

A Measure of Social of Globalization: Factor Analytic and Substantial Validity Assessment Using a Sample of Young Adult Kuwaitis

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Abstract. A sample of 146 undergraduate university students in Kuwait were used to establish the factor structure and substantive validity of a 21-item questionnaire of social globalization based on the conceptualized dimensions of personal contact, cultural proximity, and information flows. Results of the factor analysis suggested a five-factor structure that was labeled: information flows-internet; information flows-print; information flows-TV; personal contact; and cultural proximity. Furthermore, results of the substantive validity analysis suggested that although the items may be indicative of the constructs under investigation, respondents did not correlate them with their intended constructs with a higher degree of concordance. Implications for further research are discussed.

Keywords: factor analysis, substantive validity, social globalization, Kuwait.

1 INTRODUCTION

Globalization has brought an important conceptual change in the way we think about our world. Many people are realizing that events happening in our own nations are actually of international interest. With the arrival of instantaneous information dissemination, it feels like events happening in distant places are closer to us because individual bloggers and modern mass media can simulcast events as they happen. Such unprecedented levels of interconnectedness have far-reaching implications for how societies, nations, and individuals operate in the new social realities of the world we live in.

The interconnectedness among nations has made the world a global village (McLuhan, 1964) where individuals can acquire knowledge about almost anything happening in various corners of this village. If the world is now a global village, how do the individuals in this village organize and give meaning to their experiences? Does this global village phenomenon influence different individuals in the same way and to the same extent?. How do we assess globalization at the individual level to investigate its effects? In light of such questions, the major goal of the present undertaking was to develop a survey questionnaire to measure globalization at the individual level.

There are at least two reasons why the individual as unit of analysis requires special attention in discussions pertaining to globalization: First, the issue of globalization is not limited to individuals' present lives, but also has implications for the future. Second, there is still a lack of direct information on individual's experiences of globalization. Both reasons highlight the importance of developing measurements to help understand and monitor the impact of globalization. Furthermore, the field lacks any psychometrically sound and empirically developed scale or index that measures social globalization at the individual level (Arnett, 2002). The lack of sound indices means that the question of whether the social

dimension of globalization has implications for identity or acculturative stress remains a theoretical issue. Additionally, “the complexity of globalization certainly invites additional research and the use of multiple methods of data collection and analysis” (Guillén, 2001, pp. 255-256) that is not limited to the national level, but rather, a lower level of analysis (Juscus & Lekaviciene, 2007; Kobrin, 1991; Sullivan, 1994).

Consequently, this paper takes a social-psychological slant on the globalization debate and attempts to assess social globalization at the individual level (in terms of personal contact, information flow, and cultural proximity) using a sample of young adult Kuwaitis. This is premised on the argument that the younger generation in the Arab world may be more exposed to Western and other non-Western worldviews and cultures (Solberg, 2002).

Before proceeding with the main questions of the present paper, we would like to clarify a few definitional issues related to globalization. Pursuant to that, we explore some questions related measurement of globalizations, after which we outline in detail the major foci of our research enterprise. We focus on social globalization because we believe it is the dimension of globalization that may be most easily amenable to measurement at the individual-level of analysis.

1.1 Globalization: The concept

Globalization, a multidimensional construct, can be conceptualized as both a process and an outcome. As a process, globalization involves the compression of space and time; the flow of information, technology, capital, and people, and cultures; and interdependence among nations. These ideas suggest that globalization is a process taking place across national boundaries and creating patterns of interdependent connections among economies, cultures, and governments mediated through the flow of goods and services, capital, people, information and ideas, and technologies that enables an almost immediate communication across space and time (Clark, 2000; Guillén, 2001; Keohane & Nye, 2000; Norris, 2000; Sirgy, Lee, Miller & Littlefield 2004).

As an outcome, the critics of globalization have viewed it as hegemony (over local and national governments) by transnational corporations through free trade and the unfettered movement of goods and services (Helliwell, 2002), and homogenization of cultures. Conversely, proponents of globalization see it as a means (a) to the promotion of competitiveness among nations, industries, and corporations in their attempt to reach broader global markets (Helliwell, 2002), and (b) of enhancing human well-being (Tsai, 2006). In spite of the polarity of these views, Guillén (2001, p. 255) argued that “[globalization] is neither an invariably civilizing force nor a destructive one because there is enough evidence available to reject either extreme.

1.2 How is globalization measured?

The extant literature on globalization measures it at the national level (e.g., Dreher, 2006; Dreher, Gaston, & Martens, 2008; Perkarskiene & Susniene, 2011; Sirgy, Lee, Miller & Littlefield 2004; Tsai, 2006), and examines its effects at the individual level (e.g., Javadi & Javadi, 2008; Kerimova, 2009; Zahid, 2007; Wheeler, 2000; Zahid, 2007).

As a multidimensional construct, the first attempt at a quantitative assessment of globalization was the Kearney globalization index (Kearney, 2007) which measures the dimensions of (a) economic integration, (b) personal contacts, (c) technology and (d) political integration at the national level. Unequal weights are assigned to each of the components of the Kearney globalization index. The KOF index of globalization, created in 2002 has indices for the three dimensions: (a) economic globalization – conceptualized as long distance flows of goods, capital and services, information and market exchanges; (b) political globalization – perceived as the diffusion of government policies; and (c) social globalization – characterized

by the spread of ideas, information, images and people (Dreher, 2006; Dreher, Gaston & Martens, 2008). As with the Kearney index, unequal weights are assigned to dimensions of globalization.

Social globalization, as conceptualized is composed of three dimensions: personal contact, information flows, and cultural proximity. The dimension of personal contact as conceptualized was meant to assess direct interaction among people from different countries. "Information flows" was intended to assess the potential flow of ideas and images. Cultural proximity was not clearly defined in Dreher (2006) or Dreher et al. (2008). However, it appears that cultural proximity was intended to assess the consumption of cultural goods, and can be thought of as reflective of material that is reinforcing of traditional identities and includes images, dress, and lifestyle (Straubhaar, 1991, 1997, 2003; Sinclair, 1999).

We describe the first of a three-phased research plan to develop and validate a measure of social globalization in line with scale development procedures (Churchill, 1979; Gerbing & Anderson, 1988; Hinkin, 1998). Phase 1 involves item generation, application of substantive validity assessment, as well a factor structure and reliability analysis. At this stage of the research, the emphasis is on ensuring that items selected for inclusion in the final measure are valid and reflect the constructs of interest related to the three dimensions of social globalization. Specifically, the substantive validity assessment is based on the judgments of measures, not responses; it predicts the extent to which an item is assigned to its intended theoretical construct (Anderson & Gerbing, 1991).

A deductive approach to item generation was adopted (Hinkin, 1998). A published scale for use at the national level of analysis, the KOF index (Dreher, 2006; Dreher et al., 2008) was adapted to access three dimensions of social globalization (personal contact, information flows, and cultural proximity). Item generation was guided by the need for parsimony and brevity, relevance to the domains of social globalization, and multicultural orientation. To achieve multicultural relevance, each question was written so that it would be applicable to respondents in other countries by substituting country and context.

2 METHODOLOGY

2.1 Participants

A sample of 146 undergraduate university students in Kuwait who are able to read and write English were used. Of the sample, about 53 percent were females, while about 47 percent were males. The males were slightly older (21.35 years) than they females (20.68 years). A greater proportion of the female sample were first and second year students, whereas a greater percentage of the male participants were third and fourth year students. There were no significant differences in parental income between the male and female participants. A majority of the parents of the participants had completed some form of college or university education with a small proportion having completed postgraduate or professional degrees.

2.2 Procedure

Students were recruited through faculty members who were asked to help administer the survey to their students during class period. Several weeks prior to data collection, the researchers visited multiple classrooms and invited students to participate in a study on culture and cultural changes. Invited students were given a consent form and informed that their participation was voluntary, anonymous, and confidential. Students were informed that they could only participate upon giving their consent and submitting their consent forms to the researchers. Students who elected to participate were later contacted during another class section and asked to fill out the survey.

Table 1. Descriptives.

	Male		Female		Range
	Mean (SD)	N (%)	Mean (SD)	N (%)	
Age	21.35 (2.46)		20.68 (3.08)		
Gender		69 (47.3)		77 (52.7)	
<i>Educational Level</i>					
First Year		14 (20.3)*		29 (37.7)	1 – 4
Second Year		15 (21.7)*		30 (39.0)	1 – 4
Third Year		19 (27.5)*		11 (14.3)	1 – 4
Fourth Year		21 (30.4)*		6 (7.8)	1 – 4
<i>Father's Educational Level</i>					
Did not finish high school		3 (4.3)		7 (9.1)	1 – 7
Graduated from high school		7 (10.1)		11 (14.3)	1 – 7
Attended college but did not complete degree		15**		5 (6.5)	1 – 7
Completed an associate's degree		5 (7.2)		13 (16.9)	1 – 7
Completed a bachelor's degree		38 (55.1)*		25 (32.5)	1 – 7
Completed a master's degree		9 (13.0)		11 (14.3)	1 – 7
Completed a doctoral degree		6 (8.7)		4 (5.2)	1 – 7
<i>Monthly Family Income (KWD)</i>					
< 1000		5 (7.2)		9 (11.7)	1 – 5
1000 - 2000		19 (27.5)		22 (28.6)	1 – 5
2000 - 3000		14 (20.5)		12 (15.6)	1 – 5
3000 - 4000		7 (10.1)		15 (19.5)	1 – 5
> 4000		19 (27.5)		11 (14.3)	1 – 5
Past 12 months international phone calls	0.15 (0.62)		0.29 (1.29)		0 – 10
During week hours of non-Kuwaiti TV for entertainment	1.29 (1.60)		1.33 (2.01)		0 – 10
During week hours of non-Kuwaiti TV for international news	0.45 (0.67)		0.45 (1.17)		0 – 10
During week hours of non-Kuwaiti TV for general information	0.50 (0.64)		0.82 (1.70)		0 – 10
In a month number of cans of carbonated beverages drank	1.71 (2.00)		1.72 (1.98)		0 – 10
In a month number of times bought non-Kuwaiti fast food	1.11 (1.45)		1.48 (1.51)		0 – 10
Past 12 months number of travels outside Kuwait	2.24 (1.64)		2.47 (2.13)		0 – 10
During week number of hours of internet exchange of information	1.14 (1.59)*		1.95 (2.55)		0 – 10
During week number of hours of internet for non-Kuwaiti entertainment	1.07 (1.63)+		1.77 (2.58)		0 – 10
In a month, number of Starbucks or similar café visits	0.89 (1.04)+		1.27 (1.57)		0 – 10
In a month, number of non-Kuwaiti restaurant visits	0.76 (0.82)		1.00 (1.43)		0 – 10
In a day number of non-Kuwaiti interaction	1.08 (1.35)		0.88 (1.31)		0 – 10
During week number of hours of internet for general information	0.71 (1.12)		1.10 (1.99)		0 – 10
During the week number of hours of internet for getting the news	1.26 (1.69)		1.21 (1.72)		0 – 10
During the week number of hours of internet for social networking	0.80 (1.25)**		1.73 (2.45)		0 – 10
In past 12 months, non-Kuwaiti author books read	1.21 (1.43)		1.42 (1.99)		0 – 10
In a month number of hours listening to non-Kuwaiti music	1.00 (2.12)		0.85 (1.29)		0 – 10
Number of non-Kuwaiti friends	0.35 (0.70)		0.31 (1.18)		0 – 10
During the week, number of hours of newspaper as source of news	1.54 (1.76)**		0.81 (1.22)		0 – 10
During the week, number of hours of newspaper as source of general information	1.25 (1.86)		1.19 (1.94)		0 – 10
In a month, number of times wear non-Kuwaiti dress	0.56 (1.49)		0.48 (1.35)		0 – 10

** = $p < .01$, * = $p < .05$, + = $p < .1$

Consent forms were collected by instructors and returned to investigators. Upon receipt of the consent forms, a date and time were set aside for the self-administered paper-and-pencil

questionnaires. Administration took about 40 to 45 minutes. Students were used to test substantive validity because Anderson and Gerbing (1991) recommended that judges should be representative of the study sample or population of interest.

2.3 Measures

Questions were written to address the three dimensional structure of social globalization. As suggested by Anderson and Gerbing (1991), the number of hypothesized underlying factors to be judged should be small, and the three-dimensional structure of social globalization fits in with that suggestion. A total of 21 items were included in the questionnaire. The use of a limited number of items is consistent with the heuristic suggested by Hu and Bentler (1987) cited by Anderson and Gerber (1991), which recommends 20 items in areas where there is not a great deal of knowledge (a view applicable to the social dimension of globalization at the individual level).

The dimension of personal contact was examined using six questions focused on following international telecommunication traffic between individuals, international travel, an individual's exposure to "foreigners" in his or her home country, and friendships and acquaintances with individuals of foreign origin. The domain of information flows was assessed using six items that focused on three areas: television viewing habits, internet usage habits (through mobile and computer technology), and newspaper reading habits via print media and online. All these items to some extent proxy people's potential for receiving news from other countries – they thus contribute to the global spread of ideas. The dimension of cultural proximity was assessed with nine items focused on individuals' behaviors related to food, drinks, books, music, and choice of clothing.

The questionnaire was not forced-choice, and respondents had to report the "actual" number of times (absolute frequency) they engaged in each behavior. The relative frequency recommendations in the literature (e.g., Churchill, 1979; Friedman & Amoo, 1999; Gerbing & Anderson, 1988; Schriesheim & Novelli, 1989) regarding equal psychological intervals were not used because (1) the KOF Index of Globalization examines absolute measures of social globalization, and (2) the boundaries of the intended scale may influence judgments of relative frequency (Schwartz, Strack, Müller, & Chassein, 1988; Schwarz et al., 1991). The reference periods were placed at the beginning of the sentence before respondents constructed their own periods (Schaeffer & Presser, 2003). See appendix 1 for the social globalization questionnaire.

3 RESULTS

Female students spent significantly more time on the internet exchanging information and for entertainment compared with their male counterparts. Furthermore, female students visited Starbucks or similar cafes more frequently compared with their male counterparts. On the other hand, male students spent more time reading the newspapers as a source of news than did female students.

3.1 Factor and reliability analysis

Prior to data analysis, the 21 item values were transformed to a scale with the highest value equal to 10 and the lowest value equal to 0, by using the following simultaneous equations (Schriesheim & Novelli, 1989):

$$0 = a + b(x_{LT}), \text{ and} \quad (1)$$

$$10 = a + b(x_{HT}), \quad (2)$$

where,

x_{LT} = the lowest scale value in the expression being transformed, and

x_{HT} = the highest scale value in the expressions being transformed.

Different criteria for factorability were used for the 21 items. The Kaiser-Meyer-Olkin (KMO) test of sampling adequacy was .60, above the recommended .50. Also, Bartlett's test of sphericity (χ^2 (210df) = 708.42, $p < .0001$), showed that the variables did not exhibit multicollinearity. As well, the communalities were .30 and above, suggesting that each item shared some common variance with other items.

Principal axis factoring (a common factor method), rather than principal components analysis (a components method) was used for factor extraction because our interest was in understanding the latent factors that account for relationships among observed variables. In contrast, a components model simply reduces the number of variables by creating linear combinations that retain as much of the original variables measures of variance (Conway & Huffcutt, 2003, Fabrigar, Wegener, MacCullum & Strahan, 1999). Principal axis factoring also differentiates common variance from unique and error variance, but, principal components analysis does not (Conway & Huffcutt, 2003; Costello & Osborne, 2005). Finally, the choice of principal axis factoring was also motivated by the fact that the data did not exhibit multivariate normality (Costello & Osborne, 2005; Fabrigar, Wegener, MacCallum, & Strahan, 1999).

