Social Axioms as Predictors of Psychological and Subjective Well-being in Iran and England

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Abstract

The concept of social axiom represents generalized beliefs regarding individuals, agencies and other social institutions, and the spiritual world. The relationship between social axioms and social and mental well-being has not been widely investigated. The **aim** of this research is to consider the role of culture in four distinct areas of study: 1) The role of social axioms and their dimensions in predicting mental well-being (subjective and psychological well-being) as well as the mechanism of the relationship between social axioms and well-being through controlling the variables of Iranian and UK students and the big five personality factors. 2) The mediation role of mindfulness and perspective taking. 3) The scope of influence of one's attachment to national or ethnic identity on well-being. 4) The understanding of the participants of various social beliefs, especially of the concept of divine providence and its impact on one's well-being. As **method**, the first three goals were addressed by correlational studies while the fourth goal was investigated using grounded theory. The research sample for the first study consisted of 73 Iranian students (37 females and 36 males) residing in Iran and 66 students (45 females and 21 males) living in the UK. The sample for the second study included 72 Iranian students (34 females and 38 males) who reside in Iran, and in the third study the sample was composed of 66 Iranians (35 females and 31 males) who live in the UK. In the qualitative research (fourth study), the participants were 14 Iranians living in the UK for at least 3 years (4 male and 10 female). Instruments used were the Social Axiom Survey (SAS; Leung et al., 2002), Big Five Inventory (BFI; John, Donahue, & Kentle, 1991; John & Srivastava, 1999), Psychological Well-Being Scale (Ryff, 1989), Satisfaction With Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985), Positive and Negative Affect Scale (Mroczek & Kolarz, 1998), the perspective taking subscale of the Empathy Questionnaire (Davis, 1980), the acceptance subscale of the Philadelphia Mindfulness Scale (Cardaciotto et al., 2008), Paullhus's Balanced Inventory of Desirable Responding (BIDR; Paulhus, 1984), and the Multigroup Ethnic Identity Measure-Revised (MEIM-R; Phinney & Ong, 2007). In the qualitative research, a structured interview was used. **Results** show that: 1) In both samples of students who live in the UK and in Iran

social cynicism and fate control are related with well-being. Also, in the Iranian case reward for application, social complexity, and religiosity have significant relationships with well-being but in the UK based students this is not the case. Results also showed that social axioms can predict well-being over and above the role of country and personality traits. 2) The mediation role of mindful acceptance was not endorsed in the relationship between social cynicism and subjective well-being. It was found that the predictor (social cynicism) and the mediator (mindful acceptance) were not significantly correlated with the outcome (subjective well-being). However, the mediation role of perspective taking in the relationship between social complexity and psychological well-being was endorsed. 3) The moderation role of attachment to national identity in the relationship between social axioms and subjective well-being was endorsed. 4) The qualitative study indicated that Iranian immigrants have an indigenous strategy for attaining mental well-being in the face of complications and difficulties, relying on their national identity and religious background. This strategy is based on the concepts of free will and predestination of life events. Paying attention to negative events and ignoring positive events and inefficient problem-solving strategies can account for the relationship between social cynicism and low well-being and inattention to cultural elements. However, the Iranian collective culture, optimal coping style, and excessive insistence on religious elements as a cultural attribute can explain the relationship between religiosity, reward for application, and well-being in the Iranian sample. On the other hand, surrendering to divine will and the belief in divine will and predestination of life events along with the belief in human free will account for the role of attachment to national identity in the relationship between social axioms and well-being in the Iranian sample. In **conclusion,** it seems that though social axioms are related to well-being, different aspects of social axioms seem to be related to different aspects of well-being in different ways and this relationship is influenced by cultural attributes.

Keywords: cultural differences, social axiom, well-being, personality traits, mindfulness, perspective taking

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General Introduction

One of the central concerns of humankind since the dawn of history has been to understand the meaning of, and live, a good life. Philosophers as well as lay people have been constantly grappling with this question. Of critical importance for humanity is to find the key to true well-being and flourishing. Until recent times, philosophers and religions have been the most important authorities on these questions. However, over the last few decades, important developments have occurred in the field of well-being studies. Scientists from various branches of social science (such as psychology, economics, and sociology) have empirically explored various aspects of the phenomenon of well-being. With an upsurge of empirical studies on various aspects of well-being across fields, and increasing attention and popularity gained by empirical findings on mental well-being in social media, mental well-being is becoming one of the hottest topics in social sciences as well as a favoured theme in the media (De Vos, 2012).

