Shopping Values of Russian Consumers: The Impact of Habitation in a Developing Economy

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In this research, we report upon comparative measures of shopping value in the U.S. and Russian. Given the relatively limited shopping environments provided to Russian consumers, one would anticipate that the measures we examine would reflect much higher evaluations for U.S. shoppers. We inject doubt into that expectation through resort to habitation theory. Habitation theory, for which a number of articles have appeared in the 1990s reflects the belief that for emotional and physiological reactions, consumer evaluations may be subject to adaptation. Consumers exposed to relatively poor conditions may nevertheless adapt and show little difference in enjoyment than those who benefit from richer conditions. Consumers, in short, adapt to their surroundings and produce measures of evaluation that reflect their interaction with the environment. Our research results find evidence of this adaptation. Shoppers in Russia report lower ratings in the utility of their shopping systems, specifically their ability to complete a shopping task. Contrarily, their reports for hedonic values, or the pleasure derived from using their shopping systems, are similar to those in the U.S. We conclude that habitation is more likely to meaningfully affect hedonic values as compared to utilitarian. These results also suggest that the evaluation of measures of pleasure or satisfaction for consumers may need to be scrutinized carefully for evidence of the habitation effect to insure correct interpretation.

Most Americans have probably read or seen reports of the longstanding shortage of consumer goods available to the typical Russian shopper. The photos of empty shelves and long lines, the descriptions of surly shop attendants and depressing retail settings, provide a graphic picture of the Russian shopping experience. A woman interviewed as back-
ground for this study provided a personal illustration of the difficulties faced by Russian shoppers. She related that there was no butter available in her entire city of over 1.5 million people for several years in the late 1980s and early 1990s. To provide for her family, she would stand in line at 6:00 a.m. to purchase whole milk for her family (the supply would always be sold out by 8:00), then churn it into butter. She said that retail stores remained open, but the shelves were often bare or stocked with empty cans just for the sake of appearance.

We note that it was not simply luxuries, but the most basic consumer goods that were also lacking. Schmemann (1998, p. 30) reports that in Soviet Russia "If you spotted someone with a bag of toilet paper, you didn't ask where he 'bought' it—you asked where he 'got' it." Based on the marketplace realities, Russian consumers have a word that is used at times in place of "buying" something. The word dosiats, best interpreted as "to acquire with great difficulty," was used by another Russian consumer we interviewed when he described his ability to "dostiats" building materials for minor home repairs in only a few days. In sum, acquiring consumer goods in Russia remains a challenge and the retail environment provides a stark contrast to what we have come to expect in America.

Substantial research has addressed the role of shopping in consumers' lives and how interacting with retail environments influences how the experience is valued (cf., Babin and Darden, 1995; Bellenger, Steinberg and Stanton, 1976; Bloch and Bruce, 1984; Holbrook and Hirschman, 1982; Sherry, 1990; Sherry, McGrath, and Levy, 1993). A consistent finding is that value derives not only by the acquisition of goods, but also through the degree of gratification derived from the process itself. However, the available research findings derive substantially from the context of American shopping experiences. This leaves the question unanswered as to how value is derived by shoppers interacting with quite different and often less developed retail environments. More specifically, the issue upon which we focus is whether Russian shoppers, considering all the difficulties they face in their retailing environment, derive similar value from their shopping experiences?

The research reported below compares the overall value of a typical American shopping experience with the common Russian shopping experience. We examine Russian shoppers' utilitarian evaluations and hedonic responses and compare them with U.S. consumers. As such, we hope to shed light on the relationship between different types of retail environments and consumer well-being and on the nature of consumer responses to progressively more elaborate shopping facilities. The over-riding issue involved is the extent to which shopper evaluations are framed by the context of their life experiences and situational factors.

We begin with a brief review of literature pertaining to shopping value. This is intertwined with theoretical contexts from general psychological appraisals to form three hypotheses predicting similarities and differences between shopping value in the U.S. and in Russia. The research methodology is then described. Additionally, the research describes in some detail procedures aimed at cross-validating a shopping value scale assessing both utilitarian and hedonic shopping value (Babin, Darden, and Griffin, 1994). This is a necessary step in testing the research hypotheses and addresses the stability of the scale's psychometric properties when applied in the developing Russian consumer economy. A specific examination of the research hypotheses follows. We end by discus-
ing the conclusions drawn from the research along with implications for consumer evaluations of shopping experiences, patronage theory in general, and future research.

LITERATURE AND RESEARCH HYPOTHESES

Shopping Value

The total value perspective suggests that both tangible and intangible costs and benefits associated with buying experiences are important in understanding why people shop (Zeithaml, 1988). Explanations of the buying experience that appeal only to the relatively tangible and objective product acquisition dimension are simply not adequate (Bloch and Richins, 1983; Hirschman, 1984; Holbrook, 1986). Such studies commonly depict "shopping as work" (Fischer and Arnold, 1990; Sherry, McGrath, and Levy, 1993), using phrases like "the dark side of shopping." Other studies focus on the more hedonic aspects of shopping (Bloch and Bruce, 1984; Sherry, 1990), talking about "shopping as fun." This duality of rewards captures the difference between performing an act "to get something" as opposed to doing it because "you love it" (Triandis, 1977).

The utilitarian dimension of shopping has been the primary focus of marketing researchers (Bloch and Bruce, 1984). In general, consumers pursuing utilitarian value can be characterized as task-related and rational; focused on decision utility (Batra and Ahtola, 1990; Engel, Blackwell, and Miniard, 1993). Thus, utilitarian-shopping value is realized when the needed product(s) is obtained, and it is increased as the product is obtained more effortlessly.

