

Social axioms in Iran and Canada: Intercultural contact, coping and adjustment

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A comparison was made between Iranian participants living in Iran, Iranian immigrants to Canada, and Canadian-born participants on the Social Axioms Scale (SAS), including a sixth dimension, Harmony. The Iranian immigrants to Canada endorsed views that were intermediate between the other two groups. In the data from Iran, the relationships between social axioms on the one hand and measures of active coping and adjustment on the other were examined. Belief in Reward for Application predicted Active Coping; acknowledgment of Social Complexity predicted Life-Satisfaction; and endorsement of belief in Harmony predicted Mastery. Those whose beliefs on Harmony and Social Complexity were closer to their country mean were higher on Mastery and Self-Esteem, but those whose beliefs on Fate Control were closer to the country mean showed lower Life-Satisfaction.

Key words: Canada, coping, Iran, social axioms.

Introduction

Cross-cultural research since Hofstede (1980) has often been concerned with cultural differences in values (i.e. what people regard as desirable and important as their guiding principles). In contrast, Leung, Bond and their colleagues (e.g. Leung *et al.*, 2002; Leung & Bond, 2004) have shifted the cross-cultural research focus to beliefs (i.e. what people regard as true). According to them, 'social axioms' are basic and generalized beliefs about the way the world functions. These beliefs are not evaluative in nature (e.g. community spirit is good), neither are they normative dicta (e.g. love thy neighbour); rather, they state a relation between two entities (e.g. neighbourliness strengthens a community). Leung and colleagues suggest that people use these beliefs to guide their behaviour in a variety of situations.

Social axioms are measured by the Social Axioms Scale (SAS; Leung & Bond, 2004), which consists of five primary dimensions: Social Cynicism, Reward for Application, Social Complexity, Fate Control and Religiosity (formerly labelled Spiritual Consequences). Social Cynicism refers to a biased view against some groups, a mistrust of social institutions, and a disregard of ethical means for achieving an end. This is a negative view of human nature, perceiving it to be easily corrupted by power. Social Complexity refers to the belief that there are no rigid rules, but

multiple ways of achieving a goal, and also that human behaviour is commonly inconsistent. Religiosity refers to a belief in the reality of supernatural forces and the beneficial functions of religious beliefs. The Reward for Application dimension corresponds to a general belief that knowledge, effort and careful planning will have positive results. Fate Control refers to a belief that life events are predetermined, but also that there are ways for people to influence these outcomes (Leung & Bond, 2004). The SAS dimensions have been tested (to date) in 40 national/cultural groups (Leung & Bond, 2004) and the findings provide evidence for this five-factor model (Leung *et al.*, 2002).

Although not included in the original version of the scale (Leung *et al.*, 2002), a sixth dimension labelled Harmony, which taps beliefs about the causes of interpersonal harmony and conflict, has been included in some recent studies (e.g. Safdar *et al.*, 2003). This dimension is concerned with the antecedents of positive relationships, and the consequences of such relationships, in a variety of social domains (family, intimate relationships, work and friendship). Its items refer primarily to interpersonal situations, although some were cited in an intergroup context (see Appendix I for specific items). Some items restate certain theoretical positions on liking and prejudice: Rokeach (1960) belief congruence theory (we like those who agree with us) and aspects of social identity theory (Tajfel & Turner, 1986). People with high Harmony scores are expressing beliefs that social harmony can bring about positive outcomes (e.g. providing happiness, a balanced life and protection from loneliness), that harmony in one aspect of life (e.g. family) has consequences in others (e.g. performance and success), and that certain patterns of behaviour can bring about

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harmony (e.g. honesty within intimate relationships, mutual respect and compromise within partnerships). The Harmony dimension has been found to be positively related to active religious participation in Muslim, Christian, and Jewish samples (Safdar *et al.*, 2003). Harmony may be a useful addition to the five dimensions of social axioms, although the above finding suggests that its importance may be more apparent in cultures where religion plays a significant role in social life.

