

Vladimir Pashkevich, David Curry, James Kellaris, and Norman Bruvold

THE ROLE OF CULTURE-LEVEL FACTORS IN SHAPING ON-LINE PURCHASE INTENTIONS: A CROSS-COUNTRY COMPARISON

ABSTRACT

The primary goal of this research is to enhance our understanding of the moderating role that culture-specific variables – individualism/collectivism and culture context – play in shaping consumer intentions to use the Internet for product information search and shopping. Specifically, this research (a) operationalizes the concept of culture context by constructing an index with formative indicators, (b) develops reliable and valid scales for measuring constructs comprising the Theory of Planned Behavior (TPB), and (c) examines the boundary conditions and generalizability of the TPB in Internet-mediated consumption settings. We show reliable support for the interaction between culture context, subjective norms and behavioral intention. Implications for marketing practices across cultures are discussed.

Key Words: consumer behaviour, e-commerce, cross-cultural analysis, structural equations modelling

Vladimir Pashkevich

Marymount Manhattan College

David Curry, James Kellaris, and Norman Bruvold

University of Cincinnati

Correspondence: Vladimir Pashkevich

Dept. of Marketing, Marymount Manhattan College, 221 E71st Street,
10021, New York, NY, USA

E-mail: vpashkevich@mmm.edu

Tel: 212-517-0639

INTRODUCTION

Intuition and previous research suggest that individual's behavior is driven by factors such as attitudes and intentions, as well as by macro-level factors such as cultural context, norms and rules. Although users of the Internet represent an "Internet culture", they also represent the intrinsically more fundamental culture of their home country. Even though this line of reasoning would seem to bear fruit, very little is known about how the connection between broad cultural level factors and individual level factors shape an individual's intentions to use the Web.

A dominant approach to modeling the etiology of behavior in consumer research has been Fishbein and Ajzen's (1975) Theory of Planned Behavior. The theory posits that overt behavior is a function of a person's intention, which in turn is hypothesized to depend on the person's attitude toward the behavior and his/her subjective norms. One implication of this theory is that attitudes and subjective norms mediate the effects of other variables on intentions and that, in turn, intentions mediate the impact of attitudes and subjective norms on behavior. According to Fishbein, individuals are believed to hold attitudes because they perceive that desired or undesired outcomes are associated with a focal behavior. People are assumed to seek rewards by following an "optimal" plan of action that produces desired outcomes. The second antecedent of intention is a perception internalized by a decision-maker that persons important to the decision-maker prefer that she/he engages or not engages in a certain behavior. This perception is referred to as a *subjective norm* (Trafimow and Finlay 1996). Fishbein and Ajzen (1975) suggest that subjective norms are based both on the perceived preferences of individual referents and on the individual's desire to comply with these preferences.

Fishbein and Ajzen's Theory of Planned Behavior, however, may be too simplistic of a model to explain on-line behavior in different cultures. The question of the model's simplicity centers around the extent to which the magnitude of the attitude \square intention, subjective norm \square intention, and past behavior \square intention structural linkages are independent from cultural factors. The present research attempts to refine the TPB to consider behavioral intentions under conditions of effortful and deliberate decision making in on-line consumption domains in various cultures.

Shim et al. (Shim, Eastlick, Lotz, and Warrington 2000, Shim, Eastlick, Lotz, and Warrington 2001) were among the first who suggested the Theory of Planned Behavior as a theoretical framework for the structural understanding and prediction of consumer

intentions to use the Internet for information search and shopping. We follow their conceptual model but recognize that the model does not incorporate the effects of macro-level variables. Hence, we suggest that the findings of Shim et al (Shim, Eastlick, Lotz, and Warrington 2000) can be extended to specific predictions about the existence of moderating effects of culture-level factors on the magnitude of structural linkages that define the TPB. The purpose of this research is to examine the operation of these effects under various moderating conditions that represent an on-line user's culture. To achieve this goal, we compare results from two cultures – the United States and Belarus – to provide insight into whether relationships between the constructs constituting the Theory of Planned Behavior are culturally specific (see Steenamp and Baumgartner 1998 for a general discussion of cross-cultural comparison).

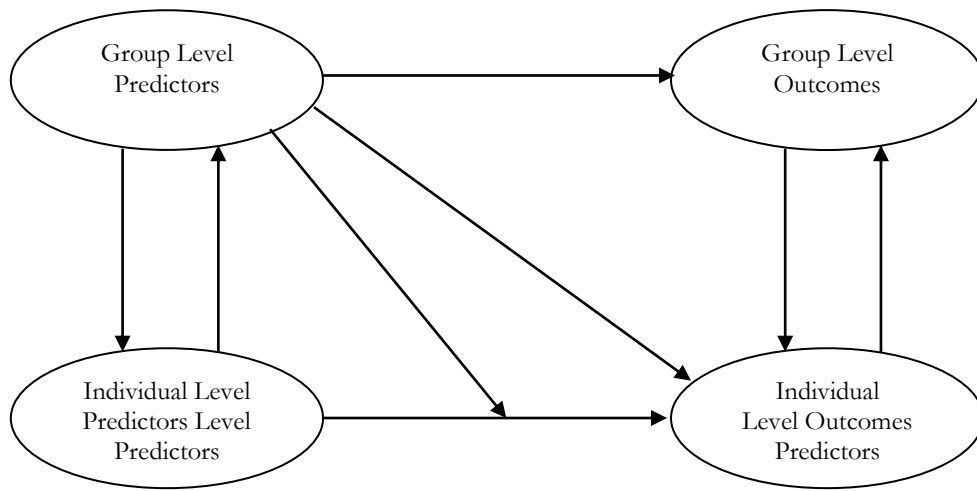
The basis for suggesting moderating influences on the magnitude of the structural linkages used here is the analysis of cultural variability. We propose that the paths from attitude, subjective norm, and past behavior to intention should vary as a function of cultural factors such as cultural context (high vs. low; Hall 1960) and individualism-collectivism (Hofstede 1980, Triandis and Gelfand 1998). It would seem plausible that the strength of the structural linkages between the constructs specified by the TPB would be culture specific, a proposition that is tested here. In so doing, variation in the intention weights attributable to attitude, subjective norm, and past behavior will be assessed, thus providing some evidence for the prediction of a moderation effect. The data collected from respondents in the United States and Belarus permit tests of the hypothesis that these two cultures, representing different positions on the high-low context, high-low collectivism, and high-low individualism dimensions, generate different predictions under assumptions of the TPB.

Accomplishing these goals requires a general framework for developing a latent variables structural equation model (LVSEM) (Kaplan and Elliott 1997) and estimating its parameters. The important feature of LVSEM is that it can be used to estimate the moderating effects of group level factors on individual level parameters (structural relationships), while taking into account measurement error. None of the other commonly used methods of cross-cultural comparison can do this.

Testing the TPB predictions in two different cultures using LVSEM methodology explicitly recognizes that micro-level phenomena are embedded in higher level macro contexts, and that macro-level phenomena often emerge through the interaction and

dynamics of lower level micro elements (Klein and Kozlowski 2000). Figure 1 illustrates some of the potential inter- and intra-level relationships possible (MacKenzie 2001).

Figure 1: Multiple Levels Framework for Modeling Individual Behavior (MacKenzie 2001)



Next, we establish a basic theoretical framework for the model that will be tested in the empirical part of the paper.

THEORETICAL CONSIDERATIONS

The advantage of a general theory of social behavior is that it can serve as an organizing framework for research on any given behavior (Early and Randel 1997). In addition, as theoretical advances are made, these advances can be readily translated into the applied domain. The primary disadvantage of a general theory of behavior is that it may omit important domain - or population-specific - variables that can explain behavior over and above the constructs within the theory. Any analysis of social behavior benefits from the use of a general theory of behavior that evolves from sound socio-psychological research traditions, as long as such application is coupled with the analysis and integration of relevant domain-specific variables and population/culture specific variables (Cialdini 1993). Models of social behavior often use explanatory variables that are relatively specific and directly tied to the behavior in question (e.g., beliefs about the advantages and

disadvantages of performing the behavior) or constructs that are more general and that serve as more distal behavioral determinants (social class, personality, subculture, culture).

There are numerous examples of models that attempt to explain the behavior of diverse groups. In social and consumer psychology, some of the more popular models include Fishbein's theory of reasoned action (Ajzen and Fishbein 1980) and Triandis et al.'s (1972) theory of subjective culture.