Initial analysis, using direct oblimin (an oblique) rotation showed a 7-factor structure. Oblique rotation is preferable in the presence of factor correlation, and if factors are uncorrelated, orthogonal and oblique rotations produce similar results (Conway & Huffcutt, 2003; Fabrigar et al., 1999). For the 7-factor solution, initial eigenvalues showed that first factor explained 17% of the variance, the second factor 10% of the variance, the third factor 8% of the variance, the fourth factor 6% of the variance. The fifth, sixth, and seventh factor had eigenvalues slightly above one, and accounted for a combined 10% of the variance. The 7-factor solution was rejected because some of the factors had only one or two items loading on them, and others had several items cross-loading on them.

Consequently, in determining the number of factors to retain, the suggestions of Costello and Osborne (2005) were used. We ran multiple factor analyses using principal axis factoring with direct oblimin rotation, and set the factors to retain from three to six. The three-, four, and six-factor solutions did not have clean factor structures, with several of the factors having only two items loading on them, and multiple cross-loading of items. We decided on the 5-factor model because it was the cleanest – having items that load .30 and above, few cross-loadings, and no factors with fewer than three items.

The following items: “past 12 months number of travels outside Kuwait,” “in a month, number of times wear non-Kuwaiti dress,” “past 12 months international phone calls,” and “in a month, number of Starbucks or similar café visits” did not load on any factor. Of the extracted factors, factor 1, “information flows – internet,” was made up of four variables and explained 16.6% of the variance, with a reliability of .76. The second factor, “information flows – print,” was composed of four items and explained 10% of the variance, with a reliability of .66. The third factor “personal contact” explained 6.8% of the variance and was made up of three variables, and had a .64 alpha reliability. The fourth factor, “cultural proximity” was made of up three items, and accounted for 5.5% of the variance, with a weak reliability of .46. The last factor, “information flows – tv” was also made up of three variables and explained 4% of the variance, and had a reliability of .77. Alpha reliabilities of .70 indicate that there is a strong inter-item correlation among the items, and should be used as the absolute minimum for measures (Hinkin, 1998)

Table 2. Factor loadings of hypothesized constructs.

Variables	Construct	IF-INT	IF-PR	PER	CUL	IF-TV
During week number of hours of internet for non-Kuwaiti entertainment	Cultural Proximity	0.78				
During week number of hours of internet exchange of information	Personal Contact	0.76				
During week number of hours of internet for general information	Information Flows	0.55				
In a month number of hours listening to non-Kuwaiti music	Cultural Proximity	0.55				
During the week, number of hours of newspaper as source of general information	Information Flows		0.88			
During the week, number of hours of newspaper as source of news	Information Flows		0.85			
During the week number of hours of internet for getting the news	Information Flows		0.33			
In past 12 months, non-Kuwaiti author books read	Cultural Proximity		0.30			
In a day number of non-Kuwaiti interaction	Personal Contact			0.81		
Number of non-Kuwaiti friends	Personal Contact			0.62		
During the week number of hours of internet for social networking	Personal Contact			0.49		
In a month, number of non-Kuwaiti restaurant visits	Cultural Proximity				0.80	
in a month number of times bought non-Kuwaiti fast food	Cultural Proximity				0.40	
In a month number of cans of carbonated beverages drank	Cultural Proximity				0.33	
During week hours of non-Kuwaiti TV for general information	Information Flows					0.72
During week hours of non-Kuwaiti TV for international news	Information Flows					0.57
During week hours of non-Kuwaiti TV for entertainment	Cultural Proximity					0.54
<i>Past 12 months number of travels outside Kuwait</i>	<i>Personal Contact</i>	<i>-0.11</i>	<i>0.28</i>	<i>0.02</i>	<i>0.02</i>	<i>0.04</i>
<i>In a month, number of times wear non-Kuwaiti dress</i>	<i>Cultural Proximity</i>	<i>0.03</i>	<i>-0.20</i>	<i>-0.04</i>	<i>-0.05</i>	<i>-0.06</i>
<i>Past 12 months international phone calls</i>	<i>Personal Contact</i>	<i>0.15</i>	<i>0.00</i>	<i>-0.03</i>	<i>-0.20</i>	<i>0.02</i>
<i>In a month, number of Starbucks or similar café visits</i>	<i>Cultural Proximity</i>	<i>-0.04</i>	<i>-0.07</i>	<i>0.08</i>	<i>0.14</i>	<i>0.04</i>
Variance Explained		16.61	10.00	6.82	5.46	4.01
Alpha Reliability of Factors		0.76	0.66	0.64	0.46	0.77