This does not mean that we know all we need to know about mental well-being and its predictors. For example, in this thesis, I argue that not much is known about belief domains that generate variability in the levels of mental well-being across individuals and cultures. Before getting into this understudied aspect of mental well-being, it is appropriate to examine what mental well-being is. Presented next is a short review of the concepts of mental well-being which have emerged from recent scientific studies on happiness. The present thesis includes two main sets of predictors for mental well-being: social axioms and the Big Five personality traits, which will be introduced later. In the following section, I focus on views on the nature of mental well-being emerging from recent empirical research to set the stage for a discussion of some gaps in the literature on predictors of mental well-being.

Hedonic and Eudaimonic Aspects of Well-Being

According to Ryan and Deci (2001), there are two principal approaches to defining well-being: hedonic and eudaimonic. "In the hedonic view, well-being is achieved through the pursuit of pleasure, enjoyment, and comfort. Hedonic ends range from physical pleasures and comforts to emotional-cognitive ones, such as enjoyment of social interaction or art" (Huta & Ryan, 2010, p. 736). That is, in the hedonic view, well-being is equated with pleasure and hedonically positive experiences as well as the absence of pain and hedonically negative experiences. The predominant view among hedonic well-being researchers is that well-being

consists of a subjective sense of happiness (Ng, Ho, Wong, & Smith, 2003). Although there are numerous ways to evaluate the pleasure/pain or pleasant/unpleasant continuum, most research within the hedonic tradition has measured well-being using scales of subjective well-being.

Subjective well-being is generally operationalized as both hedonic balance (a preponderance of positive over negative affect) and a global satisfaction with life (Diener, 1984). Hedonic or affective balance is considered to be the emotional aspect of subjective well-being, and life satisfaction is considered to be its cognitive aspect. Life satisfaction scales ask respondents to judge their lives. Affect scales on the other hand ask respondents to report the frequency of their experienced positive and negative emotions in a certain period (e.g., during the last month).

Although subjective well-being is a very important aspect of well-being, there have been some philosophical objections to the view equating subjective happiness with well-being (e.g., Ryan & Deci, 2001; Ryff & Singer, 1998). Some researchers argue that the subjective aspect of well-being is only one aspect of well-being, and there are other aspects that deserve attention, such as psychological functioning (Keyes & Annas, 2009; Keyes, Shmotkin, & Ryff, 2002; Ryan & Deci, 2001; Ryan, Huta, & Deci, 2008; Ryff & Singer, 1998). Subjective well-being researchers such as Diener and colleagues state that subjective well-being is a necessary condition of a healthy life but not a sufficient one (Diener, Sapyta, & Suh, 1998). However, it is postulated in the field of subjective well-being that subjective well-being is a proxy for many other objective aspects of well-being such as psychological functioning, and thus is worth being measured and largely relied on in well-being research.

The eudaimonic view, on the other hand, does not equate well-being with pleasure and hedonia. Instead, psychologists working in this line of research equate well-being with the presence of psychological strengths and skills. Pleasure and positive emotions are not central to this understanding of well-being (Deci & Ryan, 2008). This view is concerned with actualizing one's potential and living a virtuous life (Ng, Ho, Wong, & Smith, 2003). The study of eudaimonia dates back to Greek philosophers such as Aristotle (Ng, Ho, Wong, & Smith, 2003) who generally asserted that hedonism will not lead to long-lasting and genuine happiness.

A number of psychology researchers are currently working on different aspects of eudaimonic well-being (e.g., Ryan, Huta, & Deci, 2008; Ryff & Singer, 1998; Waterman, Schwartz, & Conti, 2008). The existing conceptualizations of eudaimonic well-being have both shared and unshared components. Many of these models emphasize personal growth and meaning in life as central components of eudaimonic well-being. In contrast, there is

disagreement among the eudaimonic conceptualizations in terms of the centrality of certain qualities such as engagement and flow (involving a sense of deep immersion in the immediate experience and a loss of sense of time and self-consciousness) in the concept of eudaimonic well-being (for a comprehensive discussion see Huta & Waterman 2013). The present thesis uses Ryff's (1989) conceptualization of eudaimonic well-being (which is introduced in more detail later).

The distinction between hedonic and eudaimonic well-being has been empirically investigated (for a review see Keyes, Shmotkin, & Ryff, 2002). For example, McGregor and Little's (1998) factor analytic study showed that subjective well-being (indicated by depression, positive affect, and life satisfaction) and meaning (including personal growth, purpose in life, positive relations with others, and autonomy) formed two distinct well-being factors corresponding to hedonic well-being and eudaimonic well-being.

