Impacting Innovativeness: The Role of Interpersonal Influences and Cultural Dimensions on Consumer Innovativeness

Mahmud Alkailani
Yarmouk University, Irbid, Jordan

Rachna Kumar
Alliant International University

The purpose of this study is to study the innovativeness of professionals within a cultural context vis-à-vis the effects of susceptibility to interpersonal influences. Organizations and businesses seek to have a highly innovative workforce and an innovative culture because research has shown that employee innovativeness is a crucial ingredient for staying competitive and sustain market position. On the other hand, susceptibility to interpersonal influences is a characteristic which can impact an individual’s beliefs of the accepted behaviors, thinking, products and operations and thus could impact their readiness to accept innovative initiatives. Interpersonal influences have been studied in the context of consumer behavior and refer to the tendency for individuals to accept information from others as credible evidence. This research studies the link between susceptibility to interpersonal influences and innovativeness. The study also hypothesized a moderating impact of cultural dimensions on this relationship. The current research builds on a previous study conducted in Turkey and replicates it in the Jordanian context. We found a positive effect of susceptibility to interpersonal influences on consumer innovativeness and found positive effects of the masculinity cultural dimension on this relationship. These findings are important for businesses and indicate that they should encourage and support group influences and affiliations in the workforce in order to increase the innovativeness of their culture. Interpersonal dynamics, affiliations, and cliques may have advantages for some organizational tasks and may also promote innovativeness optimally. The study was conducted with data from 116 professional respondents in Jordan whose innovativeness was assessed in the context of their attitudes towards new products.

INTRODUCTION

Organizations, large, small and medium alike, like to be “innovative”. Today’s economy requires organizations to constantly scan the environment, the consumer, the competition, and the future trends and continuously respond to them. It is imperative to respond in order to be competitive and to sustain the market position. Responding to these changing requirements requires organizations and their workforce to be innovative and bring about changes and new initiatives. Design, adoption and implementation of innovation is a desirable characteristic to have for an organization as well as individuals. Understanding the determinants, antecedents and consequences of innovativeness would therefore be important for organizational success. Several researchers have studied training, encouragement, and facilitation of innovativeness in specific contexts such as inventions, process and product innovations, consumer new
product purchase, and technology innovation adoption (Goldsmith and Foxall, 2003; Hyvonen and Tuominen, 2006; Kumar and Uzkurt, 2010).

The role of susceptibility to interpersonal influence on the innovative behavior of individuals will give managers and marketers useful information for training and facilitating innovativeness as well as in understanding the consumer. In the marketing arena, several research studies have studied the effects of social influences on behavior and attitudes on aspects such as brand preferences, making decision in uncertain situations, evaluating product quality and buying decisions (Mitchell and McGoldrick, 1996; Blackwell and Miniard, 1995; Pincus and Waters 1977; Argo et al., 2005; Dholakia and Talukdar 2004; Vries, et, al (2000); Spangberg and sprott, 2006). These studies have established that word-of-mouth communications and social influences do affect diffusion and acceptance of new products. (Rogers 1995; Midgey and Dowling, 1978). Higher susceptibility to interpersonal influences causes people to avoid individualism and adopt moves of the crowd, they stay with traditions, and tend to go with the status quo. They thus also tend to reject new or different products, processes and services. In this research we examine the impact of an individual’s susceptibility to interpersonal influence on their innovativeness.

Another aspect, the cultural background of the individual, is also important as an influencer of individual’s attitudes and behaviors impacting their personal influences and their openness to changes and innovations. Cultural dimensions impact their world view and how they interact and associate with social and workplace environments and requirements (Kumar and Kelly, 2006; Steenkamp, Hofstede, and Wedel, 1999; Clark and Goldsmith, 2006). Accordingly, this research includes a study of culture as an important dimension which moderates the relationship being investigated.

We used a developing economy as the referent data set for this study. Understanding the mechanisms to strengthen innovativeness in developing economies and nations is a second objective of our study. There were several reasons for this. In today’s global economy, there is a renewed recognition of the role progress of developing economies play in equally distributing the wealth and advantages of the post-industrial era. Organizational innovativeness is recognized as one of the driving forces for propelling the progress of developing economies. Second, we have used Jordanian consumers, given Jordan’s regional location, have characteristics of both Europe and Middle East and therefore provide us insights which may be applicable to diverse contexts. In recent years, businesses in Jordan have begun to pay special attention to innovativeness in order to compete in the global arena. Moreover, the Jordanian ministry of education in Jordan introduced several reforms which have the purposes of aggressively encouraging Jordanian institutions to prepare world leaders by educating is ways that the next generation of leaders find it easy to think and adopt innovative and new ways to practice and apply knowledge (Khasawneh, 2011). Although Jordan is regarded as a developing country much like South Korea, Brazil and Mexico, it has become evident that innovativeness in some of the other developing nations such as India, China and Korea can be emulated. Therefore, the results of this research would lead to managerial prescriptions to help raise the self efficacy of Jordanian professionals and harness Jordan cultural characteristics leading to improved innovativeness and thereby raising the likelihood of organizational success.