In relative terms, the hedonic or pleasurable side of shopping has received far less attention (Sherry, 1990). Although utilitarian value results from successfully obtaining the desired product during a shopping trip, hedonic value is derived more from fun and pleasure associated with the buying process (Holbrook and Hirschman, 1982). In other words, hedonic shopping value results from the immediate personal gratification derived from the emotional benefits and entertainment provided by shopping experiences (Bel- lenger, Steinberg, and Stanton, 1976).

Hedonic and utilitarian values associated with shopping have since been used to help explain consumer phenomena such as browsing, compulsive shopping, consumer loyalty, impulse buying, responses to odors, and retail crowding (Babin et al., 1994; Babin, Griffin, and Boles, 1997; Beatty and Ferrell, 1998; Eroglu and Machleit, 1999; Chebat, Gomboa, and Michon, 1999). For example, research suggests that a retail environment infused with a mild citrus odor is associated with higher reported hedonic shopping value (Chebat, Gomboa, and Michon, 1999). Much of this research also concentrates on the relationship between emotion and shopping value. Here, shopping-related affect is more strongly linked to hedonic rather than utilitarian shopping value (Babin and Darden, 1995; Chebat, Gomboa, and Michon, 1999). Other empirical results suggest that hedonic shopping value is more highly related to consumers' patronage loyalty than is utilitarian shopping value (Babin and Attaway, 2000).
Habituation Theory

The psychological literature suggests that the value people receive from events is understood only within the context from which one adapts his/her expectations or frame of reference. Hedonic responses, in particular, are moderated by habituation to one’s life experiences. The process of habituation alters the reference points of individuals’ hedonic responses within a given situation and changes the value perceived in everyday events (Kahneman, Wakker, and Sarin, 1997). “Prior consumption experiences and various cultural and social influences can alter the hedonic value of stimuli, as when people learn to like coffee or chili peppers...or acquire a passion for opera” (Kahneman et al., 1997, p. 379). In the language of habituation theory, the term hedonic value is used similarly to reflect current subjective experiences, including emotional and physiological outcomes such as satisfaction or pain.

According to habituation theory, one’s experiences frame his/her hedonic responses. In fact, even the level of pleasure/displeasure of physical pain can be affected. Fredrickson and Kahneman (1993) describe research in which human respondents were subjected to painful stimuli; the exposure to extreme cold. One experiment lasted 60 seconds. The second repeated the 60 seconds identically, but was followed by 30 seconds of less intense pain. When faced with a choice of enduring one of the experiments again, the subjects showed a significant tendency to select the longer experience. This was despite the fact that by objective measures, the second experience was more uncomfortable because of the extended duration. However, subjects evidently adapt to the conditions and the final 30 seconds of less intense pain frame the value perceived from the two experiences.

A similar process may influence the assessment of perceived shopping value. Consider the Russian consumer long accustomed to the dismal Soviet shopping environment. His/her experiences and expectations may provide the only frame known by the subject to help determine expectations about value—particularly hedonic value. This theoretical position is developed more fully below and testable research hypotheses are presented.

Hypothesis One

By objective account, the Russian shopping environment has been primitive compared to western standards. Shoppers should experience greater utilitarian value when a relatively wide product assortment is easily available. When the shopping environment results in an arduous, goods-acquisition task, utilitarian value should be reduced. In the U.S., shoppers commonly encounter retail stores with overflowing shelves. However, Drakulic (1993, pp. 68–69) quotes a woman who succinctly illustrates that this is not the case in Russia: “I learned what every single child living under communism had to learn, that you can’t find everything you need all of the time, and most likely you can’t ever find anything.”

Although the availability of goods has improved somewhat since Soviet days, Russian consumers, particularly outside of Moscow, can expect little choice among brands or variety within product classes. So, they often settle for whatever they can get because it
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is far better than returning home empty handed. Also, they commonly need multiple stops to get what can be obtained in the U.S. with one stop. There is little question that a larger array of goods enhances utilitarian shopping value by allowing a greater chance for the desired types and brands of goods to be purchased (Babin, Darden, and Griffin, 1994). Thus, considering the relatively objective content of utilitarian value and the far larger supply of goods in the typical U.S. shopping venue, the following prediction is offered.

H1: Russian consumers experience levels of utilitarian shopping value lower than U.S. consumers.

Hypothesis Two

Having long been protected from competitive pressures, most Russian retailers have yet to recognize the full importance of pleasing the customer. Poor customer service and generally unappealing retail environments create a disproportionately high number of unpleasant shopping experiences. The result is that the process itself is unlikely to be rewarding. Therefore, one might logically expect Russian consumers to report relatively lower levels of hedonic shopping value, similar to our prediction for utilitarian value.

However, habituation theory offers an alternative perspective regarding hedonic responses. For example, the general happiness reported by recent accident victims (paraplegics) is framed by their ability to adapt (habituate) to their situation (Brickman, Coates, and Janoff-Bulman, 1978). Although it is likely to surprise outside observers, the results indicate the accident victims report levels of anticipated future happiness similar to that of a control group. More directly related to the current study, mundane everyday events such as buying clothing, watching television, or receiving a compliment evoke comparable levels of pleasure among accident victims (paraplegics) and a control group. At the other extreme, Brickman et al. (1978) found that lottery winners also report similar levels of life satisfaction relative to control subjects. Essentially, both the accident victims and the lottery winners adjusted their hedonic responses to their environment.

A parallel theoretical concept common in the marketing literature is the use of the disconfirmation paradigm to explain consumer satisfaction. The logic behind disconfirmation is that the primary determinant of satisfaction is not the actual experience, but rather the deviation of the actual experience from the expected experience. Thus, even mediocre performance can result in a favorable hedonic response if the prior expectations are low. Similarly, Prospect Theory (Kahneman and Tversky, 1984) emphasizes the important role an individual's neutral reference point plays. Kahneman and Tversky, (1984) show that subjective evaluations across a variety of situations and decision contexts are made relative to and influenced by the individual's reference point. In other words, the same situation is likely to be evaluated differently by two subjects if their prior experiences and expectations differ. Put another way, consumers have varying hedonic set points around which experiences are evaluated.