Compton, Smith, Cornish, and Qualls (1996) factor-analysed a relatively large number of well-being scales. In their factor analysis, four separate factors emerged. Subjective well-being scales (e.g., happiness, life satisfaction) mainly loaded on one factor while variables related to personal growth (which is related to eudaimonic well-being) mainly loaded on the other (e.g., openness to experience, maturity). The authors concluded that, although measures of mental well-being share significant variance with each other, personal growth (i.e., eudaimonic well-being) and subjective well-being describe constructs that are related but separable.

In another study, Keyes, Shmotkin, and Ryff (2002) examined the factor structure of nine aspects of subjective (i.e., the three aspects of positive affect, negative affect, and life satisfaction) and eudaimonic well-being (i.e., the six aspects of Ryff's psychological well-being model: autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance), using a large national sample of Americans. They found that measures of subjective well-being and psychological (eudaimonic) well-being formed correlated and overlapping but separate factors.

King and Napa (1998) found that, in their ratings of the features of "the good life", individuals implicated both happiness and meaning. King and Napa conducted two studies using a sample of college students and community adults. The respondents were shown a career survey seemingly completed by a person rating his or her occupation. They were then asked to rate the respondent's life, in terms of the amount of happiness (an indicator of hedonic well-being), meaning in life (an indicator of eudaimonic well-being), and wealth. Results indicated that, while wealth was relatively irrelevant to judgments of a good life in both samples, meaning and happiness predicted the desirability rating of a life. One important

point arising from participants' responses in this study seems to be that for them, hedonic and eudaimonic well-being are separable from each other and from objective circumstances such as wealth.

Finally, using a sample of Iranian university students, Joshanloo, Rostami, and Nosratabadi (2006) revealed that the two-factor model specifying subjective and psychological well-being as correlated but separate factors fitted the data better than a model which specifies these two constructs as different aspects of a single factor. This study indicates that the distinction between these two aspects of well-being is empirically supported in Iranian samples.

Altogether, these findings support the viewpoint holding that a distinction should be made between hedonic and eudaimonic aspects of well-being in well-being studies. Below, different aspects of hedonic and eudaimonic well-being are introduced in more detail.

Subjective Well-Being

Subjective well-being (SWB) captures the hedonic dimensions of well-being. Diener (1994) defined subjective well-being as "the global experience of positive reactions to one's life …" (p.108). In other words, subjective well-being can be defined as "an individual's subjective belief or feeling that his or her life is going well" (Lucas & Diener, 2008, p. 798). Subjective well-being is deemed to be a multifaceted construct. Diener (1984) proposed that subjective well-being has three distinct components: life satisfaction, positive affect, and negative affect. This three-fold categorization has been widely accepted by researchers in the field of subjective well-being.

Diener (1984) distinguishes cognitive and affective components of subjective well-being. Life satisfaction is considered to be the cognitive component of subjective well-being because it is based on evaluative beliefs about (or attitudes towards) one's life. In contrast, positive and negative affect assess the affective component of subjective well-being and reflect the amount of pleasant and unpleasant feelings that people experience in their lives (see Schimmack, 2008).

Although the components of subjective well-being are substantially correlated, each one needs to be understood as independent of others (Diener, Suh, Lucas, & Smith, 1999). Bradburn (1969) provided empirical evidence that positive and negative affect were separable. Other researchers also showed that these two components of subjective well-being are better to be understood as orthogonal factors (e.g., Watson, Clark, & Tellegen, 1988; Watson & Tellegen, 1985). Moreover, these two factors have been found to be related to different predictors (for a review, see Schimmack, 2008). For example, whereas neuroticism

is more strongly related to negative affect than positive affect, extraversion is often a better predictor of positive affect than negative affect (Costa & McCrae, 1980; Schimmack, 2003). Based on these findings, SWB researchers often recommend assessing positive and negative affect separately (Lucas & Diener, 2008).

