seeking behavior is future preference uncertainty (Pessemier 1978). In this case, consumers seek variety to have a portfolio of options as a protection against future uncertainties or to hedge their continued interest in favorite options. The consumer expresses variety-seeking behavior not because of the utility of diversity per se, but because of the uncertainty about what future consumer options and preferences will be (Kahn 1995).

Recent research suggests that another relevant motive in explaining variety-seeking behavior can be selfpresentation - consumers use consumption to show others what kind of lifestyle they have and who they are (Ariely and Levav 2000; Souiden et al. 2011; Ratner and Kahn 2002). To achieve this goal, consumers sometimes make consuming decisions other than those they would privately favor when they expect others will form impressions of them based on the decisions made. The individuals display variety seeking behavior even when it means switching away from favorite items because they expect varied behavior to be evaluated favorably by others (Ariely and Levav 2000; Ratner and Kahn 2002).

Ariely and Levav (2000) conducted experiments showing that consumers' choices made in a group context differ systematically from those made individually. In one of the studies, guests in a restaurant were offered free samples of four different beers. In the first condition, typical of a normal ordering situation, guests indicated to the waiter their choice one by one. In the second condition, guests were asked to mark their choice on an individual menu. The results of the study showed that variety seeking was significantly higher in the first (collective) condition than in the second (independent) condition. Ratner and Kahn (2002) have also demonstrated that people are more prone to incorporate variety into their decisions when they expect others to evaluate their choices. In one of their experiments, participants were given the option to choose a set of five pieces of candy and to take them home. In the private condition, they were assured that no one else would see their picks. In public conditions, participants were told that the other person would evaluate how interesting or how rational their decision was. After this instruction,
participants made their decisions and subsequently were asked how they would expect others to evaluate their choices. The results of the study showed significant correlation between the number of different types of candy in a composed set and anticipated evaluation of their decisions. The more variety consumers incorporated into their set of candies, the more they expected to be evaluated as interesting and creative.

The results of these studies confirmed the assumption that individuals anticipate that sticking to a limited range of one's favorites would make a negative impression on othersothers might conclude that they are dull, boring, or narrowminded. In contrast, individuals expect that choosing more variety would allow them to present themselves as openminded, creative, and more interesting. However, the question may arise as to whether people are right in their predictions; in other words, do others use variety or non-variety behavior as a cue for forming impressions about the consumer's individual traits and about her/his social attractiveness? Some evidences from previous research may indirectly confirm this assumption (e.g. Etkin and Mogilner 2016; Kim and Drolet 2003; Sheldon and Lyubomirsky 2012). Happiness researchers have speculated that variety across people's experiences may increase their happiness. Jacobs Bao and Lyubomirsky (2013) even named the variety "the spice of relationship" and suggest that increasing variety in a relationship may help increase well-being and decelerate adaptation. In addition, variety seeking is also socially perceived to be normative, especially in individualistic cultures (Kim and Drolet 2003). According to Ratner and Kahn (2002) those who follow this "consumption norm" are viewed more positively than those who do not, and therefore most individuals seek to vary their behavior to follow this implicit social rule. Taking this into account our study shifted the focus from the variety or non-variety preference holder to the observer and to the conclusions drawn by the observer on the basis of information about other consumers' preferences.

## Tell me What you Consume, and I Will Tell you What Kind of Person you Are

There has been extensive research in the field of consumer behavior demonstrating that observers readily make personal judgments based on knowledge of the targets' purchase decisions. One of the earliest such projects was the widely cited study of Mason Haire (1950), which used the method of a shopping list to investigate the perception of women who purchased instant coffee versus traditional ground coffee. The study revealed that compared to observers who observed a list containing drip ground coffee, those who observed a list containing instant coffee were more likely to describe the woman who wrote the list as lazy, a poor planner, and a bad housewife. A later study also used the shopping list methodology, this time focusing on the perception of buyers of
condoms (Dahl et al. 2005). The findings showed that condom purchase led to observers' beliefs that the purchaser was both a confident person and engaged in a negative lifestyle.