Consumers accustomed to the Soviet era provide examples of the substantial influence of their environment and expectations. For example, a Russian woman proclaims (Dra-
kulic, 1993, pp. 120–121) “One doesn’t lose one’s third, communist eye that easily. . . We have no other yardstick, no other way to see it, but against the situation we come from.” Similarly, a woman reflects on first viewing a western magazine (Drakulic, 1993, p. 27): “Living under such conditions and holding *Vogue* magazine in your hands is a very particular experience – it’s almost like holding a pebble from Mars or a piece of a meteor that accidentally fell into your yard. ‘I hate it,’ says Agnes, an editor at a scientific journal in Budapest, pointing to *Vogue*. ‘It makes me feel so miserable I could almost cry. Just look at this paper—glossy, shiny, like silk. You can’t find anything like this around here. Once you’ve seen it, it immediately sets not only new standards, but a visible boundary.’”

Thus, the relatively great effort Russian consumers expend to acquire goods in a comparatively unappealing retailing setting, contrasted to the efficient and attractive environment of American shopping may not necessarily equate to low hedonic value. In fact, habituation theory suggests little or no differences between Russian and American hedonic shopping value as consumers’ subjective hedonic evaluations are framed by their environment and the ordeals of other everyday events. Although outside observers are likely to perceive drastic differences between the U.S. and Russian shopping environments, the Russian shoppers only know what they are experiencing. Put simply, the Russian shopper will make their judgments relative to their own experiences and expectations, rather than in a manner relative to external environments for which they may have limited information. Therefore, small or no differences between the Russian and U.S. hedonic experiences, much as in the case of the paraplegics and lottery winners, would be consistent with habituation theory.

**H2:** *Russian consumers experience levels of hedonic shopping value comparable to the U.S. consumers.*

**Hypothesis Three**

The third hypothesis concerns the relationship between utilitarian and hedonic value. Babin et al. (1994) reports a positive, yet modest, correlation between utilitarian and hedonic shopping value dimensions. Across three data sets obtained from United States shoppers, the coefficient ranged from 0.16 to 0.25. Thus, hedonic and utilitarian values are reasonably distinct in American culture. Shopping can be gratifying even if no purchase is made. Will a similar degree of relatedness be present among Russian consumers?

The effects of achievement on hedonic response predicted by habituation provide some insight. There is evidence that those who have adapted to an inferior standard may realize greater hedonic gratification from seemingly small achievements or occurrences. As example, lower social class American soldiers report stronger hedonic responses when promoted to a higher rank than do those from higher social classes (Merton and Kitt, 1950; Brickman, Coates, and Janoff-Bulman, 1978). Similarly, another day of good weather provides less gratification to a Californian than it does to someone from Michigan (Schkade and Kahneman, 1998). Applied to the current study, these findings infer that the
sense of achievement associated with obtaining goods may be closely connected to hedonic responses among Russian shoppers.

As illustration, Kaiser (1976, p. 54) writes, "Women who want to acquire the best Yugoslav or Hungarian clothes that are sometimes sold in Moscow must spend hours visiting numerous shops and checking with friends for inside information about where and when something good might be put on sale." One might well surmise from this that simply obtaining a product when faced with obstacles in a difficult Russian shopping environment could result in a positive emotional response.

In our work, we interviewed one Russian woman who expressed her feelings of both surprise and pleasure upon reflecting upon a successful afternoon of shopping. She described the joy she experienced when she was able to acquire everything necessary to prepare a dinner for her family and a friend in just one afternoon! Similarly, while living in Russia, one of the authors recalled his personal satisfaction from buying lettuce, tomatoes, green peppers, and salad dressing. Nevertheless, the shopping expedition required five hours to complete the task! In the U.S., he would have taken only utilitarian value from the ten minute shopping that might be required. There would be no evocation of pleasure. In Russia, however, a retailer with an in-stock supply of dairy products, produce, and meat may provide consumers with utility, but with a great sense of gratification as well (Schmennmann, 1998).

In sum, for Russians the arduous goods acquisition process becomes more important in determining the personal gratification of shopping. The ability to acquire things, particularly items that you actually set out to purchase, represents victory or defeat. Therefore, we expect that the degree of discrimination between the two scale dimensions may be substantially less clear among Russian consumers.

H3: The positive correlation between hedonic and utilitarian shopping value is greater among Russian consumers than U.S. consumers.

**METHODOLOGY**

**Survey Instrument**

Recognizing the utilitarian and hedonic dimensions of shopping value, Babin, Darden, and Griffin (1994) developed a parsimonious, two-dimensional scale of perceived Personal Shopping Value (PSV). These two dimensions, utilitarian and hedonic value, reflect the instrumental and experiential sides of shopping behavior, respectively. The PSV scale endeavors to show that not all consumer value is derived from resolving an economic need.

The original PSV scale was comprised of 15 items representing these two dimensions. Confirmatory factor analysis across different situations and multiple samples of U.S. consumers have provided evidence of construct validity. Furthermore, nomological validity of the hedonic and utilitarian shopping value measures have been illustrated by their
correspondence with a number of theoretically-related individual difference characteristics, behavioral measures, and situational factors (see Babin, Darden, and Griffin, 1994).