Finally, although the cognitive and affective components of subjective well-being correlate positively with each other (e.g., Schimmack, Radhakrishnan, Oishi, Dzokoto, & Ahadi, 2002; Suh, Diener, Oishi, & Triandis, 1998), it is important to note that life satisfaction judgments do not simply reflect the sum of one's affective experiences over time (for empirical evidence, see Lucas et al., 1996). Instead, cognitive judgments (i.e., life satisfaction) and affective experiences (i.e., hedonic balance) provide different information about the subjective quality of one's life as a whole (i.e., subjective well-being) (Lucas & Diener, 2008). However, it does not mean that the two components of subjective well-being are not influenced by each other. There is ample evidence showing that people rely to varying degrees on their affective experiences to judge life satisfaction. That is, affective experience may provide one important source of information that individuals can use to make life satisfaction judgments (Suh, Diener, Oishi, & Triandis, 1998).

Research indicates that culture also has a role to play in the relation between cognitive and affective components of subjective well-being. For instance, an interesting study by Suh et al. (1998) showed that positive and negative affect predicted life satisfaction to different degrees in different cultures. In individualistic cultures, affective experience was strongly associated with life satisfaction, whereas among participants from collectivistic cultures, the correlations were weaker.

Research examining the psychometric properties of SWB measures shows that self-report scales tend to be reliable and valid (for reviews see Lucas & Diener, 2008; Pavot, 2008). Multiple-item measures of life satisfaction, domain satisfaction, and positive and negative affect scales show high estimates of internal consistency and test-retest reliability (Diener et al., 1999). Lucas, Diener, and Suh (1996) showed that life satisfaction, positive affect, and negative affect scales formed separate but correlated factors. They also showed that these three factors were empirically separable from self-esteem. Sandvik, Diener, and Seidlitz (1993) found that self-report subjective well-being measures converge with other types of assessment, namely, expert ratings based on interviews with respondents, experience sampling measures, participants' memory for positive versus negative events in their lives, and the reports of family and friends.

Predictors of subjective well-being have been extensively investigated by researchers. Demographic variables such as age (Yang, 2008), gender (Diener & Diener, 1995; Diener et

al., 1999; Stevenson & Wolfers, 2008), income (for reviews see Biswas-Diener, 2008; Diener & Diener, 1995; Diener et al., 1999), education (Campbell, Converse, & Rodgers, 1976; Diener, Sandvik, Seidlitz, & Diener, 1993), health (George, 2006), and marriage (Diener, Gohm, Suh, & Oishi, 2000) have been linked to subjective well-being. For example, physical health and socioeconomic status (which is largely determined by one's level of income and education) are positively related to subjective well-being. However, Diener, Oishi, and Lucas (2003) conclude that such external factors often only have a modest impact on well-being reports. "Demographic factors such as health, income, educational background, and marital status account for only a small amount of the variance in well-being measures. Research shows that SWB is fairly stable over time, that it rebounds after major life events, and that it is often strongly correlated with stable personality traits." (p. 406).

Psychological Well-Being

Ryff (1989) argued that the field of subjective well-being suggests equivalence between eudaimonism and hedonism, which is contrary to the important distinction made by the Greek philosophers (e.g., Aristotle) between hedonia and eudaimonia. She also calls attention to the fact that the literature on psychological well-being (which was mainly focused on subjective well-being at that time) had not been guided strongly by theory. Ryff (1989) integrated ideas about positive human functioning from existential, clinical, developmental, and humanistic psychology to develop her model of psychological well-being. Ryff's model of optimal functioning has six dimensions (Ryff 1989; Ryff & Keyes, 1995):

1- *Self-acceptance*, which is defined as holding positive attitudes towards oneself, including one's past life. Ryff and Singer (2008) state that the concept of self-acceptance as conceptualized by Ryff is notably richer than standard views of self-esteem: "It is a kind of self-evaluation that is long-term and involves awareness, and acceptance of, both personal strengths and weaknesses" (pp. 20-21).

2- *Personal growth*, which is defined as a sense of continued growth and development as a person. Ryff (1989) asserts that optimal psychological functioning requires that one continues to develop one's potential, and to grow and expand as a person. Ryff and Singer (2008) comment that among all six dimensions of psychological well-being, personal growth comes closest in meaning to the ancient Greek conceptualization of eudaimonia, since it is explicitly concerned with self-realization of the individual, which was emphasized by ancient Greek philosophers.

3- *Purpose in life*, which is defined as the belief that one's life is purposeful and meaningful. This dimension of well-being draws heavily on existential perspectives. Ryff holds that beliefs that give one the feeling that there is purpose in and meaning to life is one of the important component parts of mental health in many various philosophical and psychological perspectives of well-being.