Note: Italicized variables did not load on any factor.

IF-INT = Information flows-internet; IF-PR = Information flows-print; PER = Personal contact; CUL = Cultural proximity; IF-TV = Information flows-tv

3.1 Substantive validity analysis

The substantive validity of a measure is the extent to which that measure is judged to reflect a construct under study (Holden & Jackson, 1979), and is analyzed using two indices (Anderson & Gerbing, 1991). The first index, the proportion of substantive agreement, P_{sa} , is “the proportion of respondents who assign an item to its intended construct” (Anderson and Gerbing 1991, p. 734).

Where: $P_{sa} = n_c / N$

n_c = number of people assigning an item to its posited construct, and

N = total number of respondents.

P_{sa} ranges from 0.00 to 1.00. Larger values indicate greater substantive validity of the item.

The second index, the substantive-validity coefficient, C_{sv} , represents the extent to which respondents assign an item to its posited construct more than to any other construct (Anderson & Gerbing, 1991).

Where $C_{sv} = (n_c - n_o) / N$

n_c and N are defined as before, and

n_o = the higher number of assignments of the item to any other construct.

C_{sv} ranges between -1.00 to 1.00. Larger values indicate greater substantial validity. A recommended threshold for the C_{sv} index is 0.5 (Anderson & Gerbing 1991). Large negative values mean that the item has high substantive validity, but for a different construct.

Results of the proportion of substantive agreement, P_{sa} , suggests that (1) for the hypothesized cultural proximity items in the questionnaire, participants were less likely to assign them to their respective construct, and (2) for the items representing information flows and personal contact constructs, respondents were about equally as likely to assign them to their hypothesized constructs.

An examination of the substantive validity coefficient, C_{sv} , shows that a majority of the items were marginally more likely to be assigned to their intended hypothesized constructs (as indicated by the positive C_{sv} values). On the other hand, some of the items had negative C_{sv} values, indicating that they were more likely to be assigned to another construct than to its hypothesized construct.

4 DISCUSSION AND CONCLUSIONS

Based on a reading of the literature, a priori theory, and a deductive approach to questionnaire construction, three dimensions of social globalization were examined: personal contact, information flows, and cultural proximity. A 21-item questionnaire was used to assess the three dimensions. A factor analysis of the questions revealed a 5-factor structure, three of which were related to information flows, which we labeled "information flows-internet, information flows-print, and information flows-tv. These findings suggest that information flows as an aspect of social globalization may be characterized by channel.

Of the four items that loaded on the factor of information flows-internet, two were hypothesized to be related to cultural proximity (during the week number of hours of internet usage for non-Kuwaiti entertainment and hours of listening to non-Kuwaiti music), and one was hypothesized as personal contact (during the week number of hours of internet exchange of information). Number of hours of internet for general information correctly loaded on the information flows-internet factor. Only one item hypothesized to be cultural proximity (past 12 months, non-Kuwaiti authored books read) loaded on information flows-print. The three other items that loaded on information flows-print were hypothesized as information flows variables: number of hours of newspaper as a source of general information, number of hours of newspaper as a source of news, and number of hours of internet for getting the news. Finally, three items loaded on information flows-tv, of which one was hypothesized to be cultural proximity (hours of non-Kuwaiti tv for entertainment), and the other two were hypothesized as information flows (hours of non-Kuwaiti tv for general information and for international news).