BACKGROUND LITERATURE

Three areas of literature have informed our investigation of the relationship between innovativeness and susceptibility to interpersonal influences of professionals. This section summarizes relevant foundations from the areas of individual innovativeness, individual susceptibility to interpersonal influence, and, cultural dimensions as they impact interpersonal influences and innovativeness. The literature summarized below builds upon the background survey done by Kumar and Uzkurt (2010).

Consumer Innovativeness

A few decades ago, consumers had limited options for researching and purchasing products. Consumers’ options have grown with the advancement of technology in recent years. Many purchasing channels and new products are presented to consumers’ everyday. Most research in the consumer
literature focused on the natural or established process on how consumers adopt or respond to innovation, both at the macro or market level perspective (Rogers 1995) and the micro or consumer level perspective (Wood and Lynch 2002). Given the importance of new product development and introduction, marketers are interested to find out what makes or influence consumers to try something new. As we are interested in testing interpersonal influences and cultural dimensions, it is necessary to study an area in which it is possible that both interpersonal influence and cultural dimension occurs. One such area is consumer innovativeness, “the tendency to want to embrace change and try new behaviors or products” (Cotte and Wood, 2004, p. 79).

Tellis, Yin, and Bell (2009, p. 1) defined consumer innovativeness as a “consumer’s propensity to adopt new products”. It is necessary to understand consumers’ propensity and its effects on adopting new products and how this propensity differs around the globe (Chandrasekaran and Tellis, 2008). The propensity and its effect on consumers’ to adopt new products can play an important role in theories of brand loyalty, decision-making, preference and communication (Hirunyawipada and Paswan, 2006).

Literature has categorized consumer innovativeness into multiple levels of abstraction, including innate innovativeness at the highest level of abstraction and domain-specific innovativeness at a lower level of abstraction (Lim and Park, 2013). The literature used different terms to describe consumer innovativeness such as the following: innate innovativeness (Midgley and Dowling, 1978), generalized or inherent innovativeness (Hirschman, 1980), global innovativeness (Hirunyawipada and Paswan, 2006) and general innovativeness (Mowen, 2000). These terms describes consumer innovativeness as a personality trait. Previous studies explain that innate innovativeness had a direct effect on individual’s adoption of innovative products (Foxall, 1995). This effect is explained by the fact that individuals with higher level of innate innovativeness do not rely on interpersonal information to make decisions to adopt a new product, they usually adopt innovations more than less-innovative individuals (Midgley and Dowling, 1978). Our literature review also found that domain-specific innovativeness is a significant predictor of innovation adoption (Hirunyawipada and Paswan 2006).

In this sense, some researchers defined the consumer innovativeness or “consumption of newness” (Roehrich 2004) as the tendency to try new products more frequently and more rapidly than other individuals (Midgley and Dowling, 1978). Steenkamp, Hofstede, and Wedel (1999, p. 56) define innovativeness as a “predisposition to buy new and different products and brands rather than remain with previous choices and consumer patterns”. This definition explores innovativeness as a general personality trait that is possessed by most people to a varying degree. On the other hand, domain specific innovativeness is influenced by the nature of the particular category and is more situations based. General innovativeness also referred to as innate or global innovativeness (Clark and Goldsmith, 2006), in contrast, is a general personality trait that influences people to try new products (Roehrich, 2004), which varies across individuals (Hirschman, 1980) and cultures (Steenkamp, Hofstedn, and Wedel, 1999).

Ho and Wu (2011) characterized consumers with high level of innovativeness in four divisions: readiness to make changes, an ability to influence others to make changes and adopt innovative concepts and new products, having the ability to solve problems and making decisions in an organization and social system, the rate and time of adoption of the previous changes in a practical relationship. Innovative consumers generally provide other consumers with suggestion and information regarding new products and their opinions are usually accepted by, and influence, other customers (Ho and Wu, 2011). Consumer innovativeness and perceived new product attributes have effects on influencing the adoption of new products, and consumer innovativeness also had a moderate affects on the relationship between perceived new production attributes and consumers’ adoption intentions (Ho and Wu, 2011).

As evident from the above discussion, researchers have used different measures to describe innovativeness. Innovativeness has been measured as an expressed behavior, global personality trait, and a domain-specific personality trait (Goldsmith and Foxall, 2003). In the current study, we view consumer innovativeness to be best conceptualized as a global personality trait or domain specific personality trait. This view represents most closely the innovativeness hat of an employee in an organizational setting and also is indicative of their openness to new products, services and processes.
Susceptibility to Interpersonal Influence

Many psychologists and marketers understand that influence of others, or interpersonal influence, is an important aspect of an individual’s behavior (Abrams, 1994; Terry and Hogg, 1996). Interpersonal influence can have an important impact over consumer behavior, especially in difficult purchase decisions, with highly visible brands, and in situations where group influences are strong (Lascu and Zinkhan, 1999). In addition, Lascu and Zinkhan (1999) suggest that conformity theory has several applications for promotional management including advertising, sales force management, personal selling, and point of purchase displays. Consumer susceptibility to interpersonal influence (CSII) is described as a “need to identify with or enhance one’s image with significant others through the acquisitions and use of products and brands, the willingness to conform to the expectations of others regarding purchase decisions, and/or the tendency to learn about products and services by observing others and/or seeking information from others” (Bearden et al., 1989, p. 474). Consumer behavior can be influenced by presence of others and the real or imagined opinions of others (Abrams, 1994; Terry & Hogg, 1996). Because consumer innovativeness is simply one particular type of behavior, it has the potential to be influenced by the opinions, expectations, or presence of others.