For purposes of this research, the PSV scale was translated into Russian using procedures drawn from previous marketing research (see Netemeyer, Durvasula, and Lichtenstein, 1991; Douglas and Craig, 1983). Two bilingual native Russians independently translated the items into Russian. A third bilingual Russian served as a judge, comparing the two questionnaires to insure that they were consistent. Of the fifteen items, only two were not translated identically. The judge reconciled the slight difference in translation of these two items, then back-translated the instrument into English. The authors compared the back-translated English version with the original and found no meaningful differences. Therefore, as a fundamental cross-cultural validation effort, translational equivalence is established (Mullen, 1995).

**The Research Setting and Data Collection**

The Russian population for this study consisted of persons living in Samara in 1995. Samara is a heavily industrialized city of approximately 1,500,000 citizens located on the Volga River, 550 miles southeast of Moscow. During the Soviet era, Samara was a “closed city.” Closed cities generally had significant military importance and Samara is a center of aviation and chemical weapons production. Citizens within closed cities enjoyed fewer freedoms than did those in places such as Moscow or St. Petersburg. For example, Samara residents were heavily restricted in their travel both within and outside of the USSR. Likewise, visits by foreigners to closed cities were rare. When one did occur, the visitor’s behavior was controlled very closely. Closed cities also typically had a more limited assortment of available goods and little exposure to western brands and retailing practices before the early 1990s.

The retailing revolution taking place in the capital cities of Moscow and St. Petersburg has only recently reached provincial cities like Samara. Schmemann (1998, p. 30) captures the plight of Russian provincial cities in an article on Kostroma, another city on the Volga River. He states, “That is not to say that Kostroma has not benefited from the freeing of enterprise that followed the collapse of Communist rule or that everyone lives at the threshold. Though nothing in Russia, not even St. Petersburg, compares with Moscow, Kostroma has acquired its modest share of new shops, gas stations, restaurants and kiosks.” At the time of data collection, residents of Samara were just developing their consumer skills and were limited in this respect at the time of the survey. They had little insight into how consumers in emerging markets might become acculturated to western retailing services.

To collect the data, shoppers were interviewed as they were leaving Samara’s central shopping center. This area included a series of kiosks and small shops, as well as the *ryinok* (a large covered marketplace with stalls offering food items) and *TSUM Samara* (the *central universal market*, a government-owned general department store). The center thus provided shoppers with access to the broadest range of goods available of any city location.
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Shoppers were informed that the interviewer was interested in their perceptions of the current shopping trip and asked to respond to the questionnaire described above. Approximately 60% of those consumers approached agreed to participate in the study, yielding 128 usable questionnaires. This approach allowed consumers to reflect on the shopping trip just completed and report their perceptions of that trip.

For the U.S. data, we employed a data set published by Babin et al. (1994, p. 652). Here, consumers were also interviewed as there were exiting a mall in a midsize, Midwestern city. To maximize similarity between the current study and the original development of the PSV scale, the authors modeled their Russian data collection procedure upon the techniques employed in this U.S. survey. In that survey, 458 shoppers were approached and a total of 386 usable responses were obtained. Within the 1994 article, the data had been used to validate the PSV scale in a mall-intercept setting.

DATA ANALYSIS

Before testing of the hypotheses, we examine the appropriateness of the PSV scale for Russian shoppers.

Evaluation of the PSV Scale

As noted, the PSV study of U.S. consumers identified two value dimensions, utilitarian and hedonic values. In tests of these, the scale items were found to be unidimensional and displayed high internal consistency. Similar results were expected when applying the scale in foreign countries because there is no reason to believe that perceived shopping value is a uniquely American phenomenon. We expected that despite differences in the retailing environment, the basic duality of value transcends cultures and is experienced among Russian as well as American consumers. Therefore, the two dimensional configuration was expected to be replicated with our Russian data.

Confirmatory factor analysis, using maximum likelihood, was employed as the primary data analysis tool to test these expectations. We first present analysis aimed at validating the scale in each sample following traditional scale validation procedures (Bearden, Netemeyer, and Teel, 1989; Gerbing and Anderson, 1988).

Standardized factor loading estimates resulting from estimating the two factor measurement model using the U.S. sample are shown in Table 1. For comparison purposes, we note that the CFA among U.S. shoppers, modeled in its original presentation (Babin et al., 1994), suggests a good fit overall ($\chi^2 = 238$, d. f. = 89, CFI (comparative fit index) = .91, RMSR (root mean standardized residual) = .06; PNFI (parsimony normed fit index) = .73). The results also show adequate reliability estimates for the two values (coefficient $\alpha$ of .86 and .80) with all factor loadings significant (all t values exceed 3.2, $p < .001$). Additionally, the correlation estimate between factors is low, also meeting expectations ($r = .25, p < .01$). This correlation indicates a modest positive relationship
### TABLE 1