4- *Positive relations with others*, which is defined as the possession of good relations with others. Ryff and Singer (2008) state that all the perspectives that Ryff has drawn on to formulate her model of mental health describe quality relations with others as a central feature of a positive and well-lived life. Ryff and Singer (2008) further assert that there is near universal endorsement of the relational realm as a key feature of how to live well (see also Ryan & Deci, 2008).

5- *Environmental mastery*, which is defined as the capacity to manage one's life and the surrounding world effectively. In other words, environmental mastery is the individual's ability to choose or create environments suitable to his or her psychological conditions (Ryff, 1989). Ryff and Singer (2008) point to the fact that although this dimension appears to be like other psychological constructs, such as self-efficacy, "the emphasis on finding or creating a surrounding context that suits one's personal needs and capacities is unique to environmental mastery" (p. 23).

6- *Autonomy*, which is defined by Ryff as a sense of self-determination. Ryff and Singer (2008) remind us that this aspect of well-being is undoubtedly the most Western of all other dimensions of psychological well-being. Some other researchers, however, argue that autonomy is a basic psychological need and is valued in all cultures. Ryan and Deci (2008), for example, argue that autonomy is a basic psychological need and therefore is natural in the sense that it is invariant, and foundational. They believe that the need for autonomy is universal, and applies to all individuals regardless of gender, upbringing, or culture. However, it assumes various shapes in various cultures.

Ryff (1989) developed the psychological well-being scale to assess the six dimensions of optimal functioning as described above. This scale has been widely used in various national contexts. Ryff and Singer cite five studies that have confirmed the six-factor structure of this scale using confirmatory factor analysis: Cheng and Chan, 2005; Clarke et al., 2001; Ryff and Keyes, 1995; Springer and Hauser, 2006 and van Dierendonck, 2004. Shokri et al. (2008) examined the factor structure of 3, 9, and 14-item Persian versions of Ryff's Scales of Psychological Well-being in Iranian university students. The results of the confirmatory factor analysis conducted by these researchers supported the original six-dimensional model of psychological well-being.

Sociodemographic correlates of psychological well-being aspects have been investigated in a few studies. Age, gender (Ryff, 1989, 1991; Ryff & Keyes, 1995), and marital status (Marks & Lambert, 1998), for example, have been found to relate to various aspects of psychological well-being. For example, purposes in life declines by age, but positive relations with others improve by age (Ryff & Keyes, 1995). Women have been found to score significantly higher than men on positive relations with others and personal growth in the USA (Ryff & Keyes, 1995).

The associations between the aspects of psychological well-being and some psychosocial variables have also been investigated. Researchers have linked aspects of psychological well-being to variables such as emotion regulation (Gross & John, 2003), personal goals (Carr, 1997), personal growth initiative (Robitschek, & Keyes, 2009), social comparison processes (Heidrich & Ryff, 1993), and spirituality and religiousness (Kirby, Coleman, & Daley, 2004) (for a review see Ryff & Singer, 2006).

However, regrettably, not much is known about the relationships between general beliefs and dimensions of well-being. In the present thesis, social axioms (Leung & Bond, 2008), which are general beliefs about various aspects of the social world, were studied as predictors of subjective and psychological well-being. These are introduced next.

Social Axioms

Leung and Bond (2008) write that: "For most people, life is not an aimless, mindless drift; their actions and activities are conscious or unconscious manifestations of their responses to two fundamental questions: What do they want to pursue in life and how do they pursue those goals?" (p. 199). These authors suggest that the "what" question has been extensively investigated by researchers working on human values. Human values are goals that people attach importance to. Values have been used to describe and interpret cultures (e.g., Chinese Culture Connection, 1987; Hofstede, 1980; Schwartz, 1994). Leung and Bond argue, however, that values do little to answer the "how" question presented before. They propose the construct of *social axioms* to provide answers to the "how" question.

Social axioms, according to Leung and Bond (2008) represent people's cognitive map of their social world. They are "generalized beliefs about people, social groups, social institutions, the physical environment, or the spiritual world as well as about categories of events and phenomena in the social world. These generalized beliefs are encoded in the form of an assertion of the relationship about two entities or concepts" (Leung & Bond, 2008, p. 200). That is, social axioms assume the following form: "A is related to B" (e.g., "Fate determines one's successes and failures"). A and B can be any constructs, and people's beliefs are

reflected by their perceived likelihood of the relationship. Social axioms are different from values, in that values assume the form "A is good/desirable/important" whereas social axioms posit a relationship between two concepts. Social axioms are also different from normative beliefs that do not address the relationship between two entities. For example, "we should help the poor" is a normative belief but not a social axiom.