Previous research also found some moderating factors for the relationship between the consumer's buying behavior and his/her perception by others. Shavitt and Nelson (1999) showed that different products may have differential implications for the perception of their users. In their studies, some products appeared to communicate more dispositional information than others did. Users of social-identity and multiplefunction products (engaging both utilitarian and socialidentity functions) were primarily described in terms of their traits, interests, and activities. In contrast, users of utilitarian products were described primarily in terms of their productrelated needs and demographic characteristics. In turn, Baran et al. (1989) showed that people made judgments of a person's responsibility and character based on his/her gender and the purchase of various brands was perceived as practical and upscale. Men who bought an upscale brand were considered more responsible than women who did so. The relationship of gender and brand was also crucial for evaluating general goodness or character. The lowest means were for women who bought only upscale brands, and the highest for women who bought only a generic brand. The results were opposite for men: those who bought only generic brands were evaluated the lowest and those who bought only upscale brands were evaluated the highest (Baran et al. 1989). These studies confirmed the assumption that people may use consumer behavior to infer individual characteristics of others and that this relationship may be moderated by some factors connected with the product's category (e.g., function category) or with a consumer characteristic (e.g., gender). The aim of our research was to investigate if incorporating variety or non-variety in consumer choices of multiple-function products and services may influence the evaluations of these consumers by other people. Based on the previous research, we assumed that the consumers incorporating variety in their consumer choices would be perceived as more interesting and socially attractive than consumers who did not incorporate variety. Additionally, we wanted to explore the role of the consumer's gender as a moderating variable in the relationship between the level of variety seeking displayed by specific consumers and their perception by others.

## Study 1

## Methodology

## Participants and Design

Analyses were performed on a sample consisting of 211 participants (men 120, women 70, 21 participants did not indicate
gender) aged 18 to 23 years. The mean age of our participants was $20.67(S D=1.12)$. The participants were randomly assigned to one of two conditions for variety in consumer choices (variety choices vs. non-variety choices) and two conditions for consumer gender (female vs. male). This study utilized a between-participants factorial design.

## Pilot Study

Prior to the experiment, we conducted a pilot test to identify the traits that can be ascribed to consumers who seek variety or make repetitive choices. The procedure was based on an exploratory study by Ratner and Kahn (2002). Twenty undergraduates listed traits that they associate with someone who either did or did not incorporate variety into their consumer choices. We chose the traits that appeared most frequently (indicated by at least 10 participants): boring, interesting, responsible, emotional, rational, traditional, and modern. We asked the students to evaluate these traits on a 7-point bipolar scale (from -3 , very negative, to 3 , very positive). Five traits were evaluated positively: responsible ( $\mathrm{M}=2.4, \mathrm{SD}=1.35$ ), rational $(\mathrm{M}=2.3, \mathrm{SD}=.86)$, interesting $(\mathrm{M}=2.0, \mathrm{SD}=1.07)$, modern $(\mathrm{M}=1.55, \mathrm{SD}=.99)$, and traditional $(\mathrm{M}=.80, \mathrm{SD}=$ 1.23). Three traits were evaluated negatively: irresponsible ( $\mathrm{M}=-2.4, \mathrm{SD}=.75$ ), boring $(\mathrm{M}=-1.5, \mathrm{SD}=1.02)$, and emotional $(\mathrm{M}=-.15, \mathrm{SD}=1.42)$. Then, we asked four independent judges to arrange these traits into Osgood's semantic scales. The scales were: boring-interesting, irresponsible-responsible, traditional-modern, emotional-rational.

## Procedure

The study was described to the participants, who were informed that the study was anonymous and nonobligatory and that they could resign at any moment. Subsequently, their verbal consent was obtained. Participation in the study was voluntary. Three interviewers recruited participants in the dormitories at two academic institutions. Participants then met the interviewer in a convenient setting (e.g., university classroom or dormitory) where they completed the paper-and-pencil questionnaire on their own. Each questionnaire included a description of a consumer. Dependent of the condition of the study, the described consumer was a woman named Ann, or a man named Paul, with preference for variety or non-variety in their choices of products or services. In the non-variety condition, the participants read that Ann or Paul lives with a girlfriend/boyfriend; likes spending holidays always in the same seaside village; has an old Toyota car, is satisfied with this brand, and wants to buy new one, also Toyota; she regularly visits the Italian restaurant and usually orders one of her two favorite meals; and has three favorite clothing shops and usually buys the same brands of clothing.

In the variety condition, the participants read that Ann or Paul prefers to spend holidays in different seaside villages; has an old Toyota car, and wants to buy new car, is satisfied with Toyota, but wants to try another brand; likes to visit various restaurants and order various meals; and likes to visit various clothing shops and change the brands purchased.

After reading the text, participants were asked to evaluate $\mathrm{Ann} / \mathrm{Paul}$ on the four dimensions that were chosen in the pilot study. The participants were also asked two questions using a 7-point Likert scale. The first question was a manipulation check: Do you think that Ann's/Paul's choices are varied? The second question aimed to estimate the social attractiveness of a consumer who incorporates variety or non-variety in her/his consumer choices (Would you like to have a friend like Ann/Paul?).

## Results and Discussion

## Manipulation Check

To check the manipulation, we performed ANOVA on the perceived variety in Ann's/Paul's choices as a function of manipulated variety in their choices of products and services. The consumer who was presented as choosing different places for holidays, different brands, different restaurants, and different food was perceived as incorporating more variety $(\mathrm{M}=5.0, \mathrm{SD}=1.58)$ than the one whose choices were repetitive $(\mathrm{M}=2.3, \mathrm{SD}=1.46), p<001$, $\eta_{p}^{2}=.44$. Effect size for this effect was large effect size under Cohen's guidelines (Cohen 1988), and showed that a $44 \%$ of variance was accounted for by description of the consumer as variety seeker (or non variety seeker).

## Evaluation of the Consumer Who Prefers/Does Not Prefer Variety in his/her Consumer Choices

To analyze the data, we used a $2 \times 2$ ANOVA (variety/ non-variety by consumer's gender), which yielded the main effects of the variety condition for the dimensions: traditional/modern, $\mathrm{F}_{(1,203)}=27.62, p<001, \eta_{\mathrm{p}}^{2}=.12$, effect size for this effect was large effect size under Cohen's guidelines (Cohen 1988), and boring/interesting, $\mathrm{F}_{(1,203)}=13.39, p<.001, \eta_{\mathrm{p}}^{2}=.06$; emotional/rational, $\mathrm{F}_{(1,203)}=9.92, p=.002, \eta_{\mathrm{p}}^{2}=.05$; social attractiveness: $\mathrm{F}_{(1,203)}=24.14, p=.001, \eta_{\mathrm{p}}^{2}=.05$ (medium effect sizes; Cohen 1988). The participants declared that they would prefer to have a friend who incorporated more variety into her/his choices of goods and services $(M=4.67$, $S D=1.56$ ) over one who did not do so ( $M=4.02$, $\mathrm{SD}=1.45$ ). The consumers who preferred variety were perceived as more interesting ( $\mathrm{M}=4.44, \mathrm{SD}=1.74$ ) and more modern $(\mathrm{M}=5.32, \mathrm{SD}=1.52)$, but less rational ( $\mathrm{M}=4.50, \mathrm{SD}=1.52$ ), than those who did not prefer
variety (respectively: $\mathrm{M}=3.55, \mathrm{SD}=1.75 ; \mathrm{M}=4.05$, $\mathrm{SD}=2.04 ; \mathrm{M}=5.20, \mathrm{SD}=1.65$ ).

The analysis revealed two-way interaction effects for the dimension irresponsible/responsible: $\mathrm{F}_{(1,203)}=3.93, p=.049$, $\eta_{p}^{2}=.019$. The post hoc test showed significant differences only for the female consumer (Fig. 1). When she preferred variety in her consumer choices, she was evaluated as less responsible $(\mathrm{M}=4.91, \mathrm{SD}=1.61)$ than a female consumer who preferred non-variety $(M=5.76, \mathrm{SD}=1.34)$, $p=.009$. There were no significant differences for a male consumer who preferred variety $(\mathrm{M}=5.15, \mathrm{SD}=1.54)$ or non-variety ( $\mathrm{M}=5.18, \mathrm{SD}=1.77$ ).

The effects obtained in study 1 supported the prediction that incorporating variety or non-variety in consumer choices can have a significant impact on inferring individual characteristics of this consumer. Specifically, it appears that incorporating variety positively influenced the social attractiveness of the consumers (both female and male); they were evaluated as less rational, but more modern, more interesting, and more preferable as friends. When trying to interpret these results, we assumed that individuals who tend to switch away from favored options may be perceived as more unpredictable. Unpredictability has two different faces: on the one hand, it evokes unpleasant connotations because it is connected to doubts and uncertainty, which people tend to reduce (Wilson et al. 2005); but on the other hand, predictable characteristics and situations may seem less exciting, and a reduction in uncertainty can entail a reduction in pleasure. Consistent with this conclusion, in study 2 , we wanted to investigate the hypothesis that incorporating variety may increase the perception of the consumer as more unpredictable, which in turn influences his/her evaluation as more interesting and then as more socially attractive (e.g., preferable as a friend).

Study 1 also provides evidence that the consumer's gender may moderate the relationship between his/her varietyseeking behavior and evaluation by others. The female consumer who incorporated variety was evaluated as less
$\square$ female consumer $\quad$ male consumer


Fig. 1 Perception of the consumer as irresponsible/responsible as a function of the consumer's gender and preference for variety (error bars represent the standard error)
responsible than the one who preferred repetitive choices. There was no difference in evaluating the male consumer. This result may be a reflection of still-existing gender roles and stereotypes. There has been a rise in women's participation in the labor market over the past decades and, in today's families, the tendency is for both partners to work. More women have gone into higher education, managerial jobs, or professional occupations. However, family-related stereotypes still seem to be important regarding women, who are often perceived through the lens of their marital and parental status. Esping-Andersen (2009) called this mixed picture of gender equality "the incomplete revolution". Even in industrialized societies, providing for the quality and stability of the family life is considered to be women's essential role and they are more likely than men to assume domestic roles of homemaker and primary caretaker of children (Eagly, Beall, Sternberg 2004; Stacey 1990). Women still handle much of the grocery shopping and are principally responsible for doing the laundry, cleaning the house, and stocking the family medicine cabinet with health and beauty products and over-thecounter medicines (PLMA GFK 2013). Therefore, it is possible that because women continue to be the primary household shopper, they are expected to behave "responsibly" and use rather tried and tested items, which is good for their family as opposed to "irresponsibly" experimenting with novelty. Taking this notion into account, in our second study we also wanted to test the hypothesis that a female consumer introduced as a wife and mother, who incorporated variety in her consumer choices, would be evaluated as less responsible than the wife and mother who did not incorporate variety and a single female consumer (regardless of preference for variety).

## Study 2

Taking these results into account, in study 2 we wanted to: 1 ) test the hypothesis about the mediational role of the consumer's evaluation as unpredictable and interesting in the relationship between variety seeking and social attractiveness; and 2) test the hypothesis about the female's family status, which may affect the relationship between her varietyseeking behaviors and evaluation by others.

## Methodology

## Participants and Design

Analyses were performed on a sample consisting of 276 participants (men 130, women 146) aged 17 to 35 years. The mean age of our participants was $21.92(S D=3.09)$. The participants were randomly assigned to one of two conditions for variety in consumer choices (variety choices vs. nonvariety choices) and two conditions for consumer family
status (single vs. family). This study utilized a betweenparticipants factorial design.

## Procedure

The procedure was almost identical to the one used in study 1 . The participants met the interviewer in a convenient setting where they completed the paper-and-pencil questionnaire on their own. Each questionnaire included a description of a consumer. However, in this study, only a single consumer was described, a woman named Eve. Depending on the condition of the study, Eve preferred variety or non-variety in her choices of products or services. The descriptions of her variety and non-variety choices were the same as in study 1 , but in study 2, we also manipulated Eve's family status: in one condition she was described as single, and in a second as having a family-a husband and two children. After reading the text, participants were asked to evaluate Eve on several dimensions. The dimensions were the same as in Study 1: boringinteresting, irresponsible-responsible, traditional-modern, emotional-rational, but we also added the dimension unpre-dictable-predictable.

Each adjective pair was rated on a 7 -point scale. The participants were also asked two questions on a 7-point Likert scale (definitely no to definitely yes). The first question was the manipulation check: Do you think that Eve's choices are varied? The second question was to estimate the willingness to have a friend like Eve (Would you like to have a friend like Eve?).

## Results and Discussion

## Manipulation Check

To check the manipulation, we performed ANOVA on the perceived variety in Eve's choices as a function of manipulated variety in their choices of products and services. The Eve who was presented as choosing different places for holidays, different brands, different restaurants, and different food was perceived as incorporating more variety $(M=5.21, S D=$ $1.50)$ than the one whose choices were repetitive ( $\mathrm{M}=2.07$, $\mathrm{SD}=1.28), p<001$.

## Evaluation of the Consumer Who Prefers/Does Not Prefer Variety in her Consumer Choices

To analyze the data, we used $2 \times 2 \times 2$ ANOVA (variety in consumer choices by consumer's family status by participants' gender), which yielded the main effects of the variety condition for the dimensions unpredictable/predictable, $\mathrm{F}_{(1,258)}=$ 81.47, $p<.001, \eta_{\mathrm{p}}^{2}=.24$; boring/interesting, $\mathrm{F}_{(1,258)}=48.40$, $\mathrm{p}<.001, \eta_{\mathrm{p}}^{2}=.15$; traditional/modern, $\mathrm{F}_{(1,258)}=35.11$, $p<.001, \eta_{\mathrm{p}}^{2}=.12$, effect sizes for these effects were large
effect sizes under Cohen's guidelines (Cohen 1988) and social attractiveness, $\mathrm{F}_{(1,258)}=22.72, p<.001, \eta_{\mathrm{p}}^{2}=.08$, (medium effect size under Cohen's guidelines; Cohen 1988). The main effect was also obtained for dimension irresponsible/ responsible, $\mathrm{F}_{(1,258)}=13.23, \mathrm{p}<.001, \eta_{\mathrm{p}}^{2}=.04$, this effect size corresponding to small effect size under Cohen's guidelines (Cohen 1988).

As predicted, a consumer who preferred variety was perceived as less predictable $(M=2.64, S D=1.90)$ and less responsible ( $M=4.43, S D=1.60$ ), but more interesting ( $M=$ $4.68, \mathrm{SD}=1.55)$, modern $(\mathrm{M}=4.84, \mathrm{SD}=1.71)$, and socially attractive $(M=4.48, S D=1.33)$ than the one who preferred non-variety (respectively: $\mathrm{M}_{\text {unpredicatable/ predictable }}=4.68$, $\mathrm{SD}=1.69 ; \mathrm{M}_{\text {irresponsible/responsible }}=5.11, \mathrm{SD}=1.55 ; \mathrm{M}_{\text {boring/ }}$ interesting $=3.39, \mathrm{SD}=1.46 ; \mathrm{M}_{\text {traditional/modern }}=3.43, \mathrm{SD}=$ $2.01 ; \mathrm{M}_{\text {social attractiveness }}=3.64, \mathrm{SD}=1.45$ ).

The analyses also obtained the two-way interaction effects between the variety in consumer choices and the participant's gender for the dimensions boring/interesting $\mathrm{F}_{(1,258)}=5.48$, $p=.20, \eta_{\mathrm{p}}^{2}=.02$, and social attractiveness, $\mathrm{F}_{(1,258)}=4.74$, $p=.03, \eta_{\mathrm{p}}^{2}=.01$.

The Bonferroni post hoc test showed significant differences only in the evaluation of the Eve who incorporates non-variety into her consumer choices. As Figs. 2 and 3 show, female participants evaluated her as less interesting ( $M=3.04$, $\mathrm{SD}=1.47)$ and less socially attractive $(\mathrm{M}=3.37, \mathrm{SD}=1.63)$ than male participants $\left(\mathrm{M}_{\text {boring/interesting }}=3.78, \mathrm{SD}=1.36\right)$ $\left(\mathrm{M}_{\text {social attractiveness }}=3.94, \mathrm{SD}=1.15\right)$.

The ANOVA revealed one three-way interaction effect for the dimension irresponsible-responsible, $\mathrm{F}_{(1,258)}=$ $5.19, p=.02, \eta_{p}^{2}=.02$. The Bonferroni post hoc test showed significant differences only in the evaluation of the Eve who likes to incorporate variety into her consumer choices. Male participants did not differ in their evaluation of Eve who was single and Eve with a family; however, female participants evaluated the Eve who likes variety as less responsible when she had a family than when she was single, $p=.<001$ (Table 1).


Fig. 2 Perception of the consumer as boring/interesting as a function of the participant's gender and consumer's preference for variety (error bars represent the standard error)
$\square$ female participant $\quad$ male participant


Fig. 3 Perception of the consumer's social attractiveness as a function of the participant's gender and consumer's preference for variety (error bars represent the standard error)

## Mediation Analysis: Does Variety Mean Unpredictable and Interesting?

To test the assumption about the mediating role of consumer evaluations as predictable (vs. unpredictable) and interesting (vs. boring) in the relationship between the consumer variety-seeking behaviors and social attractiveness, serial mediation analysis was used. Serial multiple mediator models allow for the examination of direct and indirect effects of one variable on another while modeling the process through which one mediator influences another, leading to the final outcome. Serial mediation analysis was conducted using PROCESS macro for SPSS (Preacher and Hayes 2008). The recommended bootstrap sample of 5000 was used for the current study. To test multiple relationships of constructs simultaneously a structural equation model was also calculated. It verified exactly the same model as the serial mediation analysis done with the PROCESS. The software AMOS 24 (Arbuckle 2016) was used. At first, a saturated model with all possible paths was analyzed. As it represented perfect fit, no goodness-of-fit indices were reported. The path from predictability to social attractiveness proved insignificant (Critical Ratio $(\mathrm{CR})=-0.45, p=.650)$, therefore the model was rerun without this insignificant path. In sum, it had a very good fit: $\operatorname{chi}^{2}(1)=0.21, p=.205$, $G F I=0.99, A G F I=0.99 \mathrm{NFI}=0.99, R M S E A<0.01$ [ $<0.01,0.12$ ]. In sum, both analyses (by means of serial mediation and by structural equation modeling) confirmed the validity of the model. All paths for the full process model are illustrated in Fig. 4 together with their corresponding coefficients.

The result of serial multivariable mediation analysis of the effect of incorporating variety in consumer choices on consumers' social attractiveness through consumers' evaluation as unpredictable and interesting showed that there was a significant total effect (c) of variety in consumer choices on

Table. 1 Means (standard deviations) for evaluation of Eve as irresponsible/responsible as a function of her preference for variety, her family status, and participants' gender

|  | Eve prefers variety |  |  | Eve prefers non variety |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | Female participant |  | Male participant |  | Female participant |

social attractiveness $\left(\mathrm{t}_{(267)}=5.01, p<.001\right)$. This effect supported our assumption that incorporating variety in consumers' choices influenced the evaluation of the consumer as more unpredictable (path $\mathrm{a} 1, \mathrm{t}_{(269)}=9.45, \mathrm{p}<.001$ ) than more interesting (path a3, $\mathrm{t}_{(269)}=3.10, p=.002$ ), which in turn positively influenced the social attractiveness (path $\mathrm{b} 2, \mathrm{t}_{(267)}=$ $5.89, \mathrm{p}<.001$ ). The specific indirect effect for this path (a1a3b2) was significant with a CI between .09 and .36 . The indirect effect through the dimension boring/interesting only (a2b2) was also significant $(\mathrm{CI}=.01$ to .14$)$. The indirect effect through the dimension predictable/unpredictable (alb1) only was not significant ( $\mathrm{CI}=-.17$ to .12 ). The total indirect effect, the sum of the specific indirect effects, was significant with the $95 \%$ CI between .08 and .45 . The direct effect c' of variety on social attractiveness remained significant $\left(\mathrm{t}_{(269)}=\right.$ $2.39, p=.02$ ), showing the partial mediation effect.

## Discussion

These findings from study 2 replicate and extend those from study 1 . The analyses showed that incorporating variety in consumer choices increases the consumer social attractiveness by first increasing the evaluation of the consumer as more unpredictable and then more interesting. Variety in consumer choices also positively affects the evaluation of the consumer as more modern. The results also revealed that the female consumer who incorporated non-variety in her consumer choices was evaluated by female study participants as less interesting and less socially attractive than by male participants. On the other hand, if the female consumer presented
as having a family incorporated variety in her consumer choices, she was evaluated as less responsible, but only by female study participants.

## General Discussion

In our studies, we wanted to investigate whether varietyseeking behavior may be used as a cue for social perception. Previous research showed that consumers often choose variety even though this requires them to include items they like less than other items they could have chosen. One of the explanations for variety-seeking behavior is based on the impression management motive. People assume that variety is positively evaluated by others, and by choosing an unvaried set, they present themselves as boring and narrow-minded. Our studies confirmed our (and lay people's) assumption. Incorporating variety or non-variety in consumer choices may influence how an individual is evaluated by other people. The mediational analysis revealed that consumers who incorporated variety in their consumer choices were perceived as more interesting and socially attractive and that this relationship was also mediated by the perception of variety seeking consumers as being more unpredictable. This result seems to be consistent with previous research, which showed that although unpredictability of the stimulus or situation can be aversive, especially when an event is negative, too much certainty and predictability seems to be boring and less exciting (Wilson et al. 2005). An unpredictable stimulus and situation may trigger more intense emotional reactions; at the physiological level, reward pathways in the brain, such as dopaminergic neurons,

Fig. 4 A serial multiple mediation model with consumer's evaluation on dimensions predictable/unpredictable and boring/interesting as proposed mediators of variety in consumer choices and consumer's social attractiveness

are activated not by the valence of a stimulus but by its unpredictability (Berns et al. 2001; Wilson et al. 2005). In addition, at the level of interpersonal relationships, on the one hand people seek security but on the other they want novelty and excitement, and too much predictability leads to boredom in relationships (Baxter and Erbert 1999). Based on our results, it may be possible to conclude that incorporating variety in consumer behavior suggests that the friend or partner is modern, open-minded, emotional, and open to new experiences, which in turn is expected to positively influence the quality of the acquaintance or relationship.

The results of our research also showed that the gender of the observer as well as the consumer can moderate the relationship between the variety-seeking behavior and evaluation by others. It appeared that female participants evaluated female consumers who incorporated non-variety in her consumer choices as less interesting and socially attractive than did male participants. One explanation of this result may refer to the gender differences in shopping behavior. Some research shows that for women shopping has a more hedonic than utilitarian value-they treat it as fun and pleasurable-whereas men focus on a more utilitarian value, having the outcome of getting the actual good with the least effort (Dittmar and Drury 2000; Tifferet and Herstein 2012). As a consequence, women may be more prone to be variety seekers, because variety provides pleasure, stimulation, and novelty, which increases excitement and enjoyment in shopping (Tang and Chin 2007; Roehm Jr and Roehm 2005). Taking this notion into account, it is possible that a female consumer who prefers non-variety in her consumer choices and then is presented as having atypical behavior was perceived by our female participants as not similar to them, which is consistent with Byrne's (1971) similarity attraction paradigm, which could in turn have negatively influenced her evaluation. It is also possible that the result may be explained by the fact that women are more critical of one another, as Benenson et al. (2009) showed that women form a negative view of other women far more quickly and freely than men do of other men.

Although in general consumers who were presented as preferring variety in their consumer choices were evaluated more positively on the dimensions regarding social attractiveness, the female consumer who incorporated variety in her consumer choices was perceived as less responsible (and responsibility in the pilot study was assessed as a positive trait, contrary to irresponsibility). However, the analyses revealed a threeway interaction effect, which showed that only female participants evaluated this consumer worse, and it was only when the consumer was presented as having a family. It is possible that this is the consequence of the woman's role in the family and that this represents internalized stereotypes of gender roles. Although women have increasingly joined the work
force, they continue to perform the majority of household labor. They provide more direct care for and spend more time with children, and they are also usually the alpha partners as key household decision-makers (Walzer 2008; Wood et al. 2012). It is probable that because of their role, the women who have families are expected to make more rational consumer decision-making choices-to use rather tried and tested products or services instead of looking for variety. It is also possible that this result may be explained by a type of backlash effect. A backlash effect is defined as social and economic repercussions for a disconfirming prescriptive role (Rudman and Phelan 2008; Rudman et al. 2012). Some research has shown that in some conditions women exhibit more backlash than men toward other women who act counterstereotypically. This is also consistent with social-identity research suggesting that norm violations may evoke more negative reactions by ingroup members than by out-group members (Marques 1990; Rudman and Phelan 2008).

Our results have reinforced previous research on variety seeking, confirming that consumers' lay theory that variety seeking is appropriate is correct. Study 2 provided support for our hypothesis that the gender of the observer as well as the consumer may moderate the relationship between incorporating variety seeking and consumer evaluation.

The research has some limitations. In Study 1, due to sample differences, we could not make analyses that included participants' gender, and in the design of Study 2, we included only the conditions that described the female consumer as incorporating variety (as opposed to not incorporating variety) in her consumer behavior. The next studies should also introduce a male consumer as a husband and father who incorporates (vs. does not incorporate) variety in his consumer choices. The absence of a product category as an independent variable, as has been performed in prior studies, may also reflect a limitation of this study. Finally, the present study chose university students as participants. However, studies show that the tendency of variety seeking can be negatively associated with age (e.g., Novak \& Mather 2007). Therefore, it would be desirable to investigate the social perception of consumer variety seeking behavior across various ages. These limitations can be addressed and extended in further studies.

## Compliance with Ethical Standards

Ethical Approval All procedures performed in studies involving human participants were in accordance with ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed Consent Informed consent was obtained from all individual participants included in the study.

Conflict of Interest On behalf of all authors, the corresponding author states that there is no conflict of interest.

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[^0]:    Katarzyna Stasiuk
    katarzyna.stasiuk@uj.edu.pl

    1 Institute of Applied Psychology, Jagiellonian University, ul. Lojasiewicza 4, 30-348 Kraków, Poland
    2 Institute of Psychology, Maria Curie - Sklodowska University, Lublin, Poland