#### Personal Shopping Value Scale Initial Factor Analysis Results

<table>
<thead>
<tr>
<th>Scale Item (English Translation)</th>
<th>Hedonic Factor Loading</th>
<th>Utilitarian Factor Loading</th>
<th>Russian Data</th>
<th>Item Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hedonic</td>
<td>Utilitarian</td>
<td></td>
<td>U.S.</td>
</tr>
<tr>
<td><strong>Hedonic (He)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>He1 This shopping trip was truly a joy.</td>
<td>.63</td>
<td>.85</td>
<td>3.20</td>
<td>2.70</td>
</tr>
<tr>
<td>He2 I continued to shop not because I had to, but because I wanted to.</td>
<td>.63</td>
<td>.77</td>
<td>2.99</td>
<td>2.63</td>
</tr>
<tr>
<td>He3 This (shopping) trip truly felt like an escape.</td>
<td>.65</td>
<td>.22</td>
<td>2.76</td>
<td>3.01</td>
</tr>
<tr>
<td>He4 Compared to other things I could have done, the time spent shopping was truly enjoyable.</td>
<td>.59</td>
<td>.83</td>
<td>3.19</td>
<td>4.11</td>
</tr>
<tr>
<td>He5 I enjoyed being immersed in exciting new products.</td>
<td>.53</td>
<td>.41</td>
<td>3.13</td>
<td>3.55</td>
</tr>
<tr>
<td>He6 I enjoyed this shopping trip for its own sake, not just for the items I may have purchased.</td>
<td>.62</td>
<td>.65</td>
<td>3.17</td>
<td>2.73</td>
</tr>
<tr>
<td>He7 I enjoyed a good time because I was able to act on the “spur-of-the-moment.”</td>
<td>.60</td>
<td>.36</td>
<td>2.99</td>
<td>3.22</td>
</tr>
<tr>
<td>He8 During the trip, I felt the excitement of the hunt.</td>
<td>.61</td>
<td>.77</td>
<td>3.15</td>
<td>3.43</td>
</tr>
<tr>
<td>He9 While shopping, I was able to forget my problems.</td>
<td>.59</td>
<td>.23</td>
<td>3.11</td>
<td>2.74</td>
</tr>
<tr>
<td>He10 While shopping, I felt a sense of adventure.</td>
<td>.71</td>
<td>.26</td>
<td>2.90</td>
<td>2.58</td>
</tr>
<tr>
<td>He11 This shopping trip was not a very nice time out.</td>
<td>-.43</td>
<td>-.84</td>
<td>2.72</td>
<td>2.71</td>
</tr>
<tr>
<td><strong>Utilitarian (U)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U12 I accomplished just what I wanted to on this shopping trip.</td>
<td>.70</td>
<td>.83</td>
<td>3.67</td>
<td>2.81</td>
</tr>
<tr>
<td>U13 I couldn’t buy what I really needed.</td>
<td>-.49</td>
<td>-.94</td>
<td>3.26</td>
<td>3.45</td>
</tr>
<tr>
<td>U14 While shopping, I found just the item(s) I was looking for.</td>
<td>.76</td>
<td>.86</td>
<td>3.35</td>
<td>2.73</td>
</tr>
<tr>
<td>U15 I was disappointed because I had to go to another store(s) to complete my shopping.</td>
<td>-.50</td>
<td>-.48</td>
<td>3.52</td>
<td>3.81</td>
</tr>
<tr>
<td>Cronbach alpha</td>
<td>.86</td>
<td>.80</td>
<td>.83</td>
<td></td>
</tr>
<tr>
<td>Inter-factor Correlation</td>
<td>.25</td>
<td>.80</td>
<td>.83</td>
<td></td>
</tr>
<tr>
<td><strong>Fit Indices</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$X^2$</td>
<td>238</td>
<td>370</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Degrees of freedom</td>
<td>89</td>
<td>89</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standardized Root Mean Squared Residual (MSMR)</td>
<td>.06</td>
<td>.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goodness of Fit Index (GFI)</td>
<td>.92</td>
<td>.72</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comparative Fit Index (CFI)</td>
<td>.91</td>
<td>.76</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parsimony Normed Fit Index (PNFI)</td>
<td>.73</td>
<td>.60</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
between the hedonic and utilitarian dimensions, and not one of a magnitude suggesting a lack of discrimination.

**Russian Sample Measurement Results**

The initial Russian sample CFA was conducted with the fifteen original PSV scale items restricted to load on one of two factors as described in Babin et al. (1994). The $\chi^2$ resulting from this analysis is 370 with 89 degrees of freedom ($p < .001$). The corresponding model GFI is .72, the CFI is .76, and the RMSR is .10 (see Table 1). These values indicate a modest fit at best. Investigation found four hedonic items (He3, He5, He7, and He9) produced insignificant factor loading ($p > .01$) indicating that they did not converge well with the underlying factor. The possibility that these items represent a third dimension of Russian shoppers’ perceived value was examined by testing a three-factor model with these items representing a potential second hedonic value dimension. This model provides a relatively poor fit ($\chi^2 = 886.9$ with 91 degrees of freedom). Therefore, these items were dropped from further analysis (Anderson and Gerbing, 1988; Bearden et al., 1989) as is sometimes necessary in assessing construct equivalence (Singh, 1995).

Covariances among the remaining eleven items provided input into a revised two-factor measurement model (see Table 2). A confirmatory factor analysis of the reduced scale produced a $\chi^2$ of 119 (d. f. = 43, $p < .01$), a goodness-of-fit statistic (GFI) of .86, and a root mean standardized residual (RMSR) of .06. In addition, the normed fit index (NFI = .88) and the comparative fit index (CFI = .92) indicate a significant improvement in fit compared to the null model (Bentler (1990)). The t-value for each loading estimate is significant ($t > 3.2$ for each, $p < .001$) and both factors are internally consistent (coefficient $\alpha$ of .86 and .91 for hedonic and utilitarian value, respectively).

The correlation estimate between factors within the Russian sample ($r = .84$, $t = 6.5$, $p < .001$) indicates a very high positive relationship between the hedonic and utilitarian dimensions. An additional CFA constraining all items to load on one factor was estimated to insure a two-factor structure was a superior fit to one factor. This model, assuming the two factors lack the uniqueness associated with separate factors, produced a significantly worse fit ($\chi^2 = 163$, d. f. = 44, $p < .001$), supporting the two-factor measurement model.

