**Consumer knowledge: Do we really care?**

**Revising our approach on example of the theory of planned behaviour**

**Abstract**

We assume we know quite a lot about consumer behaviour. Existing studies are focused at predicting how consumers will react, what will be their behavioural intentions and actual behaviour. However, to what extent do we really care about what consumers know? This conceptual paper aims to discuss the nature and types of consumer knowledge in the extant research. By following the learning domains by Bloom et al. (1956), we assume that there is a way to combine both cognitive vs. affective domains of consumer knowledge, thus integrating objective vs. subjective knowledge. At the next step on example of the theory of planned behaviour – we discuss what is the role of consumer knowledge in this theory and how the theory could be extended by more directly addressing consumer knowledge. Paper discusses directions of future research towards a more comprehensive approach to systematizing and renewing consumer knowledge domain.

*Keywords: consumer knowledge, theory of planned behaviour, objective knowledge, subjective knowledge, belief*

**1. Introduction**

**Marketing’s main purpose is to understand and influence consumer behaviour. Existing approaches aim to predict the behaviour, as well as anticipate what factors could help shape the desired behavioural reaction. According to Ajzen (1991), unlike predicting, “explaining human behaviour in all its complexity is a difficult task”, that can be “approached at many levels” (p. 179). Aiming at understanding and modelling consumer decision making, researchers focused at consumer knowledge as it affects all the steps of consumer decision making (Bettman & Park, 1980).**

**In some areas, e.g. innovation diffusion (Rogers, 2003), consumer knowledge has a distinctive role, in others it represents fragmented areas. Indeed, consumer knowledge can be seen as advantage for a firm, whereas new products can be easier accepted by expert users (Wood & Lynch, 2010). However, in other areas the place of consumer knowledge has lost its position at the front edge of researchers’ attention. During 1980s-1990s, researchers were calling for better understanding of consumer knowledge: e.g. “there is little agreement among consumer researchers on how to measure knowledge” (Brucks, 1986, p. 58). Despite significant efforts to conceptualize and operationalize consumer knowledge, the concept has substantially lost its central role in consumer research.**

**This study aims to revisit existing approaches to consumer knowledge and suggest opportunity to extend existing theory on example of theory of planned behaviour. Moreover, we identified recent attempts to expand theory of planned behaviour by adding consumer knowledge domain and compare their results and implications.**

**The need to revisit approaches to consumer knowledge are strongly supported by the evolution of the world economy to information economy. Current challenges of increasing information volume, cognitive load on consumers when making decisions and processing this information. Digitalization of the world economy brings forward the role of individuals’ knowledge and competences to be successfully involved in the digital marketplace. Abundance of information does not lead to superior consumer knowledge. Thus, if we aim to understand and explain consumer behaviour, we might need to revise existing models and approaches by including the focus on how consumers develop their knowledge about the marketplace, products and services. It is an open question how to conceptualize the balance between objective and subjective knowledge, its cognitive and affective domains.**

**2. Classification of knowledge in extant research**

**Despite consumer knowledge was claimed to be one of the most studied areas in marketing and consumer behaviour, it is still highly fragmented. Extant research conceptualizes consumer knowledge as multidimensional concept (e.g. Brucks, 1986; Latour & Latour, 2010).**

***2.1 Domain knowledge: product knowledge & expertise***

**Consumers store knowledge about a domain and thus learn to process information about this domain. Rao & Sieben (1992) define product knowledge as “the amount of accurate information held in memory as well as self-perceptions of product knowledge”. Product knowledge can also be associated with functional knowledge (Huffman & Houston, 1993) as the knowledge of “how and why product features are relevant to achievement of a particular goal” (p. 192). Brucks (1985) suggest the term p*roduct class knowledge* that can be measured as how much consumer knows – e.g. knowledge about product terminology, specific brands and models, rules for evaluating a new brand.**

**Higher knowledge consumers (Cowley & Mitchell, 2003) have extensive generalized knowledge about a product category, are aware about the models available in the market, attributes of models/brands and their impact on performance (Mitchell & Dacin, 1996). They also are more selective in processing information prior to making a choice (Brucks, 1985). Lower knowledge consumers – have little generalized product category knowledge, this knowledge is associated with episodic experiences. Lack of generalized knowledge makes it more difficult, for example, for consumers to categorize brands into subcategories.**