Fishbein's theory of reasoned action has been evaluated in hundreds of domains, including the analysis of such diverse behaviors as contraceptive use, eating habits, voting behavior, and smoking. Typically, researchers in these applied domains use the constructs specified by the theory and then augment the analysis by including domain- or population-specific variables that may be predictive of behavior independent of the constructs emphasized by Fishbein. Continuing in the tradition of investigating the effects of qualitatively different types of antecedents on planned behavior, Shim et al. (Shim, Eastlick, Lotz, and Warrington 2000) explored the differential effects of constructs specified in the TPB and factors specific to the Internet shopping environment. Shim et al. (2000) suggested including Internet environment-specific factors in the model to enhance its ability to predict consumers' intentions. The following domain-specific factors were included: the attitude toward security, product guarantees, safety, privacy, attitude toward the social and recreational aspects of shopping, attitude toward an opportunity to save time when shopping on-line, and overall experience and familiarity with on-line shopping.

The purpose of the current work is to explore the extent to which the relationships between the constructs in the model proposed by Shim et al. (2000) are culture specific. In order to accomplish this goal, we draw specific hypotheses regarding how cultural factors may influence the magnitude of the relationships between antecedents and dependent variables specified in Shim's model. We propose two macro-level variables-moderators that are very likely to be the population specific variables that can explain on-line consumer behavior over and above the constructs within the Theory of Planned Behavior. These are the individualism/collectivism construct and the cultural context construct. In this study, we link these constructs used to describe culture to the individual level variables of the Theory of Planned Behavior adopted for the analysis and prediction of on-line shopping behavior.

Next, we examine several theoretical frameworks that conceptualize cross-cultural variability as well as the variability within a culture. Individualism/collectivism is

considered a core dimension of cultural variability (Han and Shavitt 1994, Hofstede 1980, Kim 1994, Smith and Bond 1998). The literature on cultural variability refers to members of individualistic societies as individuals who tend to define the self as autonomous and independent from groups, whereas in collectivistic societies the self is defined more in terms of group membership (Kim 1994). Differences are also found in the relationship between personal goals and group goals. On the one hand, personal goals tend to be distinct from the group goals in an individualistic society and prioritized above the group goals. On the other hand, in a collectivistic culture, personal goals and communal goals are more closely related and, when discrepant, the former are subordinated to the latter (Triandis 1995, 1996). In individualistic nations, attitudes typically take precedence over norms as determinants of social behavior, whereas the opposite is true in collectivistic nations.

Triandis and Gelfand (1998) has elaborated a broader conceptualization of the collectivism-individualism dimension. He emphasizes more strongly than Hofstede (1980) the idea that individualism entails giving priority to personal goals over the goals of the in-group, whereas collectivism entails giving priority to in-group goals over personal goals.

Further, Triandis (1994, 1995) suggested that there are four distinct types of individualism and collectivism (a) horizontal individualism involves high individual freedom and equality, (b) vertical individualism emphasizes independence but also displays power and status differences among individuals; (c) horizontal collectivism involves interdependence and equality; and (d) vertical collectivism involves interdependence and significant power differences among individuals.

The first type suggested by Triandis, horizontal individualism, involves a self-focused action orientation and interpersonal exchanges in which the other's identity, status, and power are not significant components of interaction. Vertical individualism, on the other hand, involves interactions in which the actor-target (e.g., role and status differences) is important in the exchange. A third dimension, horizontal collectivism, involves other-oriented, interdependent exchanges toward generalized others, with little emphasis on status differences. Finally, vertical collectivism involves other-oriented exchanges in which the particular, actor-targeted relationship is typically of importance. Thus, role difference in power and status are likely to play a substantial role in determining the tone of the interaction in this case.

Another investigation into the cultural determinants of individual behavior is the work of Markus and Kitayama (1991) who suggest that North Americans possess a model of the self as fundamentally independent. Such individuals desire a sense of autonomy and seek to express their internal attributes to establish their distinctiveness from others in their environment. For Americans, then, it is important to be consistent with what one has done in the past to establish one's own stable internal attributes. Consequently, making a choice provides an opportunity to display one's preferences, express one's internal attributes, assert one's autonomy, and fulfill the goal of being unique. Thus, for Americans, internal consistency and personal agency may be deeply intertwined with their sense of self-identity.

Now consider a different cultural context – one in which the members possess a more interdependent model of the self. In contrast to American individualists, Markus and Kitayama (1991) theorize that members of more interdependent cultures (most non-Western cultures) strive for interconnectedness and belonging with their social ingroups by maintaining harmony and endeavoring to fulfill the wishes of their social ingroups (De Vos 1985, Hsu 1985, Miller 1988, Shweder and Bourne 1984, Triandis et al. 1993, Triandis 1995). Moreover, because the superordinate goal for interdependent selves is to strive for interconnectedness, they possess a more malleable self identity across contexts, suggesting that how they behaved in the past may not be an accurate reflection of their current or future preferences. For such individuals, the exercise of personal choice may be considerably less significant. Internal consistency is not as relevant for members of more interdependent cultures. Specifically, collectivists may be less committed to their previously stated preferences because there is no expectation for past preferences to be reflected in current ones. For example, Cialdini et al. (2001) found that it was not the nation of origin, but the extent to which persons are individualistic or collectivistic, that moderates the likelihood of those persons being influenced by the past deeds. Drawing once more on the theory of Markus and Kitayama (1991), one might argue that people possessing interdependent self-models will be more receptive to the imposition of others' attitudes when making judgments about personal attitudes and behaviors. Because interdependent selves strive not for autonomy and interdependence, but rather interconnectedness, they might actually prefer the choices selected by others, especially if the social context enables fulfilling the superordinate cultural goal of belonging.

The study by Cialdini et al. (2001) on social proof provides some initial insights into this phenomenon. Building on their previous research, and his colleagues surveyed the willingness of Euro-Americans and Polish participants to fill a questionnaire when considering the prior compliance rates among their peers. Social proof was shown to be a more powerful compliance technique in Poland than in the United States. Drawing on the cultural analysis of Markus and Kitayama (1991), one may expect members of more collectivist cultures to be less influenced by their personal histories. According to Markus and Kitayama (1991), although personal agency and internal consistency are essential systems of the self-concept of American individualists, it may be less relevant to the self-concept of members of more collectivist cultures.

Next, we examine another investigation into the cultural determinants of individual behavior. Many scholars outside of marketing and consumer research agree that cultural context is an important topic for study. Cultural context has been the focus of numerous works over the past several decades and has been identified by a number of scholars as a pivotal attribute of cross-cultural variability. Indeed, the distinction high-context/low-context communication is useful for understanding the differences between cultures with respect to verbal and nonverbal communication, direct versus indirect advertising, and the use of symbols versus facts and data. For example, Hall (1984) distinguishes cultures according to the degree of context in their communication systems. In a high-context communication or message, most of the information is either part of the context or internalized in the person; very little is made explicit as part of the message. The information in a low-context message is carried in the explicit code of the message. In general, high context communication is economical, fast and efficient. However, time must be devoted to programming. If this programming doesn't take place, the communication is incomplete. Generally, high-context cultures are more predictable, but only if one is familiar with the system. Low-context cultures are characterized by explicit verbal messages. Effective verbal communication is expected to be explicit, direct, and unambiguous. Low-context cultures demonstrate high value and positive attitudes toward words.

In summary, two major research streams in social psychology have investigated the effects of: (a) one's own behavior – especially freely enacted deeds – on subsequent attitudes and behavior, and (b) other people's behaviors on individuals' subsequent attitudes and behaviors (Adamopoulos and Kashima 1999, Eagly and Chaiken 1993).

Recent findings reviewed here suggest that the relative impact of one's own behavior and the behavior of others are moderated by cultural differences in individualism/collectivism. Individualists tend to be more influenced by their own behavior relative to collectivists, whereas collectivists are more influenced by other people's behavior relative to individualists, especially those exhibited by people who are close to the target individual.

We develop our discussion of the macro level cultural variables and the process model of on-line consumer behavior subsequently. Previous research has established that cultural forces influence a number of market-related behaviors, underscoring their importance to consumer researchers who seek to integrate effects of cultural and individual influences (Bagozzi, Wong, Abe, and Bergami 2000). To this end, we generate theoretical predictions relating the constructs conceptualizing the culture and the constructs of the TPB to consumer on-line behaviors.