Of course, not any belief that posits a relationship between two concepts can be considered a social axiom. Leung et al. (2002) argue that beliefs vary widely along the continuum of specificity. Some beliefs are very specific and are related to a specific place and time. For instance, we may develop specific beliefs about one of our friends (e.g., David is shy with strangers). Such beliefs are only applicable to a narrow range of situations and actors. In contrast, some beliefs are very general. Social axioms are general beliefs. The term *generalized expectancies* is used to describe such beliefs, a term introduced by Rotter (1966). These general beliefs are

> "Pitched at a high level of abstraction and hence are likely to relate to social behaviours across a variety of contexts, actors, targets, and time periods. We label such general beliefs as social axioms in the sense that, like axioms in mathematics, these beliefs are basic premises that people endorse and use to guide their behaviour in different situations. These beliefs are axiomatic because they are often assumed to be true as a result of personal experiences and socialization but not as a result of scientific validation." (Leung et al., 2002, p. 288)

The functionalist approach to beliefs proposes that beliefs and other attitudinal constructs serve human survival and functioning (Leung et al. 2002). Following this argument, Leung et al. (2002) propose that social axioms serve four main functions for human survival. They facilitate the attainment of important goals (the instrumental function), help people protect their self-worth (the ego-defensive function), serve as a manifestation of people's values (the value-expressive function), and help people understand the world (the knowledge function). Given this extensive range of functions, Leung and Bond (2004) argue that social axioms qualify to be considered as fundamental psychological constructs. In sum, social axioms are believed to play a key role in people's belief systems and enhance the survival and functioning of people in their social and physical environments.

To identify a comprehensive set of social axioms, Leung et al. (2002) drew on the Western psychological literature on beliefs as well as sources from two relatively understudied

cultures: Hong Kong and Venezuela. A Social Axioms Survey containing 182 items was initially constructed and administered to college students and adults in Hong Kong and Venezuela. Exploratory factor analysis suggested a five-factor structure for both cultures. Leung et al. (2002) collected data from three other cultures: the USA, Japan, and Germany. They used confirmatory factor analysis and factor analysis to examine the universality of the five-factor structure. Their analyses supported the same five-factor model.

Leung and Bond (2004) conducted a large-scale cross-cultural study to examine if the five-factor structure would generalize to other cultures. In this large-scale project, data from 41 national/cultural groups (including Iran and England) were included. Findings of this global project confirmed the five-factor structure of the social axioms. These five dimensions were labelled social cynicism, social complexity, and reward for application, religiosity, and fate control.

Social Cynicism

The term cynicism originates from the Greek word cynic meaning, literally, dog-like (Branham and Goulet-Caze, 1996). The dog-like references stem from the deeply rooted counter-cultural aspects of cynicism based on a rejection of social convention and an unequivocal affirmation of more natural and minimal forms of living. More specifically, the reference to a dog is based on parallels made by Greeks about Diogenes' uncivilized and animal-like qualities (Shea, 2010, p.14). Mazella (2007), keeping in mind these Greek origins, charts the evolution of the term's use throughout history and concludes that at the beginning of the 19th century, these terms began to take on radically new meanings. Mazella terms this transition the "vernacularization" of cynicism. Maze argues that cynicism became disconnected from its more deontological roots and began to become interpreted as a condition of distrust in others or cynicism in today's meaning.

Social cynicism refers to a negative view of human nature, a bias against some social groups, a mistrust of social institutions, and a belief that people tend to ignore ethical means in pursuing their goals (Leung and Bond, 2007). Social cynicism is a view that life produces unhappiness (e.g. it is rare to see a happy ending in life), that people exploit others (e.g. kind-hearted people are easily bullied), and a mistrust of social institutions (e.g. the various social institutions in society are biased toward the rich) (Leung & Leung, 2010).

Research has found that social cynicism is related to lower life satisfaction (Lai, Bound, & Hui, 2007), lower interpersonal trust, lower help seeking attitude, stronger beliefs in external locus of control and supernatural power (Singelis, Hubbard, Her, & An, 2003), higher social anxiety (Lo, 2006), higher death anxiety (Hui, Bond & Ng, 2007), lower collaboration in

conflict resolution (Bond, Leung, Au, Tong, & Chemonges-Nelson, 2004), lower self-esteem, higher loneliness (Neto, 2006), higher perceived stress (Kuo, Kwantes, Towson & Nanson, 2006), lower internal locus of hope (Bernardo & Nalipay, 2016), lower job satisfaction (Leung, Ip, & Leung, 2010), and tendency to earn lower income (Stavrova & Ehlebracht, 2016). Also, Chen, Bond and Cheung (2006) found that social cynicism has negative relationships with responsibility, practical mindedness, optimism, meticulousness, graciousness, interpersonal tolerance, veraciousness, social sensitivity, and harmony and positive relationships with emotionality, inferiority and defensiveness.