Park and Lessing first developed measurement of susceptibility to interpersonal influence as a scale; Bearden et al., (1989, p. 474) adapted the scale to measure susceptibility to interpersonal influence as a personality trait that is an innate characteristics and varies across individuals. Their study revealed that interpersonal influences impacted as two separate dimensions: normative and informational influences. These normative and informational influences can affect individuals’ consumption behavior for products that shape individual self-image as well as public image. The informative component measures individual’s behavior to try new services or products based on the information provided by other individual’s. The normative components measure an individual’s (a) use of product or purchase to enhance their image in front of significant others and (b) to comply to the expectations of other individual’s in making purchase decisions. Therefore, the normative components measure the degree to which people comply with other expectations to gain rewards or avoid punishment by those others (Kropp et al., 2004).

Susceptibility to Interpersonal Influence and Consumer Innovativeness

At the high level, consumer susceptibility to interpersonal influence has two elements: the normative element that describes a consumer’s willingness to conform to enhance their image, and the informational element that describes the information seeking behavior. Much of the research using the consumer susceptibility to interpersonal influence has emphasized the use of the normative element. Individuals that are more susceptible to interpersonal influence tend to move with the crowd rather than challenging traditions. This would explain that individuals with higher susceptibility to interpersonal influence might possess lower innovativeness. We accordingly hypothesized a negative relationship between an individual’s susceptibility to interpersonal influence and their innovativeness (Kumar and Uzkurt, 2010).

Hypothesis 1: Susceptibility to interpersonal influence will negatively influence consumer innovativeness.

Cultural Dimensions

Many authors emphasize on the value of innovation and explain how important is for organizations to continue with innovation to gain a competitive advantage (Zahra et al., 1999 & Mone et al., 1998). Therefore, organizations should focus on how they can prepare themselves to produce innovative products and strategies. Organizations should consider arranging or changing their organizational culture to one that adapt innovation, since organizational culture is becoming an important part of a firm’s ability to innovate (Muffato, 1998). Poskiene (2006, p. 47) defined organizational culture as “complex set of ideologies, traditions, commitments, and values that are shared throughout the organizations and that influence how the organizations conducts its whole performance becoming a potential source of innovation, advance and advantage”. It is important to understand that much research has been done on
organizational culture and innovation. However, less research has been done on the relationship between national culture and individual’s innovativeness. National culture is more an inherent characteristics of an individual that is reflected in any organization they are employed in. (Kumar and Kelly, 2006; Steenkamp, Hofstede and Wedel, 1999).

Components of Culture and Hofstede’s Dimensions of Culture
Few researchers (e.g., Hofstede, 1991; Barkow et al., 1992; Adler, 1998; Chang & Chwang, 2005) studied the cultural components to understand it impact on a myriad of behaviors, decisions, motivations, and practices. Alkailani, et al (2012) have reviewed previous studies which tried to understand the impacts of culture and this section summarizes some of their observations. Azzam, I. A., & Athamneh, A. (2012). Barkow et al., (1992) described three kind of culture: Meta culture, evoked culture, and epidemiological culture. The framework of culture implies that values are one of the most important factors that establish the basis of a given culture. Values are shared among people and are transferred from one generation to another by the socializing process. These old values establish the basis of culture and standard norms that affect people’s formation of behaviors (KO, 1994). In addition, Kluckhohn (1961, 1969) assumed that values are among the important components to understand the behavior of a culture. As such, Hofstede (1991) also emphasized the point that values strongly influence individual’s behavior. Hofstede (1991) describes three observable level of culture; rituals, heroes, and symbols. Furthermore, Hofstede (1998) argued that society’s cultural orientation reflects the complex interaction of values, attitudes, and behaviors presented by cultural members. Individuals’ holds normative qualities of culture based on the values they have about life and the globe. These adopted values will affect their attitudes toward the behavior they consider appropriate and effective in any given situation.