DEVELOPMENT OF HYPOTHESES

We suggest that on-line behavioral intentions would be best modeled by accounting for the interaction between attitudes, normative pressures and past experience, on the one hand, and cultural factors, on the other hand. In this research, we tested a model of these relationships explicitly using consumer culture relevant macro variables and hypothesizing their moderating effect on the magnitude of the relationships between social norms, attitudes, past behaviors as well as behavioral intentions.

Individualism-collectivism orientation and relative effect of attitudes and social norms on on-line behavioral intention (Hypothesis 1)

Prior studies demonstrate that the dominant cultural orientation affects the relative impact of attitudes, social norms and past behaviors on fast food restaurant patronage decisions (e.g., Bagozzi, Wong, Abe, and Bergami 2000). The fundamental premise of the current research is that cultural orientation leads to the differential impact of subjective norms, attitudes and past behavior on on-line consumer behavior. Attitudes held by consumers in individualistic societies are perceived to be more concrete and potent predictors of behavioral intentions and hence more powerful antecedents of on-line consumer behavior than attitudes toward on-line shopping held by consumers in collectivistic societies where they are conceptualized to be more unstable and abstract. In individualistic societies, consumers tend to define the self as autonomous and independent from groups, and

social norms are weaker predictors of behavioral intentions. In contrast, behavioral intentions of consumers from predominantly collectivistic societies, in which the self is defined mostly through the relationships with in-group members, are strongly affected by social norms (see Figure 1). This is the fundamental cultural-psychological underpinning of our framework, and we begin by looking at how cultural orientation affects consumers' behavioral shopping intentions in the Internet context. Thus, our baseline hypothesis is:

Hypothesis 1: Cultural orientation will affect the relative impact of attitudes and social norms on intentions to purchase and do information search on-line such that consumer intentions are affected predominantly by social norms in collectivistic societies and by attitudes in individualistic societies.

Moderating role of cultural context on the relative effect of attitudes and social norms on on-line behavioral intentions (Hypothesis 2)

Individualism-collectivism is only one aspect of cross-cultural variability, and our discussion of the literature in the previous chapter suggests that other dimensions of cross-cultural variability should also result in distinct predictions of on-line behavior under the Theory of Planned Behavior. Empirical tests of Hofstede's framework have thus far focused largely on the individualism/collectivism dimension of cross-cultural variability. Further, it has not been explored how other dimensions of cross-cultural variability function interactively with the constructs of the Theory of Planned Behavior. In this research, we include in our analysis one more dimension of cross-cultural variability - culture context - and examine its interactions with the antecedents of behavioral intentions specified in the TPB (i.e., attitudes, social norms and past behavior). We selected this specific dimension of cross-cultural variability not only because it enriches our theoretical understanding of different manifestations of cultural variability but also because it has important implications for marketing communication. A robust finding that has been replicated in various cultures is that people in high-context cultures value interpersonal relationships and many cultural and interpersonal stimuli may be needed to accomplish the task of persuading people to try a new product (Hall 1976). In low-context cultures, written mass communications, including precise copy, often play key roles in persuading people to try a new product. Thus, in general, communication with other consumers, often subtle and indirect, is a more powerful predictor of behavior in high-context cultures, even in situations that require careful cost-benefit analysis and

independent judgment (Rogers and Shoemaker 1971). The perceived high importance of relationships and nonverbal communication leads to social influence effects such that one perceives oneself as less prone to be involved in behaviors that are driven mostly by personal attitudes. This social influence manifests itself when behavior of a consumer is influenced mostly by the members of his/her reference group. In a similar vein, third person communication and persuasive messages from reference group members have a greater effect on consumers' behavioral intentions than persuasive communication from commercial and "official" sources. Therefore, effective marketing communication is predicated on tailoring product and service strategies as well as marketing communication program strategies so that the negative consequences of the incongruence between the marketing strategy and predominant culture can be avoided. At the theoretical level, we expect that a high context culture increases the relative effect of the social norms on behavioral intentions, thereby inhibiting the effect of attitudes toward a certain course of action. On the other hand, a low context culture works in the opposite direction to reduce the effect of social norms, thereby enhancing the effects of attitudes and cost-benefit analyses on the chosen behavior. Therefore, we expect cultural context to be a moderator of the effect of social norms and attitudes on behavioral intentions in on-line consumer behavior domain (see Figure 1):

Hypothesis 2: Cultural context will moderate the relative effect of attitudes and social norms on consumers' on-line behavioral intentions, such that attitude is a stronger predictor of BI in the low-context culture than in the high-context culture and social norms are stronger predictors of on-line behavioral intentions in the high-context cultures than in the low-context cultures.

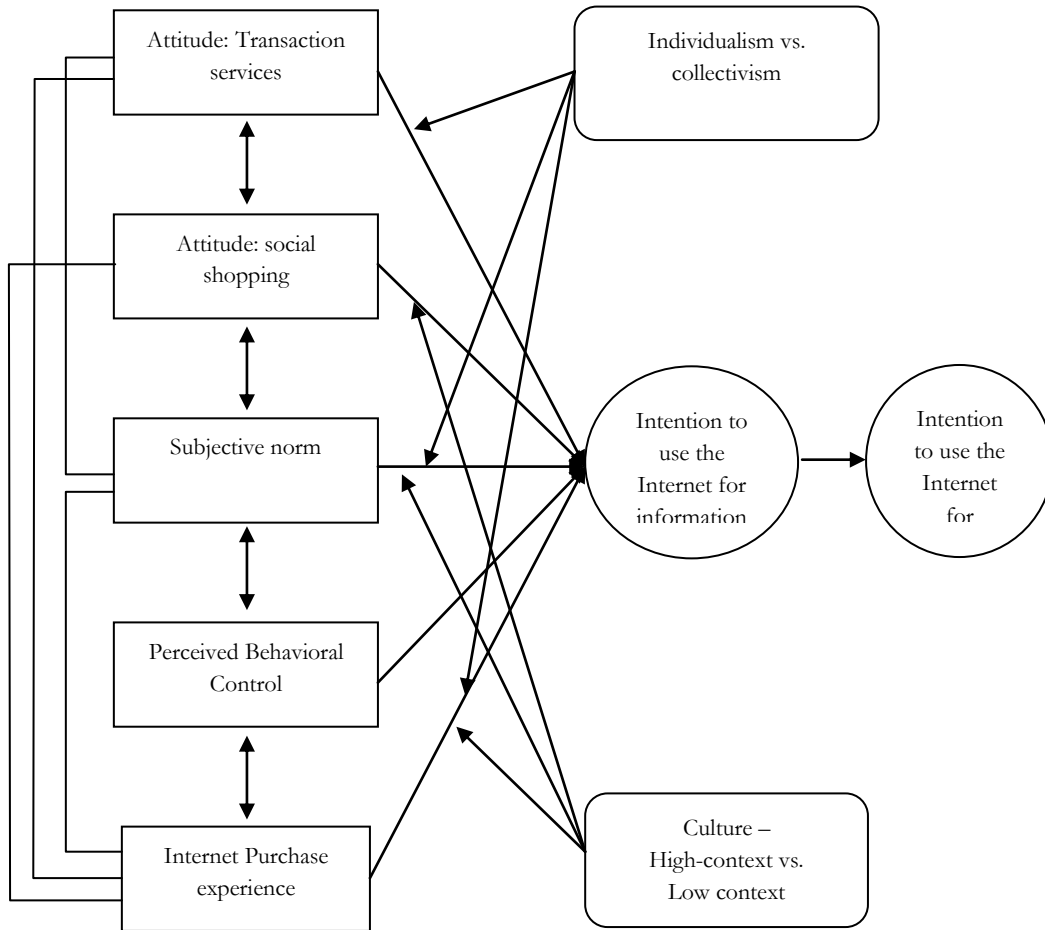
The moderating role of individualism-collectivism and cultural context on the relative effect of past behavior on behavioral intentions (Hypothesis 3)

Understanding how consumers' behavioral intentions to shop or search for product information and service information on-line are affected by past behavior (e.g., Shim, Eastlick, Lotz and Warrington 2001) is crucial since behavioral intentions have been established to be necessary precursors to actual behavior. Therefore, having established how we expect individualism/collectivism and culture context to affect the magnitude of the relationships between social norms and attitudes, on the one hand, and behavioral intentions, on the other, we focus now on past behavior. In our research, we examine the

effect of past behavior on behavioral intentions and assume that a direct effect of the prior experience on the actual future behavior is insignificant. In other words, the effect of experience on the actual behavior is mediated by behavioral predispositions. This assumption seems to be reasonable due to the complexity of the consumption domain that we focus on in this research. Indeed, shopping and searching for information on-line is not trivial: the behavior requires at least minimal deliberation. Therefore, actual on-line behavior is likely to be guided by consciously formed intentions rather than by the established habit that repeats into future behavior. The past behavior has a mediated effect on future responses through its impact on conscious intentions.