**The domain knowledge is also close to the idea of consumer expertise, leading to differences in processing and recall of domain specific information (Brucks, 1986, p. 58). This general consumer knowledge refers to understanding, among other, of category structures (Huffman & Houston, 1993). For example, according to Alba and Hutchinson (1987), consumer knowledge is defined by familiarity (i.e. the number of product-related experiences, accumulated by consumer) and expertise (i.e. the ability to perform product-related tasks successfully). As Campell and Keller (2003), brand familiarity “reflects the extent of a consumer’s direct and indirect experience with a brand” (p. 293).**

**Consumer expertise, on another hand, can be related to how consumers can differ in how they process information, solve problems, judge and recall presented information. Expert consumers will differentiate between more sublevels, will categorize information according to these sublevels and may “attend to more subtle perceptual factors” (Wood & Lynch, 2002). Expert consumers can easier recognize and structure the problem, have reduced memory search, while for novices it is a more data-driven process. It is interesting that expert consumers, i.e. consumers with high prior knowledge, can be less effective in decision making due to their overconfidence, or the “feeling-of-knowing” phenomenon (Wood & Lynch, 2002).**

***2.2. Subjective knowledge***

**Subjective knowledge can be defined as self-assessed (e.g. self-rating) or perceived knowledge about the product. As Brucks (1985), subjective knowledge refers to what individuals perceive they might know vs. what they actually store in memory (objective knowledge). Moorman et al. (2004) state that subjective knowledge refers to a belief about the state of knowledge, that is strongly related to consumer behavior, as consumers would like to stay consistent with their subjective knowledge.**

**Due to the fact that people frequently assume they know more than they do (Wood & Lynch, 2002), consumers subjectively can feel overconfident. These knowledgeable, but overconfident consumers can rely on self-generated inferences, leading to poor decision performance and bias (Park & Lessig, 1981). Subjective knowledge may indicate both self-confidence and knowledge levels (Brucks, 1985).**

**Within the subjective consumer knowledge area, large research stream focuses on the balance between the rich stream of information, directed at consumers, and their ability to process information (e.g. marketing literacy, persuasion knowledge), their feelings and sentiment toward the marketplace (e.g. consumer skepticism, cynicism, etc.) (Garnier and Macdonald, 2009). Through development of own knowledge base and a sentiments towards the marketplace, consumer experiences and service encounters consumers develop and adopt own coping strategies, purchase decision styles, habitual decision making journeys and motivation to be engaged in various spectrum of digital activities (Fleming, Reitsma, Pappafotopoulos, Duan and Birrel, 2017).**

**Substantial area of consumer knowledge studies refers to shaping consumer sentiment as a result of perceived persuasion attempt, in other words – consumer persuasion knowledge. As an outcome, the consumer may reassess the marketer’s attempts to influence him or her in deciding whether or not to purchase a product (Main, Dahl, & Darke, 2007) by regarding the marketer’s claims with greater suspicion and inferring manipulative intent (Boush, Friestad, & Rose, 1994).**

**In defining consumer behavior, it might be subjective, not objective consumer knowledge, that is influencing the behavior and has the decisive role.**

***2.3. Categories or domains of knowledge***

**We assume, that by following the taxonomy of the learning domains by Bloom et al. (1956), it is possible to integrate both objective and subjective consumer knowledge approaches.**

**Bloom et al. (1956) identified three domains of learning – cognitive, affective and psychomotor domains. From the perspective of *cognitive domain* learning occurs through development of mental skills and knowledge. Cognitive domain includes knowledge of specifics (terminology, specific facts); procedural knowledge of ways and means of dealing with specifics (trends and sequences, classifications and categories, criteria, methodology), conceptual knowledge of the universals and abstractions in a field (knowledge of principles and generalizations, knowledge of theories and structures) (Bloom et al., 1956). In other words, by applying this domain to consumer knowledge, we see overlap with product knowledge, as well as knowledge about product attributes and criteria for product comparison and choice.**

**From the perspective of the *affective domain* (Bloom et al., 1956), consumers internalize values, respond to phenomena, dealing with emotional reactions, feelings, values, motivations and attitudes. Receiving a phenomenon can be linked to willingness to hear or awareness, responding to it – involvement, learning. Valuing and internalizing the values affects the behaviour, makes it consistent.**