**Comparing U.S. and Russian Results**

Cross-national measurement validation is an increasingly relevant topic (Netemeyer et al., 1991). Numerous issues arise as researchers begin to explore the extent of invariance arising when a measurement device is applied to a new validation group. Other authors provide extensive methodological reviews of this topic (Meredith, 1993; Mullen, 1995; Singh, 1995) and offer advice concerning the adequacy of measures for cross-national validation (Steenkamp and Baumgartner, 1998). Key among these issues is the degree of measurement invariance that exists when a scale is applied in a new population. A scale that retains psychometric properties (i.e., number of dimensions, factor loading estimates, etc.) across the groups in which it is applied would be considered to have full measurement invariance.
Table 2

Reduced Russian Personal Shopping Value Scale Factor Analysis Results

<table>
<thead>
<tr>
<th>Scale Item (English Translation)</th>
<th>Russian Data Factor Loading Estimates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hedonic</td>
</tr>
<tr>
<td>Hedonic (He)</td>
<td></td>
</tr>
<tr>
<td>He1 This shopping trip was truly a joy.</td>
<td>.85</td>
</tr>
<tr>
<td>He2 I continued to shop not because I had to, but because I wanted to.</td>
<td>.77</td>
</tr>
<tr>
<td>He4 Compared to other things I could have done, the time spent shopping was truly enjoyable.</td>
<td>.83</td>
</tr>
<tr>
<td>He6 I enjoyed this shopping trip for its own sake, not just for the items I may have purchased.</td>
<td>.66</td>
</tr>
<tr>
<td>He8 During the trip, I felt the excitement of the hunt.</td>
<td>.69</td>
</tr>
<tr>
<td>He10 While shopping, I felt a sense of adventure.</td>
<td>.25</td>
</tr>
<tr>
<td>He11 This shopping trip was not a very nice time out.</td>
<td>-.86</td>
</tr>
<tr>
<td>Utilitarian (U)</td>
<td></td>
</tr>
<tr>
<td>U12 I accomplished just what I wanted to on this shopping trip.</td>
<td>.84</td>
</tr>
<tr>
<td>U13 I couldn’t buy what I really needed.</td>
<td>-.94</td>
</tr>
<tr>
<td>U14 While shopping, I found just the item(s) I was looking for.</td>
<td>.85</td>
</tr>
<tr>
<td>U15 I was disappointed because I had to go to another store(s) to complete my shopping.</td>
<td>-.48</td>
</tr>
<tr>
<td>Cronbach alpha</td>
<td>.86</td>
</tr>
</tbody>
</table>

Inter-factor Correlation

Fit Indices

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>X²</td>
<td>119</td>
</tr>
<tr>
<td>Degrees of freedom</td>
<td>43</td>
</tr>
<tr>
<td>Standardized Root Mean Squared Residual (MSMR)</td>
<td>.06</td>
</tr>
<tr>
<td>Goodness of Fit Index (GFI)</td>
<td>.86</td>
</tr>
<tr>
<td>Comparative Fit index (CFI)</td>
<td>.92</td>
</tr>
<tr>
<td>Parsimony Normed Fit Index (PNFI)</td>
<td>.88</td>
</tr>
</tbody>
</table>

Psychometric researchers suggest that the ideal case of full measurement invariance is impractical and unnecessary for substantive applications and propose partial measurement (metric) invariance as an appropriate goal (cf. Byrne, Shavelson, and Muthén, 1989). Partial measurement invariance requires a matching factor pattern, but it does not require matching loading estimates. Practically, this relaxes the requirement that a confirmatory measurement model, one constraining loading estimates to be equal across multiple samples, fits as well as a model freeing these estimates within each sample (see Byrne, 1998). Partial measurement invariance is signified when the same factor pattern (the number of factors and items loading on the appropriate factor) is supported in each group (Steenkamp and Baumgartner, 1998). The test for this requires that the same pattern be imposed on each group, but that the loadings are freely estimated within each.

To examine the extent of invariance between the U.S. and Russian samples, covariances in each sample were used to estimate multi-Group CFA models. Table 3 shows fit indices for the two-group invariant model, representing full measurement invariance, and for the
Table 3

<table>
<thead>
<tr>
<th>Index</th>
<th>U.S. Only</th>
<th>Russian Only</th>
<th>2-Group Totally Free</th>
<th>2-Group $\Lambda$ Invariant</th>
<th>2-Group He2 &amp; He6 Invariant</th>
<th>2-Group U4 &amp; U3 Invariant</th>
<th>2-Group He2, He6, U4, &amp; U3 Invariant</th>
<th>2-Group Four t's Invariant</th>
</tr>
</thead>
<tbody>
<tr>
<td>$R^2$</td>
<td>131.7</td>
<td>118.7</td>
<td>250.4</td>
<td>733.7</td>
<td>256.9</td>
<td>251.5</td>
<td>257.9</td>
<td>308.1</td>
</tr>
<tr>
<td>df</td>
<td>43</td>
<td>43</td>
<td>86</td>
<td>95</td>
<td>88</td>
<td>88</td>
<td>90</td>
<td>94</td>
</tr>
<tr>
<td>CFI</td>
<td>.91</td>
<td>.91</td>
<td>.91</td>
<td>.65</td>
<td>.91</td>
<td>.91</td>
<td>.91</td>
<td>.90</td>
</tr>
<tr>
<td>SRMR</td>
<td>.06</td>
<td>.07</td>
<td>.07</td>
<td>.34</td>
<td>.08</td>
<td>.08</td>
<td>.08</td>
<td>.08</td>
</tr>
<tr>
<td>PNFI</td>
<td>.68</td>
<td>.68</td>
<td>.68</td>
<td>.54</td>
<td>.69</td>
<td>.70</td>
<td>.71</td>
<td>.73</td>
</tr>
</tbody>
</table>

two-group “totally free” model, representing partial measurement invariance. The model constraining $\Lambda$ to be equal in each sample yields a poor fit ($\chi^2 = 733.7$, d.f. = 95, $p < .0001$, CFI = 0.65). However, the model with the assumption that the identical pattern of factor loadings exists in each sample fits relatively well ($\chi^2 = 250.4$, d.f. = 86, $p < .001$, CFI = .91). Therefore, the data suggest that partial (but not full) measurement invariance exists and further structural, cross-national analysis would be meaningful.