Future use of the Internet for the purpose of information search and purchasing products and services is likely to be a result of conscious intentions, partially shaped by consumer past experience. Past behavior can directly inform intentions for future responses through self-perception (Bem 1972), and cognitive consistency processes. Past behaviors also contribute to intentions by affecting attitudes, perceived normative pressure, and control. That is, the same self-perception and cognitive consistency processes may yield inferences about attitudes, normative pressure, and perceived control that are consistent with past experience. Despite this widely accepted conceptualization, we model a past behavior as a variable predicting intentions in its own right and not because it forms the basis for favorable or unfavorable attitudes toward the behavior or because it affects judgments of perceived control. Past behavior can have an inertia effect on the future behavior: it can lead to the formation of on-line behavioral habits that help to reduce unnecessary information processing costs (Ouelette and Wood 1998). Specifically, according to economic search theory (Kohn and Shavell 1974), it may be suboptimal to consider all available alternatives due to processing costs, if an option that is considered is above some threshold. In this vein, we posit that previous experience with using the Internet influences consumers' perceived difficulty and attractiveness of shopping on-line. Moreover, the strength of the link between past behavior and behavioral intentions varies as a function of culture context and individualism/collectivism. When viewing shopping and product information search on-line, the behavioral intention can be defined as an overall predisposition to engage in the behavior; this predisposition is a function of attitudes, social norms, the magnitude of the perceived risk associated with on-line

Figure 2: Multiple Levels Framework Applied to Consumer Behavior On-line



shopping, and the perceived ability to mitigate any negative consequences of on-line shopping. If, as per results of the work by Markus and Kitayama (1991), for members of individualistic societies, it is important to be consistent with what one has done in the past to establish one's own stable internal attributes, it is reasonable to expect a stronger relative effect of the past behavior (PB) on the behavioral intention (BI) in the low context and individualistic cultures: collectivism and high context increase the magnitude of the link between PB and IB. In other words, in the low-context cultures, the past use of the Internet in consumption domain makes the intention to use it again for shopping and information search strong enough to predispose consumers to engage in actual shopping regardless of a presence or a lack of presence of a normative pressure

promoting such activity. On the other hand, in the high-context culture, where the way individuals behaved in the past may not be an accurate prediction of their current or future predispositions (Markus and Kitayama 1991), past experience with Internet shopping should not result in stronger future intentions (see Figure 1). This seems to be a reasonable prediction due to the lower level of desire for internal consistency and lower priority given to the exercise of personal choice observed in high context and collectivistic cultures. Thus:

Hypothesis 3: Culture context and individualism-collectivism will moderate the effects of past behavior on behavioral intentions in the on-line consumption domain.

Hypothesis 3a: in the high context and collectivistic cultures, behavioral intentions to use Internet for the purpose of consumption will not be strongly affected by consumers' previous experience.

In other words, they will not vary as a function of the past behavior; but

Hypothesis 3b: in the low context and individualistic cultures, behavioral intentions will be higher when consumers previously used Internet for the purpose of shopping and information search rather than when they did not have such experiences

In the following section, we present the results of the empirical study that tests the three hypotheses delineated above.

METHODOLOGY AND FINDINGS

First, we advanced a valid scale that measures consumers' perceptions of the magnitude of the culture context within their native culture. Second, we assessed the psychometric properties of the scales measuring Individualism and Collectivism in the United States and Belarus. When the psychometric properties of the English version of these scales were reported in the literature, no such assessment of the Russian version of the scales was performed. Third, we demonstrated the adequate psychometric properties of the scales used to measure the constructs composing the enhanced model representing the Theory of Planned Behavior and estimate the SEM representing the TPB. Finally, we tested the hypotheses formulated in the previous chapter. We provided evidence supporting the hypothesized stronger and significant effect of past behavior on the intention to use Internet for information search and shopping. Also, we provided evidence suggesting that we should reject the hypotheses stating that there is a significant difference between two

cultures in terms of predictive power of the attitudes and social norms regarding on-line shopping. All written materials were translated into Russian by a bilingual, native Russian speaker and were reviewed and validated by a second bilingual native Russian speaker. The items were translated in accordance with the recommendations of Brislin (1980).

Study 1

To develop a parsimonious yet representative scale of the strength of consumers' perception of the presence of characteristics of high culture context in their countries, we followed the procedures for the formative scale development advocated by Diamantopoulos and Winklhofer (2001). Our first goal was to identify a set of items designed to tap the construct of cultural context. To attain this objective, we created a scale composed of eight questions that were potentially relevant, based on the literature on culture context (Hall 1976, 1960). The following aspects of the culture context were measured with the composite scale: emphasis on non-verbal communication, preference for doing business with people who are known, importance of pre-transaction rituals, relative de-emphasis on time, de-emphasis on contractual or formal agreements, more emphasis on informal, personal agreements, and a lack of haste.

Second, we asked one hundred seventy-four students from a large Midwestern University and one hundred and sixty-six students at a large Belarusian University to rate their culture on several dimensions representing different aspects of the culture context. Respondents used a 7-point rating scale, ranging from 1 (strongly disagree) to 7 (strongly agree), to describe "the extent to which the following statements describe [their] typical feelings toward the culture." (see Table 1) The respondent received the survey containing - among others - the items measuring cultural context, horizontal and vertical individualism, and horizontal and vertical collectivism.

When validating this measure, we drew on the guidelines suggested by Diamantopoulos and Winklhofer (2001), who contend that four issues are critical to successful index construction. Specifically, the content of the construct should be determined, indicators composing the index should be specified, a collinearity test should be run to eliminate any indicator that is a linear combination of other indicators, and the test of external validity should be performed. The content of the construct and the items were specified according to Hall's (1984) conceptualization of culture context. Next, in order to test for the presence of multicollinearity, the items were subjected to a set of

regression analyses using one item at a time as a dependent variable. If a particular indicator is almost a perfect linear combination of the other indicators, it is likely to contain redundant information and, consequently, needs to be excluded from the set of indicators composing a formative model of the construct. Based on the analysis of VIFs (variance inflation factors) corresponding to each regression model, we concluded that there were no any multicollinearity in the set of items composing the cultural context scale (see Table 2). Indeed, VIFs were far below the cut-off threshold of 10. Therefore, all the items were retained for the initial inclusion in the formative measure of culture context.

Table 1: Findings: Culture Context – US and Belarusian Samples

	U.S. score	Directionality	Belarus Scores	Significance
Heavy emphasis on non-verbal communication	4.83	Higher	4.17	.01
Preference for doing business with people who are known	4.64	Higher	4.45	.296
Existence of pre-transaction rituals	4.72	higher	4.36	0.06
Relative de-emphasis on time	3.27	lower	3.8	0.02
De-emphasis on contractual or formal agreements, more emphasis on informal, personal, agreements	3.71	lower	3.96	.141
De-emphasis on the mass media as a source of information about electronic commerce	4.71	Higher	3.9	0.00
Emphasis on the friends and relatives as a source of information	4.33	Lower	4.37	.738
Lack of haste	3.53	lower	4.38	0.00

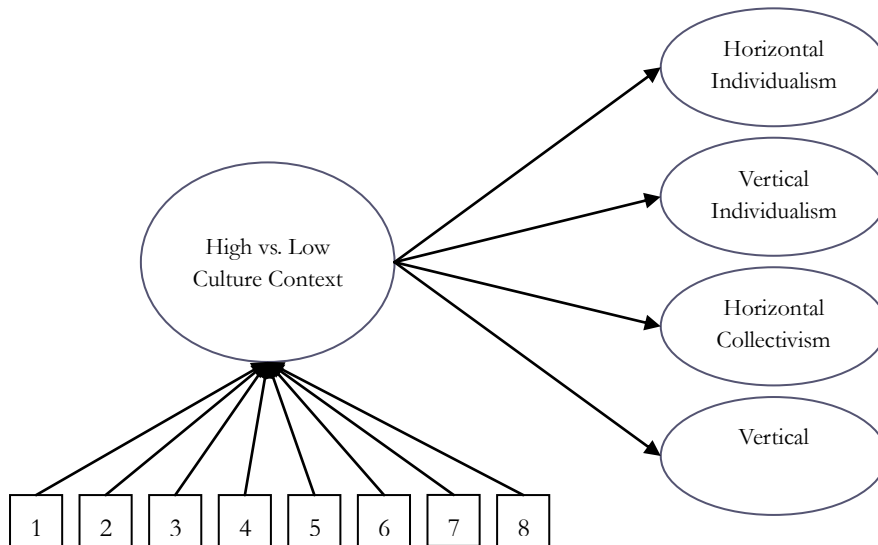
In order to test for the external validity of the suggested measure, we constructed a nomological network based on the theoretical considerations discussed in the previous section. A theoretical analysis suggests that culture context should be significantly correlated with horizontal collectivism and not correlated with horizontal individualism, vertical individualism, and vertical collectivism. This test complies with Diamantopoulos

and Winklhofer's (2001) recommendations, according to which other constructs in the nomological network should be measured by means of reflective indicators (See Figure 3).