The present study examines the five social axiom dimensions and considers the utility of the Harmony dimension in Iran, a society in which religion and family play a major role. Iran is a Middle Eastern country with a population of over 60 million people, 57% of whom live and work in cities while the remainder live and work in a rural context. The most widely practiced religion is Islam, with 98% of the population being Muslim, of whom 93% are Shiite and 7% Sunni (Daneshpour, 1996). One of the major cultural forces within Iranian society is a belief system based on Islamic principles and moral codes described in the Koran (Holy book) and the Sunnah (commentaries on the teachings and practices of The Prophet Muhammad). These principles aim to achieve a balance between worldly and spiritual needs (Khalili *et al.*, 2001).

Research has shown that religion plays an important part in Iranian psychology (Ghorbani & Bolhari, 2001; Ghorbani *et al.*, 2002; Watson *et al.*, 2002). In addition, relative to North American and North European societies, collectivist values are salient in Iranian social life. In Hofstede's (2001) analysis, for example, Iran is ranked as slightly more collectivist than Japan. The family is the most important element of Iranian culture and society, and the average family size is five people, with a divorce rate of 9.1% (Al-Issa, 2000).

Despite the growth of studies on social axioms, there is no research to date on social axioms among Iranians. Although Leung and Bond (2004) include data from Iran, this is only analyzed at the level of culture (i.e. Iranian means are taken as single cases within samples of national group means). In Leung's and Bond's (2004) hierarchical cluster analysis, Iranian scores cluster with those of Indonesia, Malaysia and Pakistan (non-Arab Muslim countries) and Canadian scores cluster with the USA, the UK and New Zealand as well as with some other European countries and Israel. The means for these two groups vary relatively consistently, with the former producing higher means for all dimensions except Social Complexity, on which the latter group scores higher. Harmony is not included in the Leung and Bond (2004) analysis, but the greater emphasis on collectivism in Iran (Hofstede, 2001) would lead to the prediction of higher scores on the Harmony subscale in an Iranian than in a North American sample.

One emerging question in the research on social axioms is that of their relationship with social adjustment. Leung

and Bond (2004), for instance, found a negative correlation between citizen scores on Fate Control and both life satisfaction and occupational satisfaction. However, not only particular social axioms, but also an individual's standing on social axiom dimensions relative to his or her country's norm (i.e. mean) has been found to be related to adaptation. Kurman and Ronen-Eilon (2004) found, among immigrants to Israel, that the closer an individual's endorsement of social axioms matched the Israeli mean, the better adapted to Israeli society that person tended to be. If this finding were to generalize, it would suggest that the closer one's ontological beliefs are to the norms in a society, the more comfortably one will adapt to that society. This should follow for a society's members¹ as well as for immigrants, and more so within 'tight' cultures (Triandis, 1994), such as Iran.

Social adjustment may also depend on coping strategies, which Lazarus (1999; p. 111) called 'the effort to manage psychological stress'. A broad distinction between two general types of coping is widely endorsed (Lazarus, 1999): active (often problem-focused) and passive (emotion-focused). From the social axioms perspective, a person who believes in a world in which effort achieves results (i.e. in Reward for Application) is likely to engage in active coping strategies. Indeed, Safdar *et al.* (2003) found, in Canadian, US and UK samples, that active coping was positively related to Reward for Application and, negatively, to Social Cynicism & Religiosity. Bond *et al.* (2004) also found that Social Cynicism and Fate Control were associated with passive strategies and Social Complexity with active, problem-solving strategies among a Hong Kong sample. There are no studies examining the relationship between social axioms, coping and adjustment outcomes among Iranians.

In the present study, then, the dimensions of the SAS were examined within an Iranian sample to consider the properties of the scale, including the potential sixth dimension, Harmony. Also, in order to consider the possibility that contact with a second culture is associated with modification of beliefs as part of the process of acculturation, two further groups were sampled for comparison with Iranians (in Iran): one of Iranians living in Canada (Iranian immigrants to Canada) and another of Canadians (born in Canada, and of predominantly European descent). Canada and Iran have been identified as having diverging beliefs (Leung & Bond, 2004) and values (Hofstede, 2001). Examining the dimensions of social axioms in these three samples would not only allow a comparison between beliefs in these two very different societies, but also a consideration of the possibility of change in people's social beliefs when they move to a society where different beliefs are endorsed. It was anticipated that Iranians living in Canada would endorse views that were intermediate between Iranians in Iran and Canadian-born respondents.