Table 3. Substantive validity analysis of items.

Variables	Construct	P _{sa}	C _{sv}
During week hours of non-Kuwaiti TV for entertainment	Cultural Proximity	0.23	-0.28
In a month number of cans of carbonated beverages drank	Cultural Proximity	0.49	0.22
in a month number of times bought non-Kuwaiti fast food	Cultural Proximity	0.41	0.06
During week number of hours of internet for non-Kuwaiti entertainment	Cultural Proximity	0.27	-0.20
In a month, number of Starbucks or similar café visits	Cultural Proximity	0.43	0.11
In a month, number of non-Kuwaiti restaurant visits	Cultural Proximity	0.32	-0.06
In past 12 months, non-Kuwaiti author books read	Cultural Proximity	0.34	-0.08
In a month number of hours listening to non-Kuwaiti music	Cultural Proximity	0.41	0.11
In a month, number of times wear non-Kuwaiti dress	Cultural Proximity	0.47	0.16
During week hours of non-Kuwaiti TV for international news	Information Flows	0.47	0.21
During week hours of non-Kuwaiti TV for general information	Information Flows	0.51	0.21
During week number of hours of internet for general information	Information Flows	0.47	0.18
During the week number of hours of internet for getting the news	Information Flows	0.57	0.31
During the week, number of hours of newspaper as source of news	Information Flows	0.53	0.26
During the week, number of hours of newspaper as source of general information	Information Flows	0.52	0.25
Past 12 months international phone calls	Personal Contact	0.74	0.55
Past 12 months number of travels outside Kuwait	Personal Contact	0.53	0.24
During week number of hours of internet exchange of information	Personal Contact	0.37	-0.05
In a day number of non-Kuwaiti interaction	Personal Contact	0.52	0.17
During the week number of hours of internet for social networking	Personal Contact	0.38	-0.07
Number of non-Kuwaiti friends	Personal Contact	0.50	0.17

The three items that loaded on cultural proximity (number of non-Kuwaiti restaurant visits, number of times bought non-Kuwaiti fast food, and number of cans of carbonated beverages drank) were all hypothesized as cultural proximity variables. Finally, three items loaded on personal contact (in day number of non-Kuwaiti interaction, number of non-Kuwaiti friends, and number of hours of internet for social networking), were also hypothesized to be personal contact variables. Four items did not load on any factor: number of travels outside Kuwait, number of times wears non-Kuwaiti dress, international phone calls, and visits to Starbucks or similar cafes.

In all, the results of the substantive validity analysis suggested that although the items may be indicative of the constructs under investigation, respondents did not correlate them with their intended constructs with a higher degree of concordance.

4.1 Limitations of the study

There are several issues that may have impacted the difference between the observed 5-factor structure and the hypothesized 3-factor structure, but two are worth explaining. First, there may have been problems with item construction and the wording of questions that may have confused the respondents, or led to alternative interpretations of the meaning and intent of the items. Another area of concern is in regard to the scale of the questions. The questions were not forced-choice, so respondents were free to estimate the frequency with which they

engaged in a specific behavior. Thus, the nature of the questionnaire design could have had an impact on respondents' ability to recall and therefore accurately record their responses.

4.2 Conclusions

Regardless of the limitations noted above, this initial attempt at developing a set of questions that could be used at understanding the social dimensions of globalization at the individual level seems promising. At the very least, it suggests that, in trying to understand information flows, it may be necessary to look at the various channels of information and distinguish among them, instead of grouping together these divergent channels, because individuals may distinguish among them. The findings also support theorizing that social globalization is comprised of personal contact and cultural proximity as indicated by the factor structure observed.

As an initial foray into the individual level examination of the dimensions of social globalization, the questions used in the survey looks promising, but may need to be fine-tuned to make them more discriminatory among the constructs, and to enable easy understanding. We are hopeful that our initial attempts will generate further research in this area as we endeavor to improve upon our questionnaire.

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