These studies indicate that social cynics tend to dislike themselves and other individuals, they lack sufficient motivation to get external professional help concerning everyday challenges, they use maladaptive coping styles, and they feel helpless against a corrupt world. In sum, this view can lead to mental vulnerability and lower psychological well-being.

Social Complexity

Social complexity refers to the belief in multiple ways of achieving a given outcome, and agreement that human behaviour is variable across situations. This means that social complexity is defined as a belief that there is no single rule governing social occasions, so that individuals need to adjust their behaviours to varying circumstances. In general, social complexity serves as an active facilitator of problem solving, and it may orient problem solving in a prosocial manner as indicated by its links to self-transcendent values, egalitarian political attitudes, and a collaborative conflict resolution style (Bond et al., 2004).

This dimension of social axioms involves the notion that the world is complex, and there is no single pattern of general rules which always work in all contexts because social behaviour is different in different contexts. The dimension concerns whether people always depend on methods which have worked before or whether individual behaviour is driven by situational changes. It is fairly like self-monitoring, and the difference is that the dimension focuses more on all aspects of the external world rather than the reactions of others to one's behaviour as is the case in self-monitoring. Moreover, it clearly shows that some people themselves are, in fact, intuitive social psychologists and sensitive to the situational changeability of behaviour (Leung et al., 2002).

Singelis, Hubbard, Her, and an (2003) found a positive correlation between social complexity and cognitive flexibility. Chen, Fok, Bond & Matsumoto (2006), in their study conducted on a sample of students from Hong Kong, concluded that there is a positive correlation between social complexity, neuroticism, and openness. There also seems to be a positive correlation between social complexity and intelligence because people who obtain high scores in social

complexity are "interested in diverse and unconventional ideas and search the world around them intelligently" (Chen, Fok, Bond & Matsumoto, 2006. P: 836). Furthermore, that such people examine issues from many different angles leads to less trust, inner conflict, and thus neuroticism. Based on these findings, Leung et al. (2012) examined the relationship between social complexity and intelligence. They found a positive correlation between social complexity and intelligence in all samples from different cultural groups except for a Norwegian group.

The results have not been consistent for the relationship between social complexity and well-being. Safdar, Lewis, and Daneshpour (2006) studied Iranian immigrants in Canada, Iranians living in Iran, and Canadian samples. They reached the conclusion that social complexity was related to coping and adjustment in all the cultural groups. In contrast, Chen, Bond, et al. (2006) found a negative relationship between social complexity and life satisfaction. Neither of the studies examined the well-being construct, and they only focused on the related constructs.

Religiosity

From prehistoric times to the present, religion has been a central part of human experience and culture. Traditionally the term religion was used to refer to all aspects of the human relationship to the Divine or transcendent, that which is greater than us, "the source and goal of all human life and value" (Meissner, 1987, p. 119). More recently, scholars have started to understand religion as activities and a way of life: "the fashioning of distinctive emotions; of distinctive habits, practices, or virtues; of distinctive purposes, desires, passions, and commitments; and of distinctive beliefs and ways of thinking," along with "a distinctive way of living together" and a language for discussing "what they are doing and why" (Dykstra, 1986, quoted from Nelson, 2009; p. 3).

From an Islamic perspective, the Holy Quran considers religious tendencies to be innate and arising from the depth of man's being. As stated in Surah Ar-Rum, Verse 30: "So direct your face toward the religion, inclining to truth. The fitrah (i.e. Allah's Islamic Monotheism) of Allah (God) upon which He has created [all] people. No change should there be in the creation of Allah. That is the correct religion, but most of the people do not know."

Muslim scholars view religion as a structural phenomenon and an approach which influences all aspects of human life and directs the person to the main and transcendental

objective, which is indeed bliss and happiness (Khodayarifard et al., 2006). There will be an overview of some contemporary Islamic thinkers' views in the following paragraphs.