Methods

Materials

Social axioms survey. The 82-item SAS was administered. This version includes items for the sixth subscale, Harmony, as well as the five primary dimensions. Respondents are requested to indicate to what extent each statement reflects their opinion by marking a 5-point scale from 'strongly disbelieve' (1) to 'strongly believe' (5). Social Cynicism consists of 19 items related to a negative view of human nature and social events (e.g. 'power and status make people arrogant'). Reward for Application consists of 16 items reflecting the idea that effort will lead to positive outcomes (e.g. 'one will succeed if he/she really tries'). Social Complexity contains 14 items and refers to the potential for multiple solutions to social problems (e.g. 'human behaviour changes with the social context'). Fate control contains eight items reflecting the belief that social events are influenced by unobservable external forces (luck, fate, etc.) and also that there are ways to influence those forces (e.g. 'fate determines one's successes and failures'). The Religiosity subscale comprises 12 items expressing belief in the existence of supernatural forces (God[s] and/or spirits) which influence the human world, and in the positive consequences of religious practices (e.g. 'there is a supreme being controlling the universe'). Finally, Harmony contains 13 items and relates to antecedents and consequences of interpersonal harmony and discord (see Appendix I for the complete list of 13 items). Cronbach alphas for the six subscales, and the factor structure of the SAS are presented below.

Coping and adjustment. Olson (1997) has developed an instrument providing measures of active coping and of adjustment. As Olson's full instrument enables the assessment of family functioning from multiple perspectives, only the measures of adjustment and coping at a personal level were included in the present study. There are three measures of adjustment at the individual level: Life-Satisfaction (10 items), Self-Esteem (10 items), and Mastery (seven items), as well as a measure of Active Coping (seven items). Each item is rated on a 5-point scale ranging from 'strongly disagree' (1) to 'strongly agree' (5).

According to Olson's (1997) model, Active Coping comprises communication (effective exchange of information), cohesion (ability to connect with others), flexibility (openness and an ability to change) and problem-solving ability such that one can deal directly with the problems and make positive changes to resolve them (e.g. 'concentrate on what you have to do and work all the harder'). Life-Satisfaction considers how satisfied people are by inviting respondents to endorse statements such as, 'I am a very happy person'. The Mastery scale looks at attitudes toward achievement

and taps perceived self-efficacy (e.g. 'I can do just about anything I set my mind to'). Self-Esteem examines evaluative attitudes toward the self (e.g. 'I feel I have a number of good qualities'). Cronbach alphas are reported below for all coping and adjustment measures.

All materials were translated into Persian and back-translated to check their equivalence.

Participants

Three samples were collected for the present study. There were 149 Canadian-born participants (109 females and 40 males), 150 Iranian immigrants living in Canada (78 females and 72 males), and 146 Iranians living in Iran (74 females and 72 males). The Canadian and Iranian samples were university students who participated to meet their course requirements. The Iranian immigrants to Canada were a community sample recruited through snowball sampling. Ninety-two per cent of the Canadian-born sample were undergraduate students, of whom 31% were 20 years old or younger, 66% were between 21 and 30, and 3% above 30. The Iranian immigrants to Canada were all first-generation immigrants (i.e. born in Iran). Thirty-six per cent were students, 56% were employed, and the remaining 8% were home-makers or unemployed. Thirty-seven percent of this sample were below 30 years, 33% were between 30 and 40, and 30% were above 40. The majority of the Iranian sample living in Iran (62%) were undergraduate students in one of the major universities in Tehran. Of the remainder, 29% were employed and 9% were unemployed or home-makers. Twenty-three per cent of them were 20 years old or younger, 54.5% were between 21 and 30, and 22.5% above 31.