Analysis of the Research Hypotheses

Cross-national research often raises issues involving comparing the levels of various constructs between groups, as is the case in the present study. Although the analysis above indicates the appropriateness of using the PSV for comparing various relationships between samples, additional issues complicate the comparisons of scale means between cultures (Steenkamp and Baumgartner, 1998). Mean comparisons become appropriate only when at least two items per factor have equal loadings across samples (Byrne, 1998). A further requirement for the comparison of means is partial scalar invariance (Steenkamp and Baumgartner, 1998). This requires at least two observed intercept terms per factor be equivalent between samples. When these conditions are met, a comparison of scale means testing $H_1$ and $H_2$ becomes valid.

The results presented in Table 3 indicate the data meet the requirement specified above. Analysis reveals at least four items overall, two on each factor, displaying metric invariance. The fit of a model constraining all four estimates invariant across samples does not produce a significantly worse fit ($\Delta\chi^2 = 7.5$, d.f. = 4, $p > .05$). The imposition of the four scalar equivalence constraints, one at a time, produces varying results with fits generally slightly, yet significantly, worse than the partial scalar equivalence model. Table 3 also shows the results of constraining all four intercepts (each equal across samples) simultaneously. The model produces a fit significantly worse than the partial metric invariance model ($\Delta\chi^2 = 50$, d.f. = 4; $p < .01$). However, Steenkamp and Baumgartner (1998) suggest reliance on key statistics other than $\chi^2$ in establishing partial scalar...
invariance. In the present analysis, the model CFI is only .01 lower, the SRMR is unaffected, and the PNFI actually increases .02 to .73, indicating the fit is not substantially reduced. When discussing similar changes in these measures (i.e., CFI, SRMR, and PNFI; Steenkamp and Baumgartner, 1998, p. 86) come to the conclusion “that partial scalar invariance is supported.”

To summarize, analysis of the PSV scale with the Russian sample indicates that four of the hedonic items do not seem to be appropriate. The elimination of these items, however, provides a shortened form of the PSV that does exhibit psychometric properties suitable for use with Russian shoppers. Furthermore, partial scalar invariance is established, allowing the comparison of means between the U.S. and Russian samples and the testing of the research hypotheses.

$H_1$ and $H_2$: Comparison of Utilitarian and Hedonic Value

The comparison of utilitarian and hedonic value of U.S. and Russian shoppers was examined by conducting $t$ tests on the differences in scale values between the two samples. $H_1$, predicted relatively lower amounts of utilitarian value for Russian shoppers. The difference in utilitarian scale means, computed relative to U.S. shoppers, is $-.87$ yielding a significant $t$-statistic ($t_{d.f.} = 579 = -9.57; p < .001$). Russian shoppers, as predicted by $H_1$, report lower utilitarian shopping value.

In contrast, $H_2$ suggested comparable levels of hedonic shopping value. The difference in hedonic scale means, again computed relative to U.S. shoppers, is $-.08$ and statistically insignificant ($t_{d.f.} = 600 = -.62$). The level of hedonic shopping value reported by Russian shoppers does not differ significantly from that of the U.S. sample.

These initial results assume equal weights for each scale item. As an additional test of $H_1$ and $H_2$, the utilitarian and hedonic scores were recalculated using regression weights from the factor analysis. With this procedure, the utilitarian value difference is $-.83$ ($t = -10.1; p < .001$) and the hedonic value difference is $-.07$ ($t = -.81; not$ significant). Therefore, these results also indicate Russian shopper’s experience levels of utilitarian value lower than their U.S. counterparts, but perceive levels of hedonic value comparable to U.S. consumers. Thus, $H_1$ and $H_2$ are supported.

$H_3$: Correlation between Dimensions

$H_3$ implies a comparison of the correlation between the hedonic and utilitarian scale scores across samples. The correlation estimates provide initial support for $H_3$, indicating a much higher degree of correlation between constructs for the Russian sample ($r = .84$) than for the U.S. sample ($r = .25$). Further evidence is provided by additional CFA results for the two-group totally free model (see Table 3). An additional constraint constraining the $\phi$ coefficient equal across both samples produced a $\Delta \chi^2$ of 11.5 with one degree of freedom ($p < .001$). This shows that the constraint significantly reduced model fit and further confirms the difference in correlation. Thus $H_3$ is supported.
CONCLUSIONS

The research presented here compares and contrasts shopping values across two very different retail environments. To our knowledge, it provides the initial examination of the utilitarian and hedonic shopping value realized by Russian consumers. Although the assumption that more luxurious surroundings will result in higher levels of shopping value is intuitively appealing, the results suggest this may not be the case. Regional and cultural differences seem to affect the manner by which consumers evaluate the product acquisition process. The results are generally consistent with habituation theory and have potential implications for comparative marketing research. These and other implications from the research are presented below followed by a discussion of limitations and future research.

A thorough cross-validation analysis of the PSV was undertaken as a necessary step in comparing results across samples. The results show that four items did not perform well and were inappropriate for use as indicators of hedonic shopping value among Russian shoppers. In retrospect, these items may not be appropriate given the many difficulties in other aspects of everyday life in Samara, Russia. However, the content of the scale items in the reduced version is still consistent with hedonic shopping value and some may argue that reducing the scale length is actually preferable (Netemeyer, Pullig, and Bearden, 1998; see also Podsakoff and MacKenzie, 1994). The end result is that psychometric support is provided for using the reduced form scale to evaluate the shopping experiences of Russian consumers.

We feel the evaluation of utilitarian value is more objective than the emotion-laden perceptions of hedonic value. Consistent with $H_1$, results suggest that American shoppers report higher levels of utilitarian shopping value than do Russian shoppers (approximately one standard deviation). Arguably, the magnitude of difference (although significant) is less than what might be expected based on the drastic physical differences between the environments. This may be evidence that habituation, to a lesser extent, also influences utilitarian value as it is not totally emotion-free.