Allameh Tabatabai (1984) argued that according to the Quran any approach, rule or regulation that could serve as a basis for human life is called "religion ."Religion is, therefore, based on a comprehensive and universal truth which involves every person, even those who deny God. Religion is thus a practical way of life in the world based on a worldview and the human as a component no matter from what that approach is derived, prophecy and revelation or human conventions. However, Allameh Tabatabai contended that not all religions bring humans real happiness except for a religion which is God ordained. Moreover, Allameh Tabatabai (Al-Mizan, vol. 3) argued that religion consists of beliefs and a series of practical and moral principles spoken by a prophet on behalf of God for the guidance of mankind believing and following which lead to happiness in two worlds, this world and the afterlife.

He also argued that all the heavenly religions have the same nature but differ in their degree of perfection and considered Islam the latest and most complete religion (Allameh Tabatabai, 1984). He divided Islamic teachings into three general categories: A. the three principles of Islam, i.e. monotheism, prophethood, and resurrection; B. ethics; and C. religious law and practical rules (Allameh Tabatabai, 1984).

Motahari (1996) considered religion a set of teachings provided by God through his chosen ones. He divided them into three general categories: A. beliefs: the ideas and facts which must be recognized and believed, like the concept of monotheism; B. ethics: the instructions on how to be a spiritual being in terms of, for example, justice, virtue, and courage; and C. laws: the practical guidelines on how and what things must be done, such as praying and fasting.

Ayatollah Javadi Amoli (2002) argued that religion is a set of doctrinal, moral, religious, and legal rules to manage human and social affairs and for human education provided by God. Thus, religion was not only defined in Islam on spiritual and personal dimensions, but also on social, political, and ideological dimensions. Accordingly, religion provides humans not only with plans for eternal life and salvation, but also for their worldly life which is yet related to afterlife. Muhammad Baqir al-Sadr (Al-Fatawa Al-Wadiha) described Islamic teachings based on humans' relationship with God, with self, others, and the universe. According to these four relationships, the three essential elements (beliefs, ethics, and laws) defined by several scholars (including Ayatollah Tabatabai, Javadi Amoli, and Motahari) are psychological, emotional, and behavioural characteristics. Khodayarifard et al. (2006) defined religiosity as follows: The cognition of and belief in God, prophets, afterlife, and

divine orders and, moreover, love for God, self, others, and the universe for the nearness of God and commitment to and practice of religious duties.

The relationship between religiosity and well-being can be examined from two perspectives, Christian and Islamic views.

Nelson (2009) argued that there are two general approaches to well-being in Western psychology: the medical and positive model. The medical approach is based on the Diagnostic and Statistical Manual of Mental Disorders (DSM) published by the American Psychiatric Association (APA). In contrast, the positive model considers well-being to be more than just the absence of illness. Rayan and Deci (2001; quoted in Nelson, 2009) argued that the positive model of mental well-being itself includes two different approaches. In the hedonic view well-being is subjective happiness, i.e. a short-term experience of pleasure and the avoidance of negative emotions. The second view is the eudemonic view, which is someone's assessment of the quality of their life. Based on this approach, well-being is more a dynamic process than a state of ultimate pleasure and seen as psychological well-being in some cases; a situation in which a person gets involved in life and strives: A. to develop his or her talents and find the meaning of life; B. to improve the quality of his or her relationships; and C. to acquire competence and environmental mastery. In contrast, Abu Torabi (2007) argued that humans intrinsically find peace of mind and heart only if they have faith in God and the hereafter, and otherwise there is always anxiety and poor mental health. In this regard, we can see below verses of the Holy Quran:

 "but whosoever turns away from My remembrance, his life shall be narrow and on the Day of Resurrection We shall raise him blind" (Surah of Taha, Verses 124)

"those who believe, and whose hearts find comfort in the remembrance of Allah. Is it not with the remembrance of Allah that hearts are satisfied" (Surah of Raad, Verses 28).

In both verses, turning away from God is regarded as the source of distress and stress, and turning to God as the source of peace.

Reward for Application

The concept of reward for application implies that investment in human resources will lead to a positive outcome, that is, one will succeed if he/she really tries. In other words, it refers to a complex set of beliefs that efforts, knowledge, careful planning, and other resources will lead to positive outcomes (Leung, Lam et al., 2012). It seems that there is a relationship between reward for application and internal locus of control and self-efficacy (Bandura, 1991) as belief in reward for application is belief in human agency. In addition, it is not

limited to personal aims unlike the concept of self-efficacy but concerns people in general (Gari, Panagiotopoