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WHEN INNOVATIVENESS WHISPERS ITS SIREN'S CALL: HOW CONSUMER INNOVATIVENESS LEADS TO NEW PRODUCT ADOPTION

ABSTRACT

In the market of consumption goods, nearly all innovations are confronted with competition from substitutes in the same or similar product categories (Wood and Swait, 2002). Consumer innovativeness has therefore become a central topic in new product marketing in order to segment and better target so called early adopters (Foxall, 1995). Recently, two strands of research have developed within the adoption literature: one strand conceptualizing consumer innovativeness as an innate personality trait (e.g. Hurt et al., 1977), the other one comprising it as a so called cognitive style (e.g. Kirton, 1976). Both concepts have been shown to be related to each other as well as to innovation adoption. However, both are per se low in predictive validity of consumers' adoptive behavior (Roehrich, 2004). Building on these research challenges, the paper elaborates on the nature of consumer innovativeness and provides an integrative view of the construct, combining cognitive as well as personality factors. We articulate a conceptual framework that offers propositions regarding the working mechanisms of the innovation adoption process. Suggestions for future empirical evidence are provided.

Keywords: Brand, cognitive dissonance, communication, model of brand communication.

INTRODUCTION

The phenomenon of consumer innovativeness has captivated scholars in the fields of marketing and psychology since the late 1950s: Under what circumstances do consumers buy new products? And how can these new product adopters be characterized and segmented?

Research studies tackling these questions arose in two different approaches that strive to ignore or dismiss each other: One research strand envisions consumer innovativeness as a cognitive characteristic (e.g., Kirton, 1976), the other one conceptualizes it as an innate personality trait (e.g., Hurt et al., 1977). Both strands evoked extensive theoretical considerations but came to their limits when trying to operationalize and measure cognitive or innate personality factors that supposedly account for individual differences in consumers' adoption behavior.

Building on different theoretical advances, scholars in this area have focused for a long time on the development of a preferably unidimensional scale to capture the phenomenon of consumer innovativeness. These attempts led to a plethora of surely reliable instruments within both research strands that share the same goal and desideration: the prediction of innovative consumer behavior (Roehrich, 2004). As a consequence of the disappointing research efforts, the interest in this construct trickled away. Albeit, the topic of new product adoption, its antecedents and determinants never dropped off the research agendas in marketing and blazed up again now that life cycles are becoming increasingly shorter and companies are forced to heavily invest in new product development and marketing.

The aim of this paper is to select theoretically sound, reliable instruments from both seemingly contradictory research strands in order to aggregate and combine these pieces of information towards a more holistic view on consumer innovativeness. This approach shall help explain previously inconsistent findings and shall hence contribute to the field's pursuit of a valid prediction of new product adoption. The authors therefore articulate an integrative conceptual framework of the individual innovation adoption process and provide suggestions for future empirical evidence.

The remainder of this paper is organized as follows: First, based upon existing work in the field, the constructs of innate innovativeness and adoption as well as the state-of-the-art regarding their operationalization are depicted. Secondly, the theoretical constructs established in personality and cognitive psychology will be reflected upon in order to shed light on the moderators and mediators of the consumer adoption process. These constructs are then used to make up the theoretical framework and specify propositions linking individual innovativeness and adoption as well as suggestions for their empirical test. The paper closes with a discussion of its contribution to the marketing literature and its implications for innovation managers aspiring to tempt their customers and make them sweep the product shelves.

CONCEPTS AND DEFINITIONS

Nowadays, companies are heavily investing in new product development, aiming at innovations (Busch and Faure, 2007). At the same time, in the consumption goods market, nearly all innovations are confronted with competition from substitutes (Wood and Swait, 2002). Consumer innovativeness has become a central topic in new product marketing to better target so called early adopters (Foxall, 1995). Marketing managers and scholars in consumer research have been investigating methods to segment consumers by their willingness to adopt innovations (Rogers, 1995). Such efforts were

supposed to enable practitioners to estimate market potentials and reduce innovation risks but led to results that can best be described as mixed (Roehrich, 2004).

Midgley and Dowling (1978) came up with a differentiation between actualized and innate innovativeness that has reached broad recognition (e.g., Manning et al., 1995). Actualized innovativeness becomes manifest in a consumer's act of trying out or purchasing new products and services earlier and more often than others (Ruvio and Shoham, 2007). Therefore, actualized innovativeness is an observable variable whereas innate innovativeness is described as a more general, product-spanning disposition or openness to new ideas and practices (Im et al., 2003). This leads to the conceptual delineation between acceptance or adoption of new products as, respectively, "the actual observable behavior of buying (or requesting the purchase of) a new product" (Mudd, 1990, p. 126) and innovativeness as "the tendency or predisposition to acquire new products, ideas etc." (ibid). Midgley and Dowling (1978, p. 235) characterize the relationship between innovativeness as a general disposition and actualized innovation adoption as follows: "We would expect individuals with a high degree of innate innovativeness to display high actualized innovativeness (i.e. adoptions) on more occasions than other, less innovative individuals. In other words, innate innovators will be observed as actual innovators more frequently [...]."

Innate Innovativeness - Consumers' Disposition to Adopt

Innate innovativeness is critical for the understanding and handling of adoption (Roehrich, 2004). With their results being of high relevance for marketing practitioners, adoption scholars intend to explain consumer behavior in order to assist marketing managers in addressing different consumer segments. Many studies therefore focus on the detection of differential criteria explaining the behavioral range in adoption from "early adopters" to "laggards" (Rogers, 2003). This approach indicates the assumption, that such differential criteria can be generalized across consumers, products and time and are thus closely tied to consumers' personality. Hurt et al. (1977, p. 59) define innate innovativeness as "a normally distributed, underlying personality construct, which may be interpreted as a willingness to change". Steenkamp et al. (1999, p. 56) describe it as a "predisposition to buy new and different products and brands rather than remain with previous choices and consumption patterns". But instead of drawing on established psychological inventories that could be administered to unveil innovators' personality profile, marketing researchers have tried since the 1970s to develop unidimensional scales intended to measure a self-contained "innovativeness" trait. The results of such efforts can at best be described as mixed (e.g., Holak, 1988; Im et al., 2003). Personality inventories however have proven to be reliable and valid in a plethora of different situations and research contexts. Recent studies have investigated correlations between innovativeness scales and established personality inventories such as the Big Five (e.g., Kwang and Rodrigues, 2002). Provided that innovative consumer behavior is nested in consumers' personalities, established psychological inventories should be not only correlated but most suitable to measure innovativeness and to predict adoption.

One of the instruments developed by marketing researchers aside well-established personality inventories is Baumgartner and Steenkamp's (1996) inventory on exploratory buying behavior tendencies (EBBT). It has proven considerable validity in trying to capture consumers' allurements by innovative products (Roehrich, 2004). According to psychological literature, individuals differ in their need for stimulation. Thus, individuals seek an optimal level of stimulation and compensate for its

abundance or shortfall with corresponding behavior (Hebb, 1995; Leuba, 1955). Raju (1980, p. 272) termed such behavioral adjustments "exploratory behavior". The optimal stimulation level triggers the tendency to search for new, diverse and intense experiences and to take risks, in a manner similar to an inherent personality trait. New products offer the possibility to keep or to take a consumer's stimulation level at its optimum (see also Mittelstaedt et al., 1976). Roehrich (2004, p. 672) concludes: "As a theoretical basis of many human activities, need for stimulation may be perceived as an antecedent of new product adoption [...]"

Actualized Innovativeness - Adoption or Innovative Consumer Behavior

Adoption is defined as the actualized behavioral outcome of innovativeness: innovative consumer behavior or acceptance of newness. According to Rogers (1995, p. 21) it describes "a decision to make full use of an innovation as the best course of action available". Within consumer research, innovation is defined as "any form of new product recently available in a market" (Jacoby, 1971, p. 244). This definition includes new products and brands as well as modifications and extensions of existing product lines and brands and even products and brands which have not been available in a certain geographic region before (ibid.).

The operationalization of adoption is an oft-discussed topic in literature on consumer behavior. A measure which is frequently applied is the time-of-adoption method which determines the "degree to which an individual is relatively earlier in adopting an innovation than other members of his system" (Rogers and Shoemaker, 1971, p. 27). Innovators are those who adopt a new product or brand comparably earlier than others (Joseph and Vyas, 1984). However, Hurt et al. (1977) criticize that the time-of-adoption method does not lead to significant innovativeness models, but only allows post-hoc analysis of an individual's latency in adoption.

The cross-sectional method examines "how many of a prespecified list of new products a particular individual has purchased at the time of the survey" (Midgley and Dowling, 1978, p. 230). Using self-report questionnaires, the number of new products or brands recently purchased or the possession of such innovations is surveyed (Midgley and Dowling, 1978). Based on this data, Joseph and Vyas (1984) generate a so-called innovation index which can then be used for advanced statistical analysis.

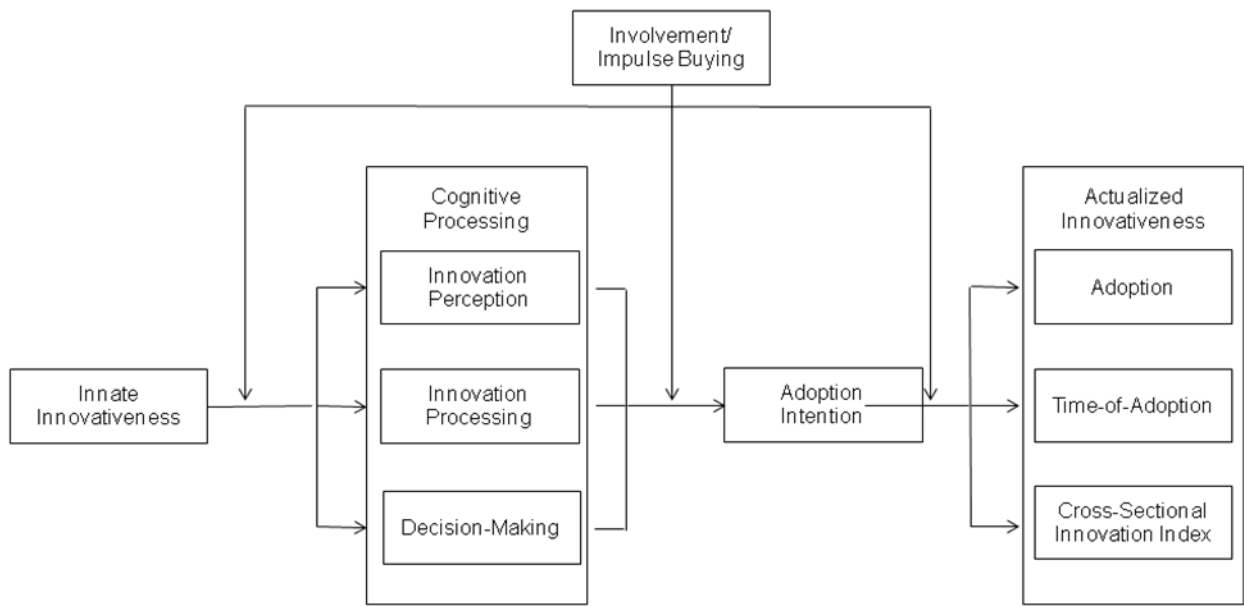
Both measures, the time-of-adoption method and the cross-sectional technique, are based on self-report questionnaires and have often been used to measure innovative consumer behaviour. A controlled experimental recording of adoption in terms of innovative choice or purchasing behaviour in either the field or a computer simulation has rarely been administered in this context but seems to be a promising approach for future research.

None of these three methods has found general recognition by the research community so far. However, all three measures are good means of operationalizing actualized innovativeness and are therefore considered to be complementary within our research approach.

CONCEPTUAL FRAMEWORK

Before elaborating on the key constructs and relationships of our conceptual framework, we provide a preview of it in Figure 1. It depicts the sequential pattern of the proposed innovation adoption process in the form of "individual disposition → cognitive processing → innovation adoption".

Figure 1: Conceptual Framework of the Adoption Process in Consumer Behavior



Adoption Intention as Antecedent to Innovation Adoption

Within social psychology, the primary approach has been to develop integrated models of behavior, with the Theories of Reasoned Action and Planned Behavior being the most widely researched models. According to the Theory of Planned Behavior (TPB), human behavior is guided by behavioral intention (Ajzen, 1991). Reviews of the literature support this notion (Kalawani and Silk, 1982) and suggest that measures of intention typically account for 20 to 30 per-cent of the variance in social behaviors (e.g., Randall and Wolff, 1994; Sheppard et al., 1988). Holak (1988, S. 50) suggests "that statements of purchase intention based on perceived innovation characteristics can be used to predict the adoption of various innovations with some degree of consistency". Thus, in terms of this study's consumer context, we propose:

P₁: Adoption intention is a predictor of actualized innovativeness.

Cognitive Processing as a Central Mediator in the Adoption Process

The process of adoption evolves from the first perception of an innovative stimulus to the decision to try or purchase a product or brand (Lilien et al., 1992). Harms (2002) describes the adoption process as one that starts with the conscious perception of an innovative stimuli, proceeds with information processing and decision making, and is followed by an adoption intention and product trial.

Innovation Perception

Drawing on the Theory of Reasoned Action (Ajzen, 1991), perception is an important determinant of behavior. Ostlund (1974, p. 8) suggests that the "perception of innovations by potential adopters can be very effective predictors of innovativeness". Adopter specific determinants of perception influence consumers' searches for information, perception of product characteristics (Litfin, 2000) and information processing. The perception and identification of an innovative product may not always be easy as innovations are defined as "any form of a product recently available in a market" (Jacoby,

1971, p. 244) including "totally new products, new brands, modifications of old brands, and even brands previously not available in a given geographical area" (ibid.). Consequently, the perception and identification of an innovative product depends on a consumer's attention during the shopping situation, but attention is generally considered to be low when shopping for groceries and convenience goods (Foscht and Swoboda, 2005, p. 19). Hence, consumer behavior literature suggests the concept of category width (CW) to describe the "degree to which people act on awareness of differences" (Sternberg and Grigorenko, 1997, p. 704) or "the extent to which a consumer perceives an innovation as different from the norm established by his or her existing products, brands or consumption patterns" (Foxall and Bhate, 1993, p. 39). Individuals with a broad CW distinguish less between existing and new products and see the purchase and consumption of new products as less risky (Foxall and Bhate, 1993). Unlike individuals with narrow CW, these individuals are more likely to adopt new brands or products (Popielarz, 1967).

P₂: Innovation perception will mediate the relationship between innate innovativeness and adoption intention.

Innovation Processing

The perception of a new product entails its subsequent cognitive processing. When aiming to explain the consumer's adoption process, concepts are needed that have shown to account for individual differences in the processing of innovation stimuli. The processing of an innovation requires the consideration of advantages and disadvantages of this new product option as well as a trade off against existing product alternatives.

According to Wood and Swait (2002, p. 3), "the manner in which people change may be affected by their propensity toward engaging in thought." Such a proclivity for cognitive activities is reflected in the psychological literature by a construct called Need for Cognition (NC) (e.g., Cacioppo and Petty, 1982). The NC construct is based on the notion of stable inter-individual differences "among individuals in their tendency to engage in and enjoy thinking" (Cacioppo and Petty, 1982, p. 116) and describes "dispositional factors governing message processing" (Cacioppo et al., 1983, p. 806). NC is a well-established and often investigated individual difference construct and many studies show that NC influences individuals' behaviors. Wood and Swait (2002) were the first to use the construct within the context of innovative consumer behavior and adoption. The authors try to segment innovative consumer behavior along the axis of Need for Cognition and Need for Change. Need for Cognition is operationalized by a short version of Cacioppo et al.'s scale (1984), Need for Change is outlined as an individual motivation to search for variety and change. The results of the study support our research approach because "consideration of these consumer types significantly increased the predictive power of demand and choice estimation" (Wood and Swait, 2002, p. 11).

However, not only the general proclivity towards cognitive efforts is crucial when it comes to innovation processing, the nature of cognitive stimuli also accounts for individual differences. The Need for Cognitive Closure (NCC) addresses these differences in referring to "the desire for clear, definite, or unambiguous knowledge that will guide perception and action, as opposed to the undesirable alternative of ambiguity and confusion" (Vermeir et al., 2002, p. 703). The underlying theory is based on the assumption that individuals with a high NCC experience a lack of cognitive

closure as aversive (Houghton and Grewal, 2000). Hence, individuals high on NCC try to abolish this unpleasant state (urgency tendency) and avert its reappearance (permanence tendency). The shift from one tendency to the other occurs when a decision is made (crystallization point). Thus, an individual high on NCC should aim for reaching a decision quickly and should then stick to that product or brand decision despite an innovation becoming available (e.g., Beatty and Smith, 1987). In contrast, individuals low on NCC are reluctant to commit to a definite option and tend to look for and engage in alternatives even after a decision has been made (Webster and Kruglanski, 1994). Thus, in terms of this study's context, we propose:

P₃: Innovation processing will mediate the relationship between innate innovativeness and adoption intention.

Decision-Making

Following the perception and processing of an innovation, consumers are forced to (consciously or not) decide upon one option. Only recently, the focus in this research area has changed from the decision-making situation and task to characteristics of the decider. Thompson et al. (2001) distinguish between a Personal Need for Structure (PNS), and the decider's fear of taking the wrong decision (Personal Fear of Invalidity, PFI). According to the authors, individuals high on PFI try to avoid errors, and therefore consider more alternatives and are more likely to oscillate between different options. PFI is frequently associated with a thorough search for information but also low confidence in own decisions and opinions (see also Blais et al., 2005).

With the advent of research on decision-making styles (DMS) as a special form of general cognitive styles (Newell and Bröder, 2008), research discussions have started to focus on the nature of handling and processing information in the decision-making context. Scott and Bruce (1995, p. 820) define DMS as "the learned, habitual response pattern exhibited by an individual when confronted with a decision situation". A return to the work of Scott and Bruce (1995) seems promising in the context of this study for several reasons. First, the theoretical and psychometrical conceptualization of these authors seems adequate for the purpose and design of our study. Second, Scott and Bruce (1995) draw on Woodman et al. (1993) who relate decision-making to innovativeness. In consequence, Scott and Bruce (1995) use measures for innovativeness and innovative behavior and their empirical studies reveal significant correlations in the expected direction: "This finding provides support for prior conceptualizations of the influence of individual cognitive style on the process of innovation" (Scott and Bruce, 1995, p. 830). An extension of these analyses towards correlations with innovative behavior as conceptualized within our study leads to the following proposition:

P₄: Decision-Making Competency will mediate the relationship between innate innovativeness and adoption intention.

Impulse Buying as a Central Moderator in the Adoption Process

It has been suggested that purchases of new products result more from impulse buying than from prior planning and intentions (Beatty and Ferrell, 1998). Existing literature supports the idea that individuals differ in their proclivity to buy on impulse (e.g., Piron, 1991, Rook and Fisher, 1995) and extensive empirical evidence has been collected in an effort to measure the prevalence of purchases made on impulse (Weun et al., 1998).

Cognitive, clinical, social, developmental, and consumer psychologists have studied the general trait of impulsiveness and impulse control (Eysenck and Eysenck, 1977, 1978; Rook, 1987; Whiteside and Lynam, 2001). In an empirical study, Hausman (2000) provides evidence that impulse buying satisfies higher-order needs like the search for variety, novelty and surprise (see also Sharma et al., 2006; Hirschman, 1980; Holbrook and Hirschman, 1982). Impulsiveness is characterized by unreflective actions (Kacen and Lee, 2002), is significantly correlated with thrill-seeking (see also Weun et al., 1998) and the psychological need for stimulation (see also Gerbing et al., 1987). Interestingly, these factors have also been found to be correlated with innovativeness though the latter is conceptually distinct from impulse buying in that it displays a conscious willingness to adopt new products. Hausman (2000, p. 403) states that "information-processing overload confounds product selection, reinforcing the rewards to be obtained from alternative section heuristics, like impulse buying". This links the construct of impulse buying to cognitive processing and allows for the following assumption:

- P₅: Impulse Buying will moderate the link between a consumer's adoption intention and his/her actualized innovativeness (adoption, time-of-adoption, cross-sectional innovation index).*
- P₆: Impulse Buying will moderate the link between a consumer's cognitive processing of an innovation and his/her adoption intention.*
- P₇: Impulse Buying will moderate the link between a consumer's innate innovativeness and his/her cognitive processing of an innovation.*

As impulse buying accounts for a substantial volume of the goods sold every year (Kollat and Willett, 1967), its consideration within this conceptual framework is of significance.