Conversely, we feel the hedonic aspect of shopping value is more subjective, emotional, and dependent on frame of reference than is utilitarian value. Therefore, $H_2$ proposed that, despite differences in their environments, habituation would result in Russian and U.S. shoppers reporting comparable levels of hedonic value. The data support this position as no statistically significant differences were found.

Our final hypothesis deals with the correlation between the dimensions of the PSV scale. $H_3$ posits that hedonic and utilitarian shopping values are correlated more highly among Russian shoppers than in the U.S. sample. This may occur because in Russia, the extent of product scarcity and lack of selection cause the finding of something close to what one needs to be gratifying. Therefore, consumers perceive hedonic value from simply getting a product. This position is supported by the high correlation we find between the PSV dimensions.

This finding is consistent with previous results indicating that in emerging cultures consumers are satisfied primarily through a utilitarian orientation (Tse, Belk, and Zhou, 1989). Additionally, these data were collected at a time when limited free market
innovations had just been implemented. So, the variety of goods available was only slightly enhanced from Soviet times. American consumers, because goods are generally so readily available, see little pleasure in just getting the product because acquiring a product with relative ease is virtually axiomatic in American shopping. For a Russian shopper, failure to obtain necessary products could limit any pleasure associated with a shopping trip.

In addition, this research introduces adaptation level theory to the retailing literature, applying the concept of habituation (Brickman et al., 1978). Support of our hypothesis serves to illustrate the role of expectations of our Russian respondents. An objective evaluation of the shopping experiences of the two samples studied here indicates the Russian shoppers have neither the wide selection of available goods necessary to efficiently complete shopping tasks nor do they shop within the pleasant and elaborate environments typical of the U.S. Although it would be natural for a Westerner to assume far lower utilitarian and hedonic value among Russians, habituation theory suggests that this may not be the case. Indeed, one’s life experiences frame hedonic value so that what may seem to be a relatively meaningless event to an observer can provide surprisingly high amounts of shopping pleasure. Here, the similarity of hedonic shopping values across the two samples appears consistent with this theory. A consumer becomes habituated to his/her surroundings, whatever they may be, and his/her expectations are made consistent with them.

Perhaps most importantly, this research may have broader implications for the measurement of psychological constructs. Indeed, habituation theory suggests implications for all comparisons of reported hedonic responses between different populations and/or over time. Given the emotional nature of consumer satisfaction (Babin and Griffin, 1998), for example, policy groups, researchers, and firms that compare satisfaction across different regions, group of consumers, or over time should consider results in light of habituation theory. Studies, for example, that track satisfaction with sundry goods and services longitudinally will need to be carefully screened for habituation effects. Habituation with living conditions and evolving expectations may change the frame of reference for consumers and introduce error into such comparisons. Such comparisons may not be solely driven by the actual consumer-retailer interaction, but be confounded by the effect of habituation and the tendency for the consumer expectations to adapt.

LIMITATIONS

Certain limitations of the present study that need to be noted. First, little prior research has been published regarding marketing issues in Russia. Thus, empirical support for the research hypotheses is limited and we were forced to rely somewhat on intuitive reasoning and anecdotal experiences. Second, the Russian sample size was not as large as desirable. Third, our data were collected in a single Russian city. Just as in the U.S., regional differences exist among Russian citizens and we may find differing results if another Russian region were sampled. However, because considerable thought was given to the data collection site, we believe that the data are representative of provincial (outside
Moscow) Russia. Fourth, although every effort was made to make the shopping experiences identical, they were not. The Russian data were, however, collected from a shopping area offering a similar array of goods and services. Finally, the data are cross-sectional, providing only a "snapshot" of Russian shopping values.

FUTURE RESEARCH

To better assess habituation and the impact of a developing retail sector, a longitudinal study would be useful. Applying measures of hedonic and utilitarian shopping value over time would be particularly interesting in a dynamic environment such as the city of Samara. Consumers in Samara had only begun to see the emergence of retail businesses comparable to those found in America. Such a study could possibly track the habituation process by monitoring the evolving retailing sector and comparing it with consumer value perceptions. As the retailing sector improves, it would be important to determine how consumers readapt to the environment. Would the PSV scores initially rise and then fall as adjustments to new circumstances occurred? If this were to occur, how long would the readjustment take?

Additionally, future study should investigate the conditions under which retailers can compare shopping value perceptions across developed and developing cultures given the likely impact of habituation. A model that could control for this effect either experimentally or as a covariate would extend the capability of retail businesses to assess the extent of true differences in the diverse markets that they serve.

Acknowledgment: The authors would like to express their appreciation for assistance provided in the questionnaire translation and data collection processes by Elena Nikolaeva, Larisa Konitzer-Smirnov, and Andrey Tikhonov. In addition, the first author would like to thank the USIA Fulbright Senior Scholar Program for the support enabling him to experience the Russian environment on an extended basis and pursue continued research examining the behavior of Russian consumers. The authors also thank the editor and anonymous reviewers for their contributions.

NOTES

1. The $\chi^2$ test is a function of sample size. Given this characteristic, many other fit statistics have been developed. For example, the CFI, IFI (incremental fit index), and NFI (normed fit index) all try to correct for model complexity in the form of additional measured variables and sample size. For example, the CFI compares the fit of a tested model with that of a 'null model' assuming no relationships among any measured variables. Although no exact rules exist for these, values above .90 are generally indicative of relatively good fits. The RMSR is a measure of the error remaining in each indicated covariation after a model is estimated. The PNFI is useful in comparing the relative improvement in fit gained by making model changes. See Byrne (1998) for a review.
REFERENCES