Hofstede (1991) introduced new cultural dimensions to the cultural studies - Power Distance, Uncertainty Avoidance, Individualism and Collectivism, Masculinity vs. Femininity, and long-term vs. short-term orientation:

Power Distance: Power-distance explains the written and unwritten distance in levels of hierarchy, or the distance between high power roles and low power roles. Cultures having low power influence function with individuals having their right place in society, people being treated equally, and power not being the all-important factor. Cultures with high power distance function with the more powerful roles and positions controlling more of the important decisions and processes (De Mooij & Hofstede, 2002). Hostede explained it as the extent to which less powerful members of an organization believe that power is distributed equally or fairly (Hofstede, 1997)

Uncertainty Avoidance: Cultures differ in the extent to which they fear or recognize threats from unknown or uncertain situations. Cultures which have low or weak uncertainty avoidance, experience more entrepreneurial and more innovative motives while cultures with high uncertainty avoidance tend to be structured, pre-decided, traditional and gear towards minimizing unforeseen threats (De Mooij & Hofstede, 2002).

Individualism/ Collectivism: In individualistic cultures, employees and people tend to watch out for themselves and take care of themselves and their own. In contrast, collectivistic cultures see individuals and employees as function more as part of a referent group which takes care of them and loyalty to the referent group is most important (Hofstede, 1997; De Mooij & Hofstede, 2002).

Masculinity vs. Femininity: In masculine cultures, task achievement and merit is valued more than qualitative aspects of relationships and assessments. In feminine cultures, caring of others, quality of life and relationships are given more importance (De Mooij & Hofstede, 2002).

Long Term Orientation and Short Term Orientation: Long-term orientation is basically when people persist in following order, relationships, act according to a network of dependencies. Short-term
orientation is marked by a focus on own persistence and reliance on own stability (De Mooij & Hofstede, 2002).

In summary, building upon review of previous studies summarized above we hypothesize cultural dimensions having been linked to personal influences and innovativeness. Results indicate that highly individualistic cultures will lead to more independent thinking which challenges status quo, thus being beneficial for innovativeness. Similarly, highly masculine cultures focused on tasks, goals, achievement may encourage change of product or processes in order to stay ahead of the market and of competition, thus being pushed towards innovation. On the other hand high uncertainty avoidance and high power distance encourage structured, traditional, standard lines of command and boundaries and is likely to dissuade innovation.

**Hypothesis 2:** A high score on individualism and masculinity will positively mediate the relationship between susceptibility to interpersonal influences and innovativeness while a high score on power distance and uncertainty avoidance will negatively impact the relationship between susceptibility to interpersonal influences and innovativeness.

**Hofstede’s Dimensions of Culture: Extending Results**

Hofstede’s original work influenced many researchers to use the same dimensions on different settings. Therefore, Hofstede’s dimensions of culture continues to be the most comprehensive study of cultural differences (Holden, 1999). Many researchers have used the five dimensions of Hofstede and accepted them as a solid framework in that area (Hambrick & Brandon, 1988). The name of Hofstede is always mentioned in discussions related to culture differences and most studies done in the Hofstede tradition clarify and further support his dimensions (Smith, Dugan & Trompenaars, 1996). Overall, Hofstede’s framework is popularly the most often quoted and utilized measure in studies of national culture (Gong et al., 2007).

Hofstede’s framework had been studied and replicated by many researchers in different settings: transformational leadership (Ergeneli, Gohar & Temirbekova, 2007), international marketing (Soares, Farhangmehr & Shoham, 2007), work related studies (Kirkman, Lowe & Gibson, 2006), and in many other settings (Alkailani., et al (2012). Hofstede (1980, 1997) also implemented his dimensions on some Arab countries (Iraq, Egypt, Kuwait, Libya, UAE and Lebanon) the results and findings of those studies had been generalized to all other Arab countries including Jordan (Alkailani, Azzam, & Athamneh, 2012). Even though that the Arab countries studied by Hofstede’s have some similarities in terms of religion and language, these countries have many other differences with regard to, GDP, income, education, and social life (Alkailani, et., al, 2012). Therefore, Alkailani, et., al (2012) have emphasized that findings from Hofstede on the Arab countries must be replicated and possibly revised. Hofstede (2005) grouped all the Arab countries and described them under one term “Arabic-speaking countries” and compared these countries with the rest of the world. The results of Hofstede’s study on the Arab countries indicated that all these countries share the same scores and therefore share similar cultural values (Hofstede, 1980). Alkailani, et., al (2012), used the same five dimensions represented by Hofstede’s framework on graduate students pursuing their master degrees in several universities in Jordan. Based on that, the study revealed that Jordanians scored similar results on the dimensions of masculinity and individualism and different results on the dimensions of uncertainty avoidance and power distance, thus his generalization made to Jordanian culture is not validated (Alkailani, et., al, e, 2012). The findings obtained by this study provide evidence that Hofstede’s dimensions should be tested in every individual country (Alkailani, et.al., 2012).

Alkailani and Kumar (2011) studied the factors that impact Internet buying in three cultures: USA, India, and Jordan by investigating Hofstede’s uncertainty avoidance dimension. Data was collected and analyzed for the three countries to understand the impact of consumer characteristics uncertainty avoidance and perceived risk on Internet buying. Their results on Jordan indicated that Jordanians have
the highest uncertainty avoidance level among the three groups and consumers are less likely to buy over
the Internet preferring face-to-face activities.

MODEL FOR THE STUDY

Figure 1 proposes a model for the relationships between susceptibility to interpersonal influence,
consumer innovativeness and cultural dimensions (Kumar and Uzkurt, 2010). Building upon previous
research findings, susceptibility to interpersonal influence is an independent variable, consumer
innovativeness is a dependent variable and cultural dimensions—individualism, power distance,
masculinity, and uncertain avoidance—are conceptualized as the moderator variables in this relationship
between susceptibility to interpersonal influence and consumer innovativeness.

FIGURE 1
RESEARCH MODEL
INNOVATIVENESS OF THE CONSUMER: IMPACTS OF INTERPERSONAL INFLUENCES
AND CULTURAL DIMENSIONS (KUMAR AND UZKURT, 2010)

RESEARCH METHODOLOGY

Data: The Context of Jordan

Innovativeness has a critical importance on competitiveness for businesses in all countries, and
especially so in a developing country. Within the last 10 years, Jordan had succeeded in pursuing
structural reforms in education, health system and privatization. The Jordanian government introduced
social protection systems and reforming subsidies, creating conditions for public-private partnerships in
infrastructure and making reforms in tax administration and management. The Jordanian economy
depends on tourism, financial services, transportation, manufacturing, and remittances from Jordanians
working abroad. Agriculture in Jordan is considered a non-relevant sector because Jordan lack of arable
land and water supplies. Therefore, the country invests heavily in water recycling and land treatment

Jordan’s economy is mostly influenced by the state, however, recently many policies has been
introduced to reduce the barriers on starting a business. In 2014, the Gross Domestic product (GDP) in
Jordan expanded by 3.20 percent in the first quarter over the same quarter of the previous year. GDP
Annual Growth Rate in Jordan averaged 4.91 Percent from 1993 until 2014. GDP Annual Growth Rate in
Jordan is reported by the central bank of Jordan. On the other hand, consumer spending in Jordan
increased to 12688.40 JOD Million in 2009 from 12403 JOD Million in 2008. Despite the regional
conflict and a turbulent regional political environment, Jordan compared to other emerging economies in the sub-region, maintains a steady economic growth rate. This is due to the economic reforms by the government, resulting in an open environment for investment and new economic activity (World Bank Annual Report, 2013).

Jordan’s economic reforms had placed the country at 100 out of 183 economies, for “Ease of doing business” in 2009 as World Bank Report. The Kingdom economic reforms encouraged foreign investment through policy changes to integrate itself into the global economy. The government had opened many sectors such as, information technology, pharmaceuticals, tourism, and services sectors. According to the World Bank Report, the kingdom has one of the youngest populations among lower middle-income countries in the world and that 38% of its inhabitants are under the age of 14. Therefore, the educational system in Jordan had improved consistently to adapt the needs of younger generations (World Bank Annual Report, 2013).

The innovative and competitive capabilities and skills ensure significant competitive advantage in international markets for a developing nation such as Jordan. Accordingly, we conducted this study with data from Jordan. Literature lacks research in the Jordanian context specially studies which examine the individual’s susceptibility to interpersonal influences, and the dimension of innovativeness, as well as the relationships among these research variables. Therefore, the results of this study could provide some useful findings for researchers and practitioners.

**TABLE 1**

<table>
<thead>
<tr>
<th></th>
<th>Jordan</th>
<th>Turkey</th>
<th>Japan</th>
<th>Germany</th>
<th>US</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individualistic/Collectivist</td>
<td>30</td>
<td>37</td>
<td>46</td>
<td>67</td>
<td>91</td>
</tr>
<tr>
<td>Masculinity/Feminity</td>
<td>45</td>
<td>45</td>
<td>95</td>
<td>66</td>
<td>62</td>
</tr>
<tr>
<td>Power Distance</td>
<td>70</td>
<td>66</td>
<td>54</td>
<td>35</td>
<td>40</td>
</tr>
<tr>
<td>Uncertainty Avoidance</td>
<td>65</td>
<td>85</td>
<td>92</td>
<td>65</td>
<td>46</td>
</tr>
</tbody>
</table>

Source: http://geert-hofstede.com/

Table 1 represents Hofstede’s original scores for Jordan, Turkey, Japan, Germany, and US. The tables show scores on Hofstede’s cultural dimensions. The table shows that Jordanians scored the lowest on individualism (High on collectivism) compared to other countries. Jordanians seem to have both masculine and feminine attributes compared to Japan and US (Masculine) and similar to Turkey. Jordanian are high in power distance (70) due to the sense of inequality of power distribution inside the country which cause the level of distrust and fear inside society. Such a situation causes Jordanians to distrust the unknown and to fear dealing with new situations and products. The table proves this fact through the high uncertainty avoidance score (65).