Involvement as a Central Moderator in the Adoption Process

Harms (2002) proposes that one reason for the little and often unfounded attention that has been paid to personality characteristics within adoption research is the fact that these variables do not have direct influence on adoption responses. However, an indirect factor that has become central within consumer behavior research is the concept of involvement (Mittal and Lee, 1989). Involvement influences consumers' decision making (Howard and Sheth, 1969), as well as processes before (Clarke and Belk, 1979) and after (Cohen and Goldberg, 1970) a purchase decision. According to Harms (2002), involvement is determined by basic personality factors and dispositions and is as key determinant of adoption intention. Zaichowsky (1985) provides evidence that product class involvement is positively correlated with usage of a product. Low initial involvement abates behavioural intentions; high involvement reinforces such intentions (Harms, 2002). At the same time, the involvement construct has significant influence on consumers' cognitive processing (Zaichkowsky, 1994). Empirical studies show that consumers with low involvement search for and process less information than do highly involved consumers (Cacioppo and Petty, 1984). A purchase pursued under low involvement occurs

with little attention and processing depth (Lastovicka and Gardner, 1978). For consumers with low involvement, a slack information search across brands is postulated as well as little comparison between product attributes. In addition, an absence of a specific preference for a particular brand is assumed as well as the perception of various brands as being similar (Zaichkowsky, 1985). Thus, with regard to this study's context, we propose:

- P₈: Involvement will moderate the link between a consumer's adoption intention and his/her actualized innovativeness (adoption, time-of-adoption, cross-sectional innovation index).*
- P₉: Involvement will moderate the link between a consumer's innate innovativeness and his/her cognitive processing of an innovation.*
- P₁₀: Involvement will moderate the link between a consumer's cognitive processing of an innovation and his/her adoption intention.*

For example, Howard and Sheth (1969) assume that highly involved people develop a higher brand commitment and perceive more product differences regarding the attribute level. Adopting this reasoning to this study's context and variables, we propose:

- P_{10A}: There is an interaction between innovation perception and involvement such that individuals with high involvement and a low threshold of innovation perception (narrow CW) will (a) develop a higher adoption intention and (b) exert more actualized innovativeness (higher adoption rate, shorter time of adoption, higher cross-sectional innovation index) than individuals with a low involvement. and a low threshold of innovation perception (narrow CW).*

As stated above, there is general consensus among research scholars that involvement is of special importance with regard to cognitive processing. Vermeir (2003) provides evidence for the manifold influences of NCC on consumer behavior and Houghton and Grewal (2000) suggest that the impact of NCC on adoption is influenced by involvement. Accordingly, we propose:

- P_{10B}: There is an interaction between innovation processing and involvement such that highly involved individuals with an intense innovation processing (high NC, low NCC) will (a) develop a higher adoption intention and (b) exert more actualized innovativeness (higher adoption rate, shorter time of adoption, higher cross-sectional innovation index) than individuals with an intense innovation processing (high NC, low NCC) but low involvement.*

EXPERIMENTAL DESIGN

Empirical testing is the logical next step in establishing the validity of our model and its propositions. As the study focuses on substitutable consumption goods, potential subjects can be any convenience sample experienced in grocery shopping and should be of different gender, age and income groups. Consumer self-reports can be used both for independent variables (innate innovativeness), mediators (adoption intention, innovation perception and processing, decision-making competency) and moderators (involvement, impulse buying) as well as for one of the dependent variables (innovation index). The model's constructs can be measured by multi-item Likert scales, of which most can be obtained or adapted from prior work in related domains. Examples of such measures are provided in Table 1.

Table 1: Potential Measures of Model Constructs

Construct	Source
Innate innovativeness	<ul style="list-style-type: none"> – Revised NEO Personality Inventory (NEO-PI-R), Ostendorf and Angleitner, 2004 – Exploratory buying behavior tendencies (EBBT), Baumgartner and Steenkamp, 1996
Innovation Perception	– Category Width (CW), Pettigrew, 1958
Innovation Processing	<ul style="list-style-type: none"> – Need for Cognition (NC), Cacioppo et al., 1984 – Need for Cognitive Closure (NCC), Houghton and Grewal, 2000
Decision Making	<ul style="list-style-type: none"> – General Decision Making Style (GDMS), Scott and Bruce, 1995 – Personal Fear of Invalidity (PFI), Thompson et al., 2001
Involvement	– adopted from Personal Involvement Inventory (PII), Zaichkowsky, 1994
Impulse Buying	– e.g., Martin et al., 1993
Adoption Intention	– adopted from e.g., Holak, 1988
Adoption	– new
Time of Adoption	– new
Innovation Index	– adopted from Midgley and Dowling, 1978