Table 2: Indicators Collinearity

	R-square	Maximum VIF
Item 1	0.195	1.440
Item 2	0.39	1.128
Item 3	0.292	1.310
Item 4	0.094	1.604
Item 5	0.102	1.606
Item 6	0.018	1.630
Item 7	0.051	1.629
Item 8	0.1	1.629

Figure 3: A Nomological Network used to Test the Formative Scale for the External Validity



The path coefficient between culture context and horizontal collectivism is significant and positive (2.07), while the path coefficients between culture context, on the one hand, and horizontal individualism (0.35, n.s.), vertical individualism (0.1, n.s.), and vertical collectivism (0.47, n.s.), on the other hand, are insignificant. Therefore, our findings within

Diamantopoulos and Winklhofer's (2001) guidelines for index scale development suggest that proposed formative indicators compose a valid scale for measuring culture context.

Study 2

Study 2 was designed to confirm the stability of the vertical and horizontal Individualism and Collectivism scales (Rhee, Uleman, and Lee 1996) using different samples of respondents. It also assessed the relative position of two cultures – the USA and Belarus – on several dimensions underlying the cross cultural variability.

One hundred seventy-four undergraduates in several marketing classes at a large Midwestern University in the United States and one hundred and sixty-six students at a large university in Belarus were asked to think about their culture (to which they had some degree of emotional attachment) and to complete the four four-item scales representing four distinct dimensions of cross-cultural variability, vertical and horizontal individualism and collectivism, with their native culture in mind. Respondents indicated the extent to which each item described their native culture. These measures are multi-item Likert scales, ranging from 1 (strongly disagree) to 7 (strongly agree), wherein respondents rate the extent of their agreement concerning how they perceive their culture. After participants completed the questionnaires, they were thanked for their participation, debriefed, and dismissed.

Results

To assess the properties of the scales, we used structural equation modeling and conducted a set of confirmatory factor analyses corresponding to the measurement model according to which VI, VC, HC, and HI are independent constructs. The model showed that each path is positive and significant (see Table 3 and Table 4), suggesting that each indicator contributes to the corresponding HI, HC, VI, or VC construct directly.

The measurement properties of the scales are included in Table 5 and Table 6. The internal consistencies of scales reflecting cross-cultural variability (the four dimensions of collectivism and individualism) were good, with all Cronbach alpha scores at above 0.73 (the USA sample) and at above 0.65 (Belarus). The fit statistics of each model were subsequently examined to assess how well each of these four measurement models fits the data. In general, a GFI (general fit index) and an AGFI (adjusted general fit index) statistic of greater than 0.9 are considered adequate, with greater values being superior. For RMSR

statistics, lower values are superior, with the generally acceptable cutoff point being 0.05. An AVE (average variance extracted) statistic of more than 0.5 is considered adequate, with higher values being superior. According to these criteria, none of the four models are acceptable because at least one of the fit statistics doesn't meet the corresponding criteria specified above. The dissimilarities between the fit statistics obtained in our study and reported previously (Rhee, Uleman, and Lee 1996) suggest a relatively unstable underlying structure of the VI, VC, HI, and HC scales.

Table 3: Maximum Likelihood Factor Loadings (USA)

Factor	Loadings of the corresponding scale items
Attitude toward transactional services (ATTS)	.343, .229, .366, .483, .276
Attitude toward social shopping (ATSS)	0.453, 0.921, 0.928
Intention to use Internet for shopping (IUIS)	0.537, 0.884, 0.851
Horizontal individualism (HI)	0.805, 0.950, 0.813, 0.837
Vertical individualism (VI)	0.797, 0.898, 0.505, 1.0
Horizontal collectivism (HC)	0.433, 0.964, 0.431, 0.692
Vertical collectivism (VC)	0.590, 0.434, 0.439, 0.637

Table 4: Maximum Likelihood Factor Loadings (Belarus)

Factor	Loadings of the corresponding scale items
Attitude toward transactional services	0.647, 0.130, 1.0, 0.26, 0.544
Attitude toward social shopping	0.133, 0.806, 0.711
Intention to use Internet for shopping	0.157, 0.496, 0.533
Horizontal individualism	0.644, 1.0, 0.655, 0.486
Vertical individualism	0.684, 1.0, 0.704, 0.741
Horizontal collectivism	0.657, 1.0, 0.678, 0.848
Vertical collectivism	0.316, 0.553, 0.267, 0.960

Upon assessing the acceptability of the measurement models corresponding to the VI, VC, HI, and HC scales, the next step was to test the research question exploring what, if any, differences exist between U.S. and Belarusian students in the cultural orientations of vertical and horizontal Individualism and Collectivism. The scores of each of the four dimensions were calculated for the two student groups. Scores could range from 1 to 7.

The multivariate tests of difference were performed and findings are summarized in Table 7.

Table 5: CFA Results (USA)

	Chi-square	GFI	AGFI	RMSR	AVE	Coeff. Alpha
ATTS	6.56.73,p=0.255	0.985	0.954	0.219	0.12	0.71
ATSS	Perfect fit	N/A	N/A	N/A	.739	.82
IUIS	Perfect fit	N/A	N/A	N/A	0.598	0.8726
HI	49.3,p=0.00	0.902	0.510	0.0431	0.727	0.8164
VI	34.6,p=0.00	0.923	0.615	0.0615	0.69	0.8272
HC	0.123,p=0.94	1	0.998	0.0075	0.445	.7688
VC	46.3,p=0.00	0.909	0.546	0.174	0.2836	.73

Table 6: CFA Results (Belarus)

	Chi-square	GFI	AGFI	RMSR	AVE	Coeff. Alpha
ATTS	2.5	.275	.955	0.128	0.38	0.7
ATSS	Perfect fit	N/A	N/A	N/A	.4	.5
IUIS	Perfect fit	N/A	N/A	N/A	0.1849	0.66
HI	Perfect fit	1	N/A	N/A	0.89	0.86
VI	29.13.6,p=0.00	0.927	0.637	0.0703	0.66	0.73
HC	Perfect fit	N/A	N/A	N/A	0.69	.816
VC	0.653,p=0.7	0.998	0.990	0.03294	0.3493	.65

Table 7: Findings: Individualism and Collectivism – US and Belarusian Samples (p=0.05)

Dimension	US – Belarus directionality	Significance
Vertical Individualism	Higher	sig
Horizontal Individualism	Higher	sig
Vertical Collectivism	Higher	sig
Horizontal Collectivism	Higher	sig

As anticipated, the U.S. sample scored substantially higher on both horizontal and vertical Individualism than the Belarusian sample. The obvious deviation from expected scores was on the dimensions of vertical and horizontal collectivism. U.S. students scored in the high range and Eastern European students in the low range. These results are contradictory to the fact that Eastern Slavic cultures are known for their collectivist behavior. We suggest that collectivist as well individualist behaviors are displayed in

Belarus and United States. It seems that both countries display the striking contradictions of highly individualistic behavior, low social responsibility, and at the same time active networking for survival.