The Iranian immigrants to Canada and the Canadian participants completed the English version of the SAS; the Iranians (in Iran) completed the Persian versions of the SAS and the coping and adjustment measures. The coping and adjustment measures were only administered to Iranian participants living in Iran.

Results

First, factor analyses using Varimax rotation were conducted on the SAS for each of the three samples. An examination of the scree plots and variance accounted for by six factors (*vs* five or seven) showed that a six-factor solution was best for all the samples. This six-factor solution explained 30% of the variance for the Canadian sample, 35% for the Iranians in Canada, and 43% for the Iranian sample. In the next step, the items that showed low factor loadings or had a low (or negative) item-total correlation were omitted from the scale. This procedure has previously been used to identify which of the items (intended to be

Table 1 Cronbach's alpha for each of the SAS dimensions for Canadian, Iranian immigrant to Canada and Iranian samples

	Canadian alpha	Iranian-Canadian alpha	Iranian alpha
Social Cynicism (19-item)	0.73	0.72	0.82
Reward for Application (15-item)	0.60	0.74	0.83
Social Complexity (5-item)	0.40	0.48	0.62
Fate Control (8-item)	0.56	0.51	0.61
Religiosity (10-item)	0.73	0.80	0.70
Harmony (11-item)	0.62	0.69	0.72
Active Coping (5-item)	–	–	0.70
Life-Satisfaction (10-item)	–	–	0.86
Self-Esteem (9-item)	–	–	0.72
Mastery (3-item)	–	–	0.62

Note: the above subscales, with the exception of Social Cynicism, Fate Control, and Life-Satisfaction, were modified to improve the scale reliability. Metric equivalence was maintained, however, across the three samples. A list of deleted items can be obtained from the first author.

etic) are applicable and meaningful in a particular culture (Kurman & Ronen-Eilon, 2004; Leung & Bond, 2004). The subscales Social Complexity, Reward for Application, Religiosity, and Harmony required modification (i.e. omission of items) across all the three samples. The same items were omitted for each sample to maintain metric equivalence. Social Cynicism and Fate Control were the two subscales that required no modification (or were not improved by it) in any of the samples.

Cronbach alphas for all subscales, in the three samples, are presented in Table 1. The reliability for two of the subscales, Social Cynicism and Religiosity, is well within the acceptable range for all samples (Cronbach alphas between 0.70 and 0.82). For two of the other subscales, Reward for Application and Harmony, the reliability coefficients are moderately high (Cronbach alpha between 0.60 and 0.83) and within the range reported by other researchers (Kurman & Ronen-Eilon, 2004). However, the reliability of two subscales, Social Complexity and Fate Control are undesirably low (Cronbach alpha between 0.40 and 0.62).

Comparison of three samples on social axioms

A 3 (cultural group) \times 2 (gender) \times 6 (SAS dimensions) Multivariate Analysis of Variance (MANOVA) indicated a significant multivariate effect for cultural group, Wilks' Lambda = 0.54, $F_{12,832} = 25.37$, $p < 0.001$. The three cultural groups differed significantly on five out of six SAS dimensions: Social Cynicism, $F_{2,421} = 18.45$, $p < 0.001$, Reward for Application, $F_{2,421} = 68.50$, $p < 0.001$, Fate Control, $F_{2,421} = 51.00$, $p < 0.001$, Religiosity, $F_{2,421} = 129.36$, $p < 0.001$, and Harmony, $F_{2,421} = 20.14$, $p < 0.001$. The three cultural groups, however, did not differ on

the Social Complexity subscale, $F_{2,421} = 0.25$, $p > 0.05$. Scheffe's post hoc analyses indicated that the Iranians scored significantly higher than the Canadians on Social Cynicism, Reward for Application, Fate Control, Religiosity, and Harmony (all p 's < 0.01). Iranians (in Iran) also scored higher than Iranian immigrants in Canada on these five dimensions. Furthermore, Iranian immigrants in Canada scored higher than the Canadians on four of them: Social Cynicism, Reward for Application, Fate Control, and Religiosity. The means and standard deviations for the three samples on the six SAS dimensions are reported in Table 2.