**Sample and Data Collection**

Data for this study were collected through a survey administered to professionals to working for more than 2 years. They were a chosen as a convenience sample from students studying in different universities in Jordan. 200 questionnaires were distributed and 116 usable questionnaires were used in the final analysis. Graduate students were chosen as sample for this study because of their working professional experience. Most graduate students in Jordan are working professional with both computer and English language literacy. Students were asked to think of buying a new electronic device before answering survey questions. 200 questionnaires were distributed. 176 surveys were returned. The first step performed after data collection was a visual inspection to detect any incomplete surveys. Forty cases were found to be missing more than five responses and were deleted. Using the mean of the items representing each variable for each case, a preliminary regression analysis was conducted. The preliminary tests, which included Cook's D, leverage, Mahalanobis distance, standardized DFBeta, and the standardized
residuals, were conducted to identify influential cases and outliers. Cases were deleted from the sample in which limits on more than one measure were exceeded. Ultimately, this inspection resulted in the removal of twenty additional cases, leaving our sample at 116 cases.

**MEASURES**

Definitions of measures used in this study were also used in Kumar and Uzkurt (2010).

**Dependent Variable: Consumer Innovativeness**

The consumer innovativeness was measured using a scale developed by Doghous et al., (1999). The scale combines cognitive, affective and conative aspects of consumption behavior, which are dimensions mostly used in the literature to measure the consumer innovativeness. This scale contains 7 items and is scaled on 5–point Likert scales (1=strongly disagree to 5=strongly agree).

**Independent Variable: Susceptibility to Interpersonal Influence**

The susceptibility to interpersonal influence was measured using a scale developed by Bearden et al., (1989). The scale has 12 items and is comprised of two sub constructs - normative influences and informational influences. The items are scaled on 5–point Likert scale (1=strongly disagree to 2=strongly disagree).

**Moderators: Cultural Dimensions**

We utilized the scale developed in Hofstede’s seminal work on the effects of culture on organizational functioning (Hofstede, 1984). It was used to measure the four cultural dimensions of individualism, power distance, masculinity, and uncertainty avoidance. The 16 items are scale on 5-point Likert scales (1= a little important to 5= most important). We utilized the back translation method to translate the items into Jordanian before the survey was used and responses obtained.

**RESULTS**

**Sample Characteristics**

Table 2 presents demographic characteristics of the sample. 52.6% of the sample were males, most of them are married (70.1%); and their age between 21-30 years old (88.8%). The sample was divided between undergraduate and graduate students (50% each).
**TABLE 2**

**SAMPLE CHARACTERISTICS**

<table>
<thead>
<tr>
<th>Demographic Characteristics</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>61</td>
<td>52.6</td>
</tr>
<tr>
<td>Female</td>
<td>55</td>
<td>47.4</td>
</tr>
<tr>
<td><strong>Education Level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary-High</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>University</td>
<td>58</td>
<td>50</td>
</tr>
<tr>
<td>Postgraduate</td>
<td>58</td>
<td>50</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 and under</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>21-30 yrs</td>
<td>103</td>
<td>88.8</td>
</tr>
<tr>
<td>31-40 yrs</td>
<td>12</td>
<td>10.3</td>
</tr>
<tr>
<td>41-50 yrs</td>
<td>1</td>
<td>0.9</td>
</tr>
<tr>
<td>51-60 yrs</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>61 and older</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>83</td>
<td>70.1</td>
</tr>
<tr>
<td>Single</td>
<td>25</td>
<td>21.5</td>
</tr>
<tr>
<td>Divorce</td>
<td>8</td>
<td>7.0</td>
</tr>
</tbody>
</table>

**Reliability and Factor Analysis**

Cronbach Alpha coefficients for variables range from .66 for power distance to .90 for susceptibility for interpersonal influences. After conducting a factor analysis for the multi-unit constructs, results show that factor loadings for all items were above .50 which indicates that factors are significant and valid for measurement.
### TABLE 3
MEASURES USED IN THE STUDY