Study 3

One hundred seventy-four undergraduate marketing students from a large Midwestern University participating for class credit and one hundred and sixty-six students from a large university at the Republic of Belarus took part in this study, which was administered in a single session. Participants were given these instructions:

Thank you for agreeing to participate in this project. All of your responses will be anonymous. The items on the questionnaire aim to measure attitudes towards using Internet for information search and shopping, and, more specifically, how you feel about shopping on-line. Completing this questionnaire is very straightforward. Read each statement. Then circle one number to indicate the strength of your agreement with each statement. Please take your time and think about your responses. "Using the Internet for information search and shopping" applies to the products and services you normally buy using Internet. Another purpose of this study is to measure your involvement or interest in on-line shopping. To take this measure, we need you to judge various aspects of on-line shopping according to how YOU perceive on-line shopping. Be sure that you check every scale. Do not omit any. Never put more than one check mark on a single scale. The value of this research depends on the seriousness with which you approach the task. There are no right or wrong answers. We only ask that you answer all of the questions as honestly and thoughtfully as you can. Thank you in advance for your participation.

After reading the instructions, respondents were asked to think about their on-line shopping experiences and then to indicate the extent to which the items measuring these experiences described their feelings and thoughts about Internet shopping along a scale ranging from 1 (strongly disagree) to 7 (strongly agree). Participants answered a set of 32 items representing our seven focal TPB constructs: attitude toward economic transactions on-line, attitude toward the social aspects of shopping on-line, experience with on-line shopping, perceived risk associated with shopping on-line, intention to shop on-line, hedonic benefits of on-line shopping, and intention to search for product information on-line. The first factor, labeled ATTS (attitude toward on-line economic transactions), included the items security, product guarantees, safety, and privacy. Items in this factor

reflect the subjective probability of the risk associated with shopping on-line as well as perceived convenience. A second factor, labeled ATSS (attitude toward social aspects of shopping), included the items measuring social, personal, and recreational aspects of on-line shopping. This factor reflects positive feelings toward on-line shopping due to its potential to satisfy social and psychological needs. A third factor, labeled SN (subjective norms), included the items measuring expectations and social desirability. These items describe a consumer's feelings of being joined with the Internet. A fourth factor, labeled perceived behavioral control, included the items measuring subjective probability of the risk associated with shopping on-line. A fifth factor, past behavior, included the items measuring actual experience with Internet shopping. Finally, sixth and seventh factors, labeled intention to use the Internet to search for product information and purchase products, included the items measuring behavioral intentions. After completing the questionnaire, participants were thanked for their support, debriefed and dismissed.

Results

The measurement properties of the items are included in Table 5 and Table 6. Unidimensional scales representing the TPB constructs were analyzed on the basis of confirmatory factor analyses. The items corresponding to attitude toward economic transactions on-line, attitude toward the social aspects of shopping on-line, and intention to search for product information on-line were correlated with unique factors corresponding to the constructs they intended to represent, which was consistent with initial theorizing. Reasonably clean factor analyses resulted. The alpha reliability coefficient scores for the ATTS, ATSS and IUIS scales, obtained based on the USA data, were adequate ($\alpha=.71$; $\alpha=.82$; $\alpha=.87$) and within Nunnally's (1978) guidelines for scale development. The alpha reliability coefficient scores for the ATTS, ATSS and IUIS scales, obtained based on the Belarusian data, were somewhat inadequate ($\alpha=.7$; $\alpha=.5$; $\alpha=.66$) according to Nunnally's (1978) guidelines for scale development. The overall goodness-of-fit of these measurement models with reflective indicators was assessed with the chi-square test, the general fit index (GFI), the adjusted general fit index (AGFI), and the root mean square error of approximation (RMSEA). The psychometric properties of the ATTS, ATSS and IUIS scales, obtained based on the Belarusian data, were somewhat inadequate (See Table 6). It provides the evidence that the scale validated in one cultural setting doesn't necessarily have similar desirable psychometric properties in another

culture. Therefore, the data obtained from different samples of respondents drawn from two different cultures led to the preliminary conclusion that the ATTS, ATSS and IUIS scales are not stable. After the items were scrutinized again, the conclusion was made that indexes with formative indicators must be constructed. Corresponding composite scales were created by averaging the items. The items corresponding to the experience with on-line shopping, perceived risk associated with shopping on-line, intention to shop on-line, and hedonic benefits of on-line shopping were correlated with the unique factors as well (Tables 3 and 4). Corresponding composite scales were then created for the purpose of examining the structural relationships between all the constructs composing the TPB.

Structural equation models were used to estimate parameters and test hypotheses. Figure 2 shows the variables and paths in the model. Covariance matrices were used as input to LISREL VII for the multiple sample analyses.

All construct variances, covariances between constructs, and error variances were freely estimated in each sample. That is, each of the paths indicated in the model (see Figure 2) was estimated freely in two samples. A single set of fit statistics is provided in Table 8. The fit statistics for the structural model suggest a satisfactory fit of the model to the data.

Table 8: Findings: Fit Statistics – US and Belarusian Samples

	Chi-square	GFI	AGFI	RMR (standardized)
USA	50.60 (P = 0.019)	.96	.89	0.031
Belarus	52.26 (P = 0.013)	.95	.87	0.052

The chi-squares were 50.60 in USA and 52.26 in Belarus, the GFIs were .96 and .95, the AGFIs were .89 and .87, and the RMRs were 0.031 and 0.052 in USA and Belarus, accordingly. It was concluded that the structural models fit the data well under unconstrained conditions. The estimated structural paths of the models are shown in Table 9 and Table 10. Two out of ten paths were statistically significant. Shopping experience/past behavior significantly predicted behavioral intentions in the USA.

Table 9: Summary of Path Coefficients for Explaining Intention to Use Internet for Information Search

Path	USA	Belarus
Attitude toward transaction services		
□ product information search intention	-0.21(-0.45)	-0.31(-0.31)
Attitude toward social aspects of Internet shopping		
□ product information search intention	3.20(31.36)	0.50(0.66)
Social influence from important others		
□ product information search intention	-2.90(-24.18)	3.36(3.18) *
Perceived behavioral control		
□ product information search intention	2.83(16.39)	-1.78(-1.97)
Direct Internet shopping experience		
□ product information search intention	1.88(23.89) *	1.30(1.17)

Note: Standard errors are in parentheses

* - the result is statistically significant

Table 10: Summary of Path Coefficients for Explaining Intention to Use Internet for Shopping

Path	USA	Belarus
Attitude toward transaction services		
□ Intention to use the Internet for shopping	-0.03(-0.01)	-0.01(-0.01)
Attitude toward social aspects of Internet shopping		
□ Intention to use the Internet for shopping	0.25(0.24)	-0.03(0.03)
Social influence from important others		
□ Intention to use the Internet for shopping	0.13(0.11)	1.61(1.30) *
Perceived behavioral control		
□ Intention to use the Internet for shopping	0.17(0.1)	-0.80(0.75)
Direct Internet shopping experience		
□ Intention to use the Internet for shopping	0.36(0.46)*	0.22(0.17)

Note: Standard errors are in parentheses

* - the result is statistically significant

However, attitudes and social norms were not related to behavioral intentions in the USA. As expected, social norms were positively related to behavioral intentions in Belarus. However, attitudes and past behavior were not significantly related to behavioral intentions. Thus, two hypotheses received support: the one predicting a larger effect for the American versus the Eastern European culture for the impact of past behavior and

the other predicting a larger effect for Eastern European versus American cultures for the impact of subjective norms. However, the hypothesis predicting larger effects for American versus Eastern European cultures for the impact of attitudes received no support because the respective path coefficients were of equal magnitude for Americans and Belarusians, contrary to predictions.

The final structural model was used to test the theory-driven prediction that the paths from attitudes, subjective norms and past behavior to behavioral intentions varied across cultures (to test Hypotheses 1, 2 and 3) and that all other paths were invariant across samples. In order to test the interaction effect between culture and individual level predictors, two steps are required. The first step involved a “multiple-group” solution in which LISREL derives parameters’ estimates for each group separately. It also involved initial assessment of goodness-of-fit of the model when the data obtained from both groups were analyzed simultaneously. Obtaining nonsignificant fit statistic - chi-square – would suggest that a model fits well across groups. The step 1 analysis provided perspectives on how well the model fits the data when LISREL is permitted to estimate coefficients in each group separately and without constraints across groups. In other words, the model estimated at step 1 allowed the paths from attitudes, subjective norms, past behavior, and perceived risk to each of the facets of behavioral intention to vary by sample. Suppose that there is no interaction effect and that the path from the subjective norms and past behavior (experience with shopping using the Internet) and behavioral intentions are, in fact, identical for consumers in the US and Belarus. This would suggest that any difference in the sample regression path coefficients for consumers in the US versus consumers in Belarus is due to sampling error. In the second model, in step 2, each of the paths between past behavior, attitudes and social norms was constrained to be invariant across the two samples. If there is indeed no interaction effect and the two path coefficients are equal in two populations, then such constraints should not adversely affect model fit relative to the fit of the model analyzed in step 1. If there is a reasonably significant interaction effect, then the constraints would adversely affect the model fit. Step 2 involves such a constrained solution. The results are then compared to the unconstrained solution in step 1.