**An illustration to a typology of consumer knowledge that is based on previously developed typologies, and also meets the requirements of both cognitive and affective domains is typology by Brucks (1986). Thus, according to Brucks (1986), based on previously developed typologies, suggested typology of knowledge includes: terminology, product attributes, general attribute evaluation, specific attributes, general and personal product usage, brand facts and purchasing and decision making procedures (see Table 1).**

**Table 1. Types of knowledge and their characteristics**

|  |  |
| --- | --- |
| **Types of knowledge** | **Description/Characteristics**  |
| ***Terminology*** | **refers to knowledge of the meaning of terms used within domain** |
| ***Product attributes*** | **refers to knowledge of which attributes are available for evaluating a brand and includes knowledge of attributes that a person would use in making a decision** |
| ***General attribute evaluation*** | **refers to knowledge of the overall evaluation for an attribute or an attribute level** |
| ***Specific attribute*** | **refers to knowledge of specific criteria used to evaluate an attribute** |
| ***General product usage*** | **refers to knowledge of how the product can be used, what characteristics of the usage situation are relevant when a purchase is being considered, and which product characteristics are affected by these usage situation characteristics** |
| ***Personal product usage*** | **includes memories of usage experiences, knowledge memories of usage experiences of personal acquaintances** |
| ***Brand facts*** | **refers to knowledge of how brands “score” on an attribute, overall evaluation of a brand, and other brand facts such as comparisons between brands on an attribute** |
| ***Purchasing and decision-making procedures*** | **refers to knowledge about the purchasing process** |

**Source: Brucks (1986), p. 61.**

**3. Theory of planned behaviour: exploring the information foundation of behavioural antecedents**

Theory of planned behaviour was developed on the base of theory of reasoned action and aggregates the factors can help predict behavioural intentions and actual behaviour. Ajzen (1991) considers behavior as a function of salient information, or beliefs, relevant to the behavior. It is important to notice, that while initially Ajzen (1991) follows a cognitive or information-processing approach to attitude formation, consumer knowledge is not included in the conceptual model and is not tested in most of empirical studies.

However, theory of planned behavior implies the need to investigate the beliefs people hold, whereas the beliefs are shaped in association with object, e.g. product, service or brand attributes. This information foundation of any attitude can be linked to understanding consumers’ beliefs, assessment of probabilities and values associated with them.

Antecedents of consumer behavior represented three main drivers:

* *Attitude* towards the behavior refers to the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question (Ajzen, 1991, p. 188). In association with previously discussed typology of consumer knowledge, attitude would result from a person’s procedural knowledge (e.g. knowledge of criteria of evaluation (Bloom et al., 1956) or attribute evaluation (Brucks, 1986).
* *Subjective norm* refers to the perceived social pressure to perform or not to perform the behavior (Ajzen, 1991, p. 195).
* *Perceived behavioral control* refers perceived ease or difficulty of performing the behavior, reflects past experience as well as anticipated impediments and obstacles (Ajzen, 1991, p. 183). Behavioral control is considered as ability that is linked to available resources and opportunities and can be also linked to self-efficacy belief.



Figure 1. Theory of planned behaviour (Ajzen, 1991, p. 182)

The combination of these factors explains the level of behavioral intention and actual behavior. It is intention that is considered by Ajzen (1991) as representation of aspiration, motivation and the trigger for behavioral achievement. According to Ajzen (1991), the antecedents of consumer behaviour are determined by three kinds of salient beliefs:

* *Behavioral beliefs influence attitudes toward the behavior.*
* *Normative beliefs constitute the underlying determinants of subjective norms;*
* *Control beliefs provide the basis for perceptions of behavioral control.*

It is belief strength that defines subjective probability that a given behavior will produce a certain outcome (Fishbein & Ajzen, 1975). This information foundation of the attitude has caused several model extensions and application by suggested a range of additional factors, which, in their turn, are causing the attitudes. Moreover, people are subject to cognitive limitations, and, as Ajzen (1991), while “people can hold a great many beliefs about any given behavior, but they can attend to only a relatively small number at any given moment. These beliefs are prevailing determinants of a person’s intentions and actions” (p. 189).