A pattern is evident whereby (with the exception of Social Complexity, where there were no significant differences between the three groups) the scores from the Iranian immigrants to Canada were intermediate between the other two sets of scores, and the differences were significant in every case except one (Canadians and Iranian immigrants to Canada on Harmony).

In addition, a significant gender effect was found, Wilks' Lambda = 0.94, $F_{16,416} = 4.18$, $p < 0.001$. Men had a significantly higher mean on Social Cynicism than women, $F_{1,421} = 10.17$, $p < 0.005$. The interaction between gender and cultural group was significant, $F_{2,421} = 7.62$, $p < 0.001$. Scheffe's post hoc analysis indicated that Iranians scored highest on Harmony, followed by Iranian immigrants and Canadians. Iranian men (living in Iran) scored significantly higher than Iranian women, but Canadian and Iranian immigrant women scored (insignificantly) higher than Canadian and Iranian immigrant men.

Axioms and adjustment among Iranians (in Iran)

Reliability coefficients (Cronbach's alpha) for the measures of coping and adjustment were within an acceptable range

Table 2 Total, male and female means and standard deviations, for each SAS dimension, across the three samples

	Canadian (C)			Iranian-Canadian (IC)			Iranian (I)		
	Total (n = 149)	Male (n = 40)	Female (n = 109)	Total (n = 140)	Male (n = 69)	Female (n = 71)	Total (n = 138)	Male (n = 69)	Female (n = 69)
Social Cynicism									
M	2.69 IC, I	2.84	2.64	2.90 I	2.91	2.88	3.08	3.20	2.98
SD	0.40	0.07	0.04	0.41	0.06	0.06	0.56	0.06	0.06
Reward for Application									
M	3.70 IC, I	3.67	3.71	3.82 I	3.86	3.80	4.25	4.27	4.24
SD	0.34	0.06	0.04	0.42	0.05	0.05	0.43	0.05	0.05
Social Complexity									
M	3.80	3.81	3.82	3.74	3.79	3.72	3.82	3.93	3.74
SD	0.44	0.08	0.05	0.47	0.06	0.06	0.56	0.06	0.06
Fate Control									
M	2.55 IC, I	2.54	2.55	2.78 I	2.75	2.81	3.20	3.26	3.16
SD	0.51	0.08	0.05	0.49	0.06	0.06	0.60	0.06	0.06
Religiosity									
M	3.20 IC, I	3.19	3.19	3.40 I	3.30	3.49	4.21	4.16	4.30
SD	0.56	0.09	0.05	0.63	0.07	0.07	0.49	0.07	0.07
Harmony									
M	3.96 I	3.83	3.99	4.04 I	3.95	4.13	4.23	4.32	4.15
SD	0.39	0.07	0.04	0.44	0.05	0.05	0.41	0.05	0.05

Note: Significantly different means are in bold. A letter next to a mean score indicates the comparison group, $p < 0.05$.

Table 3 Correlation coefficients between the six SAS dimensions and the measures of coping and adjustment for the Iranian sample

	1	2	3	4	5	6	7	8	9	10
1. Coping	–									
2. Satisfaction	0.33***									
3. Self-Esteem	0.36***	0.61***								
4. Mastery	0.32***	0.44***	0.60***							
5. Social Cynicism	0.15	0.18*	–0.11	0.14						
6. Reward	0.44***	0.35***	0.34***	0.42***	0.29***					
7. Social Complexity	0.19*	0.43***	0.19*	0.36***	0.44***	0.51***				
8. Fate Control	0.09	0.20*	–0.09	0.14	0.65***	0.26***	0.43**			
9. Religiosity	0.25**	0.21*	0.29***	0.27**	–0.05	0.55***	0.21**	0.02		
10. Harmony	0.37***	0.33**	0.36***	0.53***	0.31***	0.74***	0.58***	0.25**	0.55***	

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ ($N = 141$).

and are reported in Table 1. As with the SAS, the items that showed low factor loadings or had a low (or negative) item-total correlation were omitted from the subscales. The zero-order correlation coefficients were calculated for the six SAS dimensions and the measures of coping and adjustment, Active Coping, Self-Esteem, Mastery, and Life-Satisfaction (Table 3). Reward for Application, Social Complexity, Religiosity and Harmony correlated significantly with all four measures. Social Cynicism and Fate Control correlated significantly with Life-Satisfaction.

Next, a series of hierarchical regression analyses were performed predicting Active Coping, Mastery, Life-Satisfaction and Self-esteem using demographic variables and the six SAS dimensions as predictor variables. In each analysis, the following variables were entered in Block 1: gender, age (three categories: 20 or below, $N = 34$; 20–30, $N = 79$; 31 or above, $N = 33$), occupation (two categories: student $N = 90$, non-student $N = 56$), and education (two categories: below university $N = 49$, university degree or above $N = 97$). In Block 2, the six SAS dimensions were

Table 4 Summary of hierarchical regression analyses for variables predicting measures of coping and adjustment in the Iranian sample

Variable	Active Coping		Mastery		Life-Satisfaction		Self-Esteem	
	R^2	B	R^2	B	R^2	B	R^2	B
Block 2	0.27***		0.33***		0.24***		0.23***	
Gender		-0.03		-0.05		-0.02		-0.09
Education		0.14		0.12		-0.01		0.10
Age		0.04		-0.10		0.10		0.03
Occupation		0.19		0.01		-0.03		-0.06
Social Cynicism		0.09		-0.04		-0.06		-0.23
Reward for Application		0.57***		0.19		0.20		0.22
Social Complexity		-0.14		0.18		0.37***		0.08
Fate		-0.01		-0.03		-0.01		-0.10
Religiosity		-0.09		-0.08		0.02		0.07
Harmony		0.04		0.32*		-0.04		0.18

* $P < 0.05$, *** $P < 0.001$.

entered. No demographic variables predicted any of the coping and adjustment scores.

In the first hierarchical regression, Reward for Application was the only predictor of Active Coping ($B = 0.57$, $p < 0.001$), $F_{10,127} = 4.69$, $p < 0.001$ (Table 4). In the second hierarchical regression analysis, Harmony was the only significant predictor of Mastery ($B = 0.32$, $p < 0.05$), $F_{10,126} = 6.06$, $p < 0.001$. The third regression analysis indicated that Social Complexity was the only SAS dimension predicting Life-Satisfaction ($B = 0.37$, $p < 0.001$), $F_{10,125} = 3.89$, $p < 0.001$. In the last regression analysis none of the variables were significant predictors of Self-Esteem although R^2 was significant, $F_{10,124} = 3.75$, $p < 0.001$.

Finally, three regression analyses were conducted predicting the measures of adjustment, Mastery, Life-Satisfaction, and Self-Esteem, using the absolute difference of the individual's score on each of the six SAS dimensions from the sample mean as the predictor variables. Normative endorsement of Harmony ($B = -0.77$, $p < 0.005$), $F_{6,130} = 4.17$, $p < 0.001$, predicted Mastery; normative endorsement of Fate Control ($B = 0.42$, $p < 0.01$), $F_{6,129} = 2.45$, $p < 0.05$ predicted Life-Satisfaction; normative endorsement of both Harmony ($B = -0.49$, $p < 0.05$) and Social Complexity ($B = -0.26$, $p < 0.05$), $F_{6,128} = 5.78$, $p < 0.001$ predicted Self-Esteem. Closer adherence to the norm with respect to Fate Control was associated with less Life-Satisfaction. However, closer adherence to the norm with respect to Social Complexity and Harmony was associated with higher Self-Esteem and a greater sense of Mastery.

Discussion

The inclusion of the additional, sixth dimension, Harmony, appeared appropriate in the present study. It appeared to be

a distinct factor, with better reliability than the Social Complexity and Fate Control dimensions. It was also one of the dimensions that predicted adjustment outcomes.