As these self-report instruments call for using measures to control for self-report and mono-method bias (cf. Donaldson and Grant-Vallone, 2002; Baumgartner and Steenkamp, 2001), additional measures need to be applied to collect data for the dependent variables adoption and time-of-adoption. We have therefore created a multilevel experimental setting, dispersing the self-report questionnaires over three periods of inquiry. Hence, subjects are asked to complete a series of three paper-based questionnaires within a period of a few weeks. In return for their participation, subjects are offered a set of products (in our study, four different chocolate bars) to choose from as a gift after each completion of a questionnaire. One of the products in the choice set is an innovation, in our case not yet available in the markets and region of the study. The other three products are long-established, well-known brands that consumers come across regularly wherever they do their shopping. The product set (types and brands of chocolate bars) remains unvaried for all the three choices. Subjects are not told in advance that they will receive a gift after every trial and that the products

available to choose from will be the same. Thus, all subjects are offered a constant choice of four different products three times in the course of this multilevel study and the three product choices can be considered as independent from each other.

Subjects' product choices in every one of the three times of inquiry are then tracked covertly. This tracking reveals whether subjects choose the innovation or not (adoption), and if so after which of the three inquiries they opt for the new product (time-of-adoption). This allows for a direct measure of innovative consumer behaviour which can then be related to the self-report measures.

In addition, several control variables are considered in the context of this study. For example, existing product preferences must be assumed to impact consumers' willingness to switch for a new option.

Data collection started in June 2008 and will be completed by the end of September 2008. Subjects were recruited in Switzerland, Germany and Austria as a convenience sample. After the completion of data selection, we intend to estimate the full model with covariance structure analysis software.

DISCUSSION AND FURTHER RESEARCH

The present paper provides first steps towards an adoption model within the domain of consumer behaviour, integrating cognitive as well as innate determinants. It contributes to contemporary research in an at least twofold way. First, it complements research on innovativeness. Though there has been notable work on the measurement and prediction of consumers' adoption patterns, little is known so far about the theoretical nature and basic determinants of this construct. Two strands of research have developed within the adoption literature, conceptualizing consumer innovativeness as either an innate personality trait (e.g., Hurt et al., 1977) or as a so called cognitive style (e.g., Kirton, 1976). To date, there has been no attempt to integrate these two research strands into an integrative model. Thus, our conceptual framework builds a first step to close this gap. Second, a lot of the basic theories and concepts we draw on have not yet gained much attention within marketing research. Psychology scholars have provided substantial research on cognitive as well as personality constructs and have developed and validated reliable scales to measure such variables. By adapting these concepts and measures to the marketing and consumer behavior context, we connect consumer behaviour research with recent work in cognitive and personality psychology.

Our framework is also of high relevance for marketing and management practices. Supposing it holds up to empirical testing, marketing managers will be provided with distinct knowledge of the characteristics that trigger consumers' product adoption. In the consumption goods market, nearly all innovations are confronted with competition from substitutes (Wood and Swait, 2002). Adoption determinants have therefore become a central topic in new product marketing in order to segment and better target so called early adopters (Rogers, 1995; Foxall, 1995). A better understanding of these determinants could help estimate consumers' reactions to a new product or brand, to predict the market's sales volume and to lower the innovation risk.

This paper discloses not only an integrated conceptual framework on the nature of innovativeness and the adoption process; it also provides propositions for the model's testing. We presented some concrete suggestions for construct operationalization and study design. These suggestions provide us with a rich research agenda which, in the end, might reconcile the two strands of thinking inherent in the cognitive and personality approach to consumer innovativeness.

There are of course limitations to this research. One of the main limitations is its focus on consumption goods. This focus was chosen to weitgehend eliminate influences of consumers' income

and willingness to pay, and hence such influencing factors as the current financial crisis. Consumption goods were targeted because innovations in this field are oftentimes rather subtil than offensichtlich due to the Hersteller's notion of "more variety creates more demand". Accordingly, constructs like consumer's need for self-representation, a certain status-orientation or established self-concept carry less weight and can hence be neglected as moderators for our model. Also, consumption goods are feasible for a direct measure of behavior as it is proposed for the study design, whereas self-report measures to date have rarely generated valid results. While such a focus is thus useful and necessary, the process of adoption may indeed be different depending on the product (e.g. when choosing a new yogurt or sports car). Hence, it should be further investigated whether the model holds for different products and types of innovation.

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