Background factors

Figure 2. Theory of planned behaviour
(de Leeuw et al., 2015, p. 129; Kan & Fabrigar, 2017, p. 5477)

Following the knowledge-based logic some of recent studies have proposed an extension to the logic of the theory of planned behaviour. In their revision on the theory of planned behaviour, Kan & Fabrigar add the role of evaluation of behavioural outcomes, strength of motivation to comply with the referents, as well as relative important of the antecedents of behavioural intention. Finally, recent study by de Leeuw et al. (2015) suggest adding wide variety of background factors, including values, education, etc. In other words, this overall scheme can help in uniting cognitive and affective learning domain in explaining consumer behavior.

Recent examples of this extended approach to theory of planned behaviour with the focus on consumer knowledge factors (see Table 2).

Table 2. Overview of the core studies adding knowledge dimension to theory of planned behaviour

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Authors (year)  | Context  | Cognitive domain of learning/ Type of knowledge | Role in the model  | Outcomes  |
| Ajzen et al. (2011) | Energy conservation, alcohol consumption, attending a mosque service, voting to support Muslim student activities | Knowledge as information accuracy | Antecedent | Behavioural intention and actual behaviour |
| Brothers et al. (2014) | Evidence-based treatment for cancer patients | Product knowledge  | Antecedent of behavioural intention to use | Behavioural intention to use evidence-based treatment |
| Kim & Hwang (2020) | Drone delivery services in Korean market | Product knowledge | Moderator | Product perception, criteria of evaluation, weight of criteria, differences in degree of analytical information processing, decision criteria available in memory, product judgments and behavioural intentions |

For example, Kim & Hwang (2020) extend the model by adding the level of product knowledge as moderator. Product knowledge is defined as degree of individual knowledge about the product of the study and its attributes. In line with the procedural knowledge by Bloom et al. (1956), authors imply that consumers with various levels of knowledge will have different product perceptions, as well as will differ by criteria of product evaluation and their weights.

In the model by Brothers et al. (2014) product knowledge directly affects behavioural intention to use the evidence-based treatment.

In a later paper by Ajzen et al. (2011) authors suggest that “knowledge is a prerequisite for effective action” (p. 102). Knowledge is considered as factual assertions (true/false answers), in other words, it is accuracy of information, not the amount of information that was evaluated (whereas the amount of information (e.g. “how well are you informed with respect to a given topic…). In this study Ajzen et al. (2011) claim that the difference between the factual knowledge or accurate information and beliefs is that consumers’ beliefs maybe incorrect. Indeed, as discussed above, consumers may be overconfident or subject to **the “feeling-of-knowing” phenomenon (Wood & Lynch, 2002). As Ajzen et al. (2011), beliefs “may reflect wishful thinking or be biased in other ways, and they may be unrepresentative of the information that is considered important in a given behavioral domain” (p. 102). Still, these beliefs guide consumer behavior. Despite the assumptions of the study, empirical results of four surveys indicated that the measure of knowledge as accuracy of information did not have significant effect, while the role of attitudes, shaped by subjective beliefs had significant effect. However, in one of the surveys, Authors have experimented by framing participants by selecting whether answers, positively or negatively associated with the theme of the survey, will be correct. Thus, the conclusion is that it is possible to frame participants, by influencing their attitude and beliefs.**

**3. Conclusions and future research directions**

**This study aimed to revisit existing approaches to consumer knowledge and suggest opportunity to extend existing theory on example of theory of planned behaviour. Moreover, we identified recent attempts to expand theory of planned behaviour by adding consumer knowledge domain and compare their results and implications.**

**After reaching its peak during 1980-1990s, the research in the area of consumer knowledge has lost its strength. The central place of research on consume knowledge during those decades were occupied by consumer knowledge of product class, consumer expertise and familiarity which helped to be framed to perceive the price correctly, evaluate product attributes, compare brands and categorize brands into subcategories.**

**As the complexity of factors and information to be processed by consumers increase, the task of building knowledge base comprises now both cognitive and affective domains (Bloom et al., 1956). The importance of consumer subjective knowledge and consumers’ beliefs is increasing.**

**The examples of recent studies, extending the range of factors to be considered when applying theory of planned behaviour, indicate an opportunity to increase the role of consumer knowledge – its objective and subjective dimensions – in explaining consumer behaviour. And yet, the study by Ajzen et al. (2011) shows that the subjective dimension of consumer knowledge might be more important for future research.**

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