Adjustment and axioms in Iran

For the Iranian sample, Active Coping was predicted by Reward for Application, a finding which was hypothesized on the basis of existing literature from samples of other nationalities (Leung & Bond, 2004). This particular association of beliefs and coping style appears cross-culturally robust as well as making intuitive sense. Harmony predicted Mastery, and Social Complexity predicted Life-Satisfaction. Neither of these relationships was anticipated, and they suggest that, for these Iranians, paying attention to one's social network (maintaining harmony within it and being sensitive to its complexity) is a way both of getting things done (and thereby gaining a sense of mastery) and of receiving enough positive reinforcement to feel that life is satisfying. Again, these findings make intuitive sense in a relatively collectivist society (Hofstede, 2001). It is pertinent that in this context it is Harmony (rather than, as might be anticipated, Reward for Application) that is associated with a sense of Mastery.

Harmony and Social Complexity appear to be particularly important areas of belief to the extent that Self-Esteem was predicted by concurrence with the social norms in endorsement of these dimensions. Mastery was also predicted by the proximity of one's beliefs to the norm on Harmony. There is support here for the idea that the closer a person's beliefs are to a society's norms the more adjusted to that society the person will be. This has been found before in relation to the adjustment of immigrants (Kurman & Ronen-Eilon, 2004). As suggested above, it appears to be relevant to society members as well as to immigrants.

However, it does not apply to all areas of belief; closer proximity to the normative belief in Fate Control predicted lower Life-Satisfaction. The sample mean on Fate Control is higher than for the Canadian and immigrant samples; indeed, it is higher than any of the national means reported by Leung and Bond (2004). Adherence to this high mean predicted poorer adjustment. This does not imply that deviation simply indicates lower belief in fate control; even though the mean is relatively high, the scores are still normally distributed.

Other areas of belief appear not to be relevant to adjustment. Although Reward for Application predicted Active Coping, it did not predict any of the measures of adjustment. Social Cynicism had the lowest mean score and was not predictive of adjustment; neither was adherence to the norm. Religiosity is highly endorsed within this Iranian sample; of the 40 national samples reported by Leung and Bond (2004), only the Indonesian, Malaysian and Pakistani samples produced higher means. However, Religiosity is not predictive of adjustment and neither is normative endorsement of Religiosity. As Iran is not a secular society, one might have anticipated a relationship between religiosity and adjustment. Perhaps because it is not a secular society, it is customary to endorse religious views even if the endorsement lacks conviction (i.e. as a self-presentational strategy). For these Iranians, then, being well adjusted implies an awareness of the importance of one's social network (maintaining harmony within it and being sensitive to its complexity). However, one should not put too much emphasis on fate, to do so would be dysfunctional. Other areas of belief (Religiosity, Social Cynicism and Reward for Application) have no implications for adjustment.

Social axioms among Iranians, Canadians and Iranian immigrants to Canada

Iranian immigrants to Canada scored between the Canadian and Iranian samples on all SAS dimensions except Social Complexity, and all differences were significant except the one between Canadians and immigrants on Harmony. The gender effect, males scoring higher on Social Cynicism, has been found in other studies (Safdar *et al.*, 2003), although the interaction of cultural group and gender with respect to Harmony, Iranian men in Iran scoring relatively high, has not.

Issues raised and limitations

The production of scores on five of the six SAS dimensions by the Iranian immigrants to Canada that were intermediate between those expressed by the Iranian and Canadian samples looks like a snapshot of the acculturation process in action. It could suggest that contact with the second culture

has modified the immigrants' beliefs towards the norms of their new social environment. However, another interpretation is possible based on self-selection. It is possible that those whose views differ from the norms in their culture of origin may be the ones who migrate, and (given a choice) they migrate to somewhere where their beliefs might be more appropriate. It may be the case, then, that these Iranian immigrants to Canada already held these views before they migrated. These two interpretations need disentangling, and this requires longitudinal research. It is quite possible that there is some truth in both interpretations: people with culturally incongruent beliefs are more likely to migrate, and their views may be further modified when they do.