Following the reasoning above, the following operations were performed: (1) a model fit was calculated using a multiple group solution in which LISREL estimated parameters in two countries with no across-group constraints; (2) a model fit was calculated using a

multiple group solution in which LISREL estimated parameters in different countries with an across-group constraints imposed to reflect the interaction effect between culture and subjective norms, attitudes and past behavior; (3) the difference in model fit was calculated by subtracting the fit index for the constrained solution from the fit index for the unconstrained solution. The set of constrained models used to test for the interaction effect is presented in Table 11.

Table 11: Description of the Models derived from the Initial Model

Model	Description (indicates a fixed path)
M1	The Path Coefficient between attitude and BI
M2	The Path Coefficient between perceived social norms and BI
M3	The Path Coefficient between past behavior and BI

The differences in fit indices (the chi-squares statistics) for models estimated at step 2 and step 1 are presented in Table 12.

Table 12: Change in the Fit Statistics when modifying Initial Model

Comparison	Chi-square difference	D.F.	Significance
M0-M1	0.24	2	N.S.
M0-M2	9.19	2	Significant
M0-M3	0.32	2	N.S.

As it turns out, these differences also are distributed as a chi-square statistic with degrees of freedom equal to the difference between the step 2 and step 1 degrees of freedom. In the case of constrained model M2, a chi-square 9.19 with 2 degrees of freedom is statistically significant suggesting that the difference in model fit is statistically significant. Therefore, an interaction effect is present because making the assumption of no interaction (i.e. equal path coefficients for consumers in Belarus and the US) significantly and adversely affects the model fit. Consequently, the parts of Hypothesis 1 and Hypothesis 2, which predicted that consumer subjective norms would be associated with stronger behavioral intentions to use the Internet for the purpose of information

search and shopping in collectivist (e.g., Belarus) rather than individualist (e.g., the United States) societies, was supported. Comparing changes in chi-square and degrees of freedom for model M0, on the one hand, and models M1 and M3, on the other hand, yields insignificant change in chi-square, indicating that the more constrained models fit nearly as well as an unconstrained model. For this reason, it is concluded that culture does not moderate the relationships between attitudes and past behavior, on the one hand, and behavioral intentions, on the other hand. Therefore, the parts of Hypothesis 1 and Hypothesis 2, which predicted that consumer attitudes would be associated with stronger behavioral intentions to use the Internet for the purpose of information search and shopping in individualist (e.g., the United States) rather than collectivist (e.g., Belarus) societies, were not supported. Also, Hypothesis 3, which predicted that consumer experience with the Internet (past behavior) would be associated with stronger behavioral intentions to use the Internet for the purpose of information search and shopping in individualist (e.g., the United States) rather than collectivist (e.g., Belarus) societies, was not supported.

Examination of the paths from social norms to behavioral intentions provides further support for the parts of Hypothesis 1 and Hypothesis 2, which predicted that culture moderates the relative impact of social norms on behavioral intentions to use the Internet for the purpose of shopping and product information search. In Belarus, subjective norm was strongly related to behavioral intentions to use the Internet for information search and shopping, as evidenced by path coefficients of 3.36 and 1.61, respectively. In the United States, the path coefficients between subjective norms and behavioral intentions were not significant. Thus, the more collectivistic a society is, the more influenced the consumer in this society by subjective norms.

CONCLUSIONS

The results of this study are interesting and important for substantive, theoretical, and methodological reasons. Substantively, attitudes toward service or product, subjective norms, and past behavior are the factors that affect behavioral intentions and can be affected by managerial practices. Clearly, the results of the test of the focal model suggest that subjective norms and past behavior have significant relationships with behavioral intentions to use the Internet for shopping and product information search – outcomes that are undoubtedly important to an organization's marketing objectives. In addition, the

substantive findings that attitudes had no effect on behavioral intentions, past behavior had positive effects in the United States, and subjective norms had positive effects in Belarus may provide those who study marketing practices in different societies with some important information regarding their practical efficiency.

The positive paths from subjective norm to behavioral intentions in the Belarusian sample were in stark contrast to positive, but insignificant, paths in the US sample. This provided partial support of Hypothesis 1 and Hypothesis 2, which was based on evaluation of both the culture and the antecedents of behavioral intention in terms of individualism/collectivism and culture context. The paths from attitude to behavioral intentions were insignificant in both samples. This contradicts the parts of Hypothesis 1 and Hypothesis 2 that predicted a uniquely strong set of relationships in the United States because of its high individualism and low context. We expected such a relationship because attitude is shaped by individual's cost-benefit analysis and perceived opportunities for experiencing benefits associated with Internet use. Also, we expected that the relationship between past behavior and behavioral intentions would be positive and significant in the United States and insignificant in Belarus. In addition, we expected that culture would moderate this difference between two societies. However, while these paths were positive and significant in the US and not significant in Belarus, the data did not support a moderation hypothesis.

In combination, these results suggest that individuals in some collectivistic cultures (e.g., Belarus) may tend to be more influenced by subjective norms, whereas individuals in some individualistic cultures (e.g., the US) may be not affected by subjective norms when considering the Internet as a tool for shopping and information search.

This indicates that while demographic characteristics would definitely play a role in the future success of Internet shopping in Belarus, their importance will be secondary while actual Internet shopping experience would be pivotal in further acceptance of it. Therefore shoppers should be motivated to experience actual online shopping. If the first experience of Internet shopping creates a positive image in the minds of shoppers, it would result in a repeat of Internet shopping among these initial shoppers who would act as innovators and opinion leaders for the diffusion of Internet shopping. Therefore internet sellers should target those Internet surfers who are long term and heavy users of the Internet, as also those who have experienced Internet shopping and have spent large amounts on it. As revealed by the study, rather than segmenting on the basis of

demographic characteristics, actual experience based segmentation would be more appropriate and would have a higher probability of success in the case of Internet shopping in Belarus.

With careful modeling and a priori specification of group-level hypothesis, mixed models that include relationships that are both unique to a culture (i.e., emic) as well as those that are general across cultures (i.e., etic) can be fitted. This study provides support for the contention that cultural dimensions, such as individualism-collectivism and cultural context, are useful in developing such hypotheses. In addition, these results highlight the importance of developing theory-driven models of potential cultural differences in consumer behavior and, respectively, differences in the effectiveness of marketing managerial practices.

One of the objectives of this paper was to develop a new measure reflecting the strength of consumers' perception of culture context. Based on the premise that consumers are able to articulate the nature of the cultural context that characterize their societies, a set of cultural context items thought to potentially indicate various aspects of cultural context was constructed. The finalized 8-item scale reflects the dimensions of culture context defined by Hall (1984). The scale predictive validity was indicated by its ability to predict consumers' evaluations of their culture as horizontally collectivistic. The analysis of indicators' collinearity offered evidence of a lack of collinearity, showing that the set of items doesn't contain any redundancies. Comparing two societies on the dimensions of cultural context brought mixed results. U.S. students scored in the high range on such aspects of cultural context as heavy emphasis on non-verbal communication, existence of pre-transaction rituals, De-emphasis on the mass media as a source of information about electronic commerce. Belarusian students scored in the high range on such dimensions as relative de-emphasis on time and a lack of haste.

One more objective of this paper was to find out how two societies – the U.S. and Republic of Belarus – are positioned on the dimension of collectivism-individualism. The measures of horizontal and vertical collectivism and individualism proposed by Triandis and Gelfand (1998) were used to compare Belarusian and the U.S. sample. The assessment of the psychometric properties of these scales suggested their instability. As found in earlier research, the U.S. sample scored substantially higher on horizontal and vertical individualism. The deviation from expected scores was on the dimensions of horizontal

and vertical collectivism. U.S. students scored in the high range and Belarusian students in the low range.

LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

Certain limitations of the present study that need to be noted. First, little prior research has been published regarding marketing issues in Belarus, Russia and Ukraine. Thus, empirical support for the research hypotheses is limited and we were forced to rely somewhat on intuitive reasoning and anecdotal experiences. Second, the Belarusian sample size was not as large as desirable. Third, our data were collected in a single Belarusian city. Just as in the U.S., regional differences exist among Belarusian citizens and we may find differing results if another Belarusian region were sampled. Finally, the data are cross-sectional providing only a “snapshot” of Belarusian shopping values and related psychological variables.

It would be advisable to carry out the research under a rigorously derived, larger and relatively balanced sample. Apart from culture and TPB related characteristics there are many other variables related to infrastructure, security and legislation which would also play a pivotal role in diffusion of Internet shopping in Belarus. Therefore future research could build on the present by broadening the variables to be considered under Belarusian conditions. At the same time similar studies with relatively larger samples, rigorously derived across all the states of Belarus, would complement this study.

In conclusion, the results of this study point to the importance of the role of national culture in understanding the relative impact of different factors affecting behavioral intention to use the Internet for shopping and information search. Additional research is warranted to further understand the role of culture in the relative importance of factors shaping consumer behavior, particularly given the continuing globalization of business.

REFERENCES

- Adamopoulos, J. and Y. Kashima. 1999. *Social psychology and cultural context*. Thousand oaks, CA: Sage Publications, Inc.
- Ajzen, I. and M. Fishbein. 1980. *Understanding attitudes and predicting social behavior*. Englewood Cliffs, NJ: Prentice Hall.
- Bagozzi, R. P., N. Wong, S. Abe, and M. Bergami. 2000. Cultural and situational contingencies and the theory of reasoned action: Application to fast food restaurant consumption. *Journal of Consumer Psychology* 9: 97-106.

- Bem, D. J. 1972. Self-perception theory. In L. Berkowitz, editor, *Advances in experimental social psychology* Vol. 6: 1-62. San Diego, CA: Academic Press.
- Brislin, R. 1980. Translation and content analysis of oral and written material. In H. C. Triandis, J. W. Berry, editors, *Handbook of cross-cultural psychology* Vol. 2: 389-444. Boston: Allyn & Bacon.
- Cialdini, R. B. 1993. *Influence: science and practice* (3rd ed.). New York: HarperCollins.
- Cialdini, R. B., W. Wosinska, D. W. Barrett, J. Butner, and M. Gornik-Durose. 2001. The differential impact of two social influence principles on individualists and collectivists in Poland and the United States. In W. Wosinska, R. B. Cialdini, D. W. Barrett, and J. Reyskowski, editors, *The Practice of Social Influence in Multiple Cultures*. Lawrence Erlbaum Associates, Inc.
- De Vos, G. A. 1985. Dimensions of the self in Japanese culture. In A. J. Marsella, G. De Vos, and F. L. K. Hsu, editors, *Culture and self* (pp. 149-184). London: Tavistock.
- Diamantopoulos, A., M. Winklhofer. 2001. Index construction with formative indicators: An alternative to scale development. *Journal of Marketing Research* 38: 269-277.
- Eagly, A. H. and S. Chaiken. 1993. *The psychology of attitudes*. San Diego, CA: Harcourt Brace Janovich.
- Early, P. C. and A. E. Randel. 1997. Culture without borders: An individual level approach to cross-cultural research in organizational behavior. In C. L. Cooper and S. Jackson, editors, *Creating tomorrow's organizations* (pp. 59-73). New York: Wiley.
- Fishbein, M. and I. Ajzen. 1975. *Belief, attitude, intention and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley.
- Hall, E. 1960. *The silent language of overseas business*. Harvard Business Review 38: 87-96.
- Hall, E. 1976. *Beyond culture*. Garden City, NY: Anchor Press/Doubleday.
- Hall, E.T. 1984. *The dance of life*. Garden City, NY: Doubleday/Anchor Press.
- Han, S. and S. Shavitt. 1994. Persuasion and culture: Advertising appeals in individualistic and collectivistic societies. *Journal of Experimental Social Psychology* 30: 326-350.
- Hofstede, G. 1980. *Culture's consequences: International differences in work-related values* (Abridged ed.). Beverly Hills, CA: Sage.
- Hsu, F. L. K. 1985. The self in cross-cultural perspective. In A. J. Marsella, G. De Vos, and F. L. K. Hsu, editors, *Culture and self*. London: Tavistock.
- Kaplan, D. and P. R. Elliott. 1997. A didactic example of multilevel structural equation modeling applicable to the study of organizations. *Structural Equation Modeling* 4 (1): 1-24.
- Kim, U. 1994. Individualism and collectivism: Conceptual clarification and elaboration. In Kim, U., H. C. Triandis, C. Kagitcibasi, S. C. Choi, and G. Yoon, editors, *Individualism and collectivism: Theory, method, and applications*. Thousand Oaks, CA: Sage.
- Klein, K. J. and W. J. S. Kozlowski. 2000. *Multilevel theory, research and methods in organizations: Foundations extensions, and new directions*. San Francisco: Jossey-Bass.
- Kohn, M. G., S. Shavell. 1974. The theory of search. *Journal of Economic Theory* 2 (9): 93-123.
- MacKenzie, B. 2001. Reflections for improving consumer research through latent variable structural equation modeling. *Journal of Consumer Research* 28:159-166.
- Markus, H. and S. Kitayama. 1991. Culture and the self: Implications for cognition, emotion and motivation. *Psychological Review* 98: 224-253.

- Miller, J. G. 1988. Bridging the content-structure dichotomy: Culture and the self. In M. H. Bond, editor, *The cross-cultural challenge to social psychology* (pp. 266-281). Beverly Hills, CA: Sage.
- Ouelette, J. A and W. Wood. 1998. Habit and intention in everyday life: the multiple processes by which past behavior predicts future behavior. *Psychological Bulletin* 124 (1): 54-74.
- Rhee, E., J.S. Uleman, and H.K. Lee. 1996. Variations in collectivism and individualism by in-group and culture: Confirmatory factor analyses. *Journal of Personality and Social Psychology* 71: 1037-1054.
- Rogers, E. M. and F. F. Shoemaker. 1971. *Communication of innovation: A cross-cultural approach*. New York: Free Press.
- Shim, S., M. A. Eastlick, S. Lotz, and P. Warrington. 2000. Using the theory of planned behavior to predict consumer intention to use the Internet for information search and shopping. In J. Evans, editor, *Retailing 2000: Launching the New Millennium, IX*. Hempstead, NY: Academy of Marketing Science.
- Shim, S., M. A. Eastlick, S. L. Lotz, and P. Warrington. 2001. An online prepurchase intentions model: The role of intention to search. *Journal of Retailing* 7 (3): 397-416.
- Shweder, R. A. and E. J. Bourne. 1984. Does the concept of the person vary cross-culturally? In R. A. Shweder and R. A. LeVine, editors, *Culture theory: Essays on mind, self, and emotion*. Cambridge, England: Cambridge University Press.
- Smith, P. B. and M. H. Bond. 1998. *Social psychology across cultures: Analysis and perspectives*. Needham Heights, MA: Allyn & Bacon.
- Steenkamp, Jan-Benedict E. M. and H. Baumgartner. 1998. Assessing measurement invariance in cross-national consumer research. *Journal of Consumer Research* 25: 78-90.
- Trafimow, D. and K. Finlay. 1996. The importance of subjective norms for a minority of people: Between-subjects and within-subjects analyses. *Personality and Social Psychology Bulletin* 22: 820-828.
- Triandis, H. C. 1994. *Culture and social behavior*. New York, NY: McGraw-Hill.
- Triandis, H. C. 1995. *Individualism and collectivism*. Boulder, CO: Westview Press.
- Triandis, H. C. 1996. The psychological measurement of cultural syndromes. *American Psychologist* 51 (4): 407-415.
- Triandis, H. C., and M. J. Gelfand. 1998. Converging measurement of horizontal and vertical individualism and collectivism. *Journal of Personality and Social Psychology* 74 (1): 118-128.
- Triandis, H. C., C. NcCusker, H. Betancourt, S. Iwao, K. Leung, J. M. Salazar, B. Setiadi, J. B. P. Sinha, H. Touzard, and Z. Zaleski. 1993. An etic-emic analysis of individualism and collectivism. *Journal of Cross-Cultural Psychology* 24: 366-383.
- Triandis, H. C., V. Vassiliou, G. Vassiliou, Y. Tanaka, and A. Shanmugam. 1972. *The analysis of subjective culture*. New York: John Wiley.