<table>
<thead>
<tr>
<th>Construct</th>
<th>Source</th>
<th>Items</th>
<th>Factor Loadings</th>
<th>Reliability</th>
</tr>
</thead>
</table>
| **Consumer Innovativeness (CIN)**  | Doughfus et al. (1999)          | CIN3. I am really interested in learning about new products (new brands, quality, improvements...)  
CIN6. Right now, I am using many of new products  
CIN4. I think new products are really useful  
CIN5. I have to try new products before anyone else  
CIN7. Presently, I am using new products and services appealing to me  
CIN2. People often ask me to give my opinion about products (new brands, quality, improvements...)  
CIN1. Lately, I have been hearing a lot about new products appealing to me | 0.72            | 0.52          |
| **Susceptibility to Interpersonal Influence (EI)** | Branden et al. (1989)§ | EI3. To make sure I buy the right product or brand, I often observe what others are buying and using  
EI8. When buying products, I generally purchase those brands that I think others will approve of  
EI6. I often identify with other people by purchasing the same products or brands they purchase  
EI9. I like to know what brands and products make a good impression on others  
EI2. It is important that others like and brands I buy  
EI12. I want to be like someone, I often try to buy the same brands that they buy  
EI11. I achieve a sense of belonging by purchasing the same products and brands that other people purchase  
EI10. I frequently gather information from friends or family about a product before I buy | 0.74            | 0.50          |
| **Cultural Dimensions**           | Hofstede, (1994)                | IND1. I have sufficient time for your personal or family life  
IND3. I have security of employment  
IND4. I have an element of variety and adventure in the job  
IND2. I have good physical working conditions (good ventilation, lighting, adequate space, etc.) | 0.82            | 0.78          |
| Individualism (IND)               |                                 | POW2. I am consulted by my direct superior in his/her decisions  
POW1. I have a good working relationship with your direct superior  
POW3. An organization structure in which certain subordinates have two bosses should be avoided at all costs  
POW4. How frequently, in your experience, are subordinates afraid to express disagreement with their superiors | 0.71            | 0.66          |
| Power distance (PDI)              |                                 | MASC1. I work with people who cooperate well with one another  
MASC2. I have an opportunity for advancement to higher level jobs  
MASC4. When people have failed in life it is often their own fault  
MASC3. Most people can be trusted | 0.66            | 0.80          |
| Masculinity (MAS)                 |                                 | UNCA1. One can be a good manager without having precise answers to most questions that subordinates may raise about their work  
UNCA2. Competition between employees usually does more harm than good  
UNCA3. A company's or organization's rules should not be broken  
UNCA4. How often do you feel nervous or tense at work | 0.67            | 0.81          |
Exploratory factor analysis using principle components of factor extraction and Varimax rotation technique was performed to examine the uni-dimensionality/convergence of each predefined multi-item construct. Factor analysis resulted in the 7 independent items being reduced to one factor/construct, the 12 dependent items also reduced to one factor, and 16 moderating items of the cultural dimensions factor reduced to four factors. As a cut-off loading was used 0.40. All of the factor loadings were above 0.50 which can be assumed a high level of significance. As the measurement items for each of the categories were factor analyzed and the results establish that the measures used in this study have construct validity (Nunnally, 1978).

**Hypotheses Testing**

Table 4 shows the bi-variate correlation coefficients of the variables in the research model. The findings in the table present that most of the variables were positively related to each other. To assess the degree of multi-collinearity for the factors in all the model, VIF (variation inflation factor) values were calculated (Stapelton, 1995). It is seen that no problem of the multi-collinearity appears to be present in the study because the VIF values for the factors were among 1.09 and 1.84.

### Table 4
**ZERO-ORDER CORRELATIONS AND DESCRIPTIVE STATISTICS**

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Innovativeness</td>
<td>2.01</td>
<td>0.45</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Susceptibility to Interpersonal Influences</td>
<td>2.75</td>
<td>0.71</td>
<td>.0154</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Individualism</td>
<td>2.67</td>
<td>0.67</td>
<td>0.084</td>
<td>0.269**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Power distance</td>
<td>2.65</td>
<td>0.67</td>
<td>0.060</td>
<td>0.27**</td>
<td>0.546**</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Masculinity</td>
<td>2.55</td>
<td>0.69</td>
<td>0.322</td>
<td>0.289**</td>
<td>0.395**</td>
<td>0.533**</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>6. Uncertainty avoidance</td>
<td>2.35</td>
<td>0.50</td>
<td>0.053</td>
<td>0.126</td>
<td>0.244**</td>
<td>0.250**</td>
<td>0.310**</td>
<td>-</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2tailed).**

**. Correlation is significant at the 0.05 level (2-tailed).**

The correlation matrix shows that cultural factors were not correlated with innovativeness while they are correlated with susceptibility to interpersonal influences except that for uncertainty avoidance.

**Direct Effect of Susceptibility to Interpersonal Influence on Consumer Innovativeness**

The hierarchical regression analysis was employed to test the research model. Table 5 presents the results of the hierarchical regression analysis. For the dependent variable of innovativeness five hierarchical models were developed: first introduces the susceptibility to interpersonal influence in the model 1; then adds the four cultural dimensions step by step in model 2,3, and 4; lastly all cultural dimensions were added the model 4.Model 1 in Table 5 shows that susceptibility to interpersonal influence has a positive effect on the consumer innovativeness. But we were expecting a negative effect in our Hypothesis 1. Therefore there is no support for H1:

**Hypothesis 1: Susceptibility to interpersonal influence will negatively influence consumer innovativeness.**
TABLE 5
THE RESULTS OF REGRESSION ANALYSES

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antecedent variable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Susceptibility to interpersonal</td>
<td>1.54*</td>
<td>1.697***</td>
<td>..63</td>
<td>.273 ***</td>
<td>.043</td>
</tr>
<tr>
<td>Influence (IPI)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mediators (Hofstede's Cultural Dimensions)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individualism</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Ind.)</td>
<td>0.030</td>
<td>0.032</td>
<td>0.001</td>
<td>0.002</td>
<td></td>
</tr>
<tr>
<td>Power Distance (PowD.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Masculinity (Masc.)</td>
<td>0.263***</td>
<td>0.269***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uncertainty Avoidance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant/intercept term</td>
<td>1.757</td>
<td>1.697***</td>
<td>1.700***</td>
<td>1.512***</td>
<td>1.569***</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.024***</td>
<td>0.026***</td>
<td>0.026***</td>
<td>0.136***</td>
<td>0.138***</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>0.015***</td>
<td>0.008***</td>
<td>0.000</td>
<td>0.105***</td>
<td>0.098***</td>
</tr>
<tr>
<td>Change in $R^2$</td>
<td>0.024***</td>
<td>0.002</td>
<td>0.000***</td>
<td>0.110***</td>
<td>0.002</td>
</tr>
<tr>
<td>$F$ (d.f)</td>
<td>2.773</td>
<td>1.488</td>
<td>.984</td>
<td>4.364***</td>
<td>3.508***</td>
</tr>
<tr>
<td></td>
<td>(114)</td>
<td>(113)</td>
<td>(112)</td>
<td>(111)</td>
<td>(110)</td>
</tr>
</tbody>
</table>

Notes: Table entries are standardized regression coefficient *P<0.10; *P<0.05; **P<0.01; ***P<0.001

The hierarchical regression analysis shows that susceptibility to personal influences has a significant impact on consumer innovativeness and the moderating effect of cultural factors was only established for masculinity.

**Moderating Impact of Cultural Dimensions on the Effect of Susceptibility to Interpersonal Influence on Consumer Innovativeness**

When including all cultural dimensions in the final Model (Model 5), only Masculinity ($F=3.508***$) show moderating role on the effect of susceptibility to interpersonal influences on the consumer innovativeness. Thus H2 is partially supported in this study: A high score on individualism and masculinity will positively mediate the relationship between susceptibility to interpersonal influences and innovativeness while a high score on power distance and uncertainty avoidance will negatively impact the relationship between susceptibility to interpersonal influences and innovativeness. This supports the work of Steenkamp et, al (1999) which showed that Masculine societies place greater emphasis on wealth, success, ambition and material things and this behavior is expressed in purchasing new items and accepting new technology ( Hofstede, 1991). Societies high in Uncertainty Avoidance tend to be more resistant to change from established patterns and will be focused on risk avoidance and reduction (Alkailani & Kumar, 2011). Jordanian culture appeared to be moderate on Uncertainty avoidance according to Hofstede ( UA = 61) and Alkailani ( UA = 51) ( Alkailani , et, al, 2013). Later studies show that Jordanian culture is moving toward lower scores on Uncertainty Avoidance. Societies with low Uncertainty Avoidance are curious about what is new and different; and can be expected to be less resistant to innovation ( Hofstede, 1991)

**DISCUSSIONS**

This study investigated the relationship between susceptibility to interpersonal influences and innovativeness with cultural dimensions moderating the effect in the context of Jordan. We were interested in studying this relationship in Jordan as it is a developing country and is on the cusp of setting up internal culture and infrastructure for establishing itself in the global stage of competitiveness. In
addition, the similar model was researched in Turkey and we were interested in comparisons as well as noting similarities within the developing country context. Accordingly we chose to collect the data in Jordan. Our data showed that susceptibility to interpersonal influences was positively related to innovativeness, as studied in the Jordanian context. We also found that individuals with high scores on the Hofstede’s masculinity dimension positively moderated the relationship between susceptibility to interpersonal influences and innovativeness.

Our literature review had lead us to hypothesize that innovativeness of individuals will be adversely impacted if they tended to go with the crowd and the status quo, avoided changing traditions and preferred not to stand out from the crowd. They could have been expected to shun new products, processes, and ways of thinking. But our results indicated the opposite: such individuals with high levels of susceptibility to influence also have high levels of openness to innovativeness. It appears that developing economies could be prone to be influenced with new and cutting edge products, processes, services, and offerings more so than in developed countries. Thus susceptibility to personal influences manifests itself in adoption of new and innovative things. In future research, this model should be tested in a developed nation. The other dimension to note is the respondent profile was mostly young (ages 21-30 years). The younger generation has been studied in previous studies to be more open to innovativeness and they particularly tend to celebrate influences towards the new and the innovative. In other words, their susceptibility to influences is skewed towards breaking traditions and challenging status quo. In future research the influence of age as an impacting factor impacting this relationship should be studied.

Interestingly, we did not find a positive moderation impact of Hofstede’s individualism dimension. Jordan is low on this cultural dimension and perhaps in such a society, being high on innovativeness is a path which needs support and nurture from the relevant society which will be at odds if the person is high on individualism. In other words, societies which are low on individualism make it an additional challenge for people to be open to innovativeness.

There is a balance that organizations (and communities and societies) try to strike between influences, individualism and innovativeness. This research has contributed results which are useful from the point of view of training and grooming the workforce for organizational innovativeness. It has also contributed towards understanding consumer innovativeness for a marketers’ strategy. In addition, the results have given us insights regarding the Jordanian consumer context.

REFERENCES


Uzkurt, C., Kumar, R., & Ensari, N., (2011). Assessing Organizational Readiness for Innovation: An Exploratory Study on Organizational Characteristics of Innovativeness. Accepted in International Journal of Innovation and Technology Management