Another reason why it would be desirable to disentangle these acculturation and self-selection interpretations is that there are theoretical implications in terms of our understanding of social axioms. They are described as psychological constructs which are basic and fundamental (Leung *et al.*, 2002; Leung & Bond, 2004). However, if they are subject to significant change through cross-cultural contact, this would suggest that they may not all be deeply held. In order to maintain the view that these are fundamental beliefs, longitudinal data are required showing the extent to which different beliefs change over time. Research on values has found that among immigrant communities, some values change over one generation, others over two (Rosenthal & Feldman, 1992; Georgas *et al.*, 1996). Similarly, it is likely that some beliefs will be more tenacious than others.

It is also likely that some beliefs, in some circumstances, will be endorsed for the sake of self-presentation rather than internalized belief. Beliefs relating to religion in contemporary Iran might present a case in point. This raises (old) questions about the validity of measures such as this: to what extent is the SAS a measure of self-presentation rather than of basic, fundamental belief? This may well vary from one research context to another.

Conclusions

Although not included in much of the social axioms research, the inclusion of the sixth dimension, Harmony, seems justified, even though it has not received as rigorous an investigation as the five primary dimensions. As well as being one of the dimensions which received the strongest endorsement in all three samples, and indicating an interaction of cultural group and gender, it was relevant to adjustment in terms of both Mastery and Self-Esteem. These beliefs seem to be particularly relevant for interpersonal and inter-group interactions, making them of key importance to social psychologists.

The SAS is a relatively new instrument, and developing such a scale with sufficient cross-cultural validity that it

approaches a true rather than an imposed etic (as Leung, Bond and colleagues have done) is certainly a considerable achievement. Here, the SAS demonstrates how different sets of beliefs can predict different measures of coping and adjustment in an Iranian sample. It also distinguished, in predictable ways, between samples from two different societies, as well as providing a snapshot of the beliefs of a group born in one society but living in the other. However, the fact that this is not a longitudinal design limits the confidence one can attach to the interpretation of these findings.

The finding that measures of adjustment are predicted by the endorsement of beliefs which approximate societal norms is also noteworthy. It could be hypothesized that this outcome might vary according to the extent to which a society tolerates dissent (see also Bond & Smith, 1996), which would suggest a design such as that advocated by Leung and Bond (2004) in which the strength of relation between two psychological variables (the extent to which one's beliefs are normative, and adjustment) would vary according to a specified cultural variation (the tightness of a society, or the extent to which it tolerates dissent).

Although the present study provides data relevant to social beliefs, acculturation, coping and adjustment, it also raises questions, in particular, about the extent to which one can regard social axioms as fundamental beliefs. They may, in fact, be relatively changeable and, of course, their measurement may be blurred, at times, by self-presentational strategies. As ever, more research, especially longitudinal, is required.

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End note

1. Hence, the term 'well adjusted', adjustment rather than adaptation being referred to more commonly in the literature on mental health (Watson *et al.*, 2002). Berry and Sam (1997) list self-esteem, well-being/satisfaction and identity consolidation as the constituents of psychological adaptation. After Olson (1997) we have operationalized adjustment as self-esteem, life satisfaction and mastery; the overlap between the two constructs is evident. To be consistent with the literature, we use the term adaptation to refer to immigrants acculturating to a new society (Iranians in Canada) and adjustment in the context of coping among people not necessarily making a cultural transition (Iranians in Iran). When referring to other authors' accounts of their own work, we are guided by their usage.

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Appendix I

Interpersonal harmony (13 items)

1. If the two parties in an intimate relationship are open and honest with each other, the relationship will be better and last longer.
2. A pleasant interpersonal environment and a sense of well-being lead to better performance.
3. Life without love is flat and insipid.
4. Honesty is a prerequisite for a happy life.
5. An intimate relationship is an important foundation for a balanced life.
6. A family provides security and protection against loneliness.
7. True partnership can only exist when there is mutual respect.
8. It is hard to make friends with people who have different opinions from yourself.
9. A harmonious family life leads to career success.
10. A good relationship requires compromises from both sides.
11. If one is purely egoistic, then it will be impossible to develop good relationships.
12. Rashly partitioning other people into social groups leads to prejudice and tension.
13. If one belongs to a marginal group, it is difficult to gain acceptance from the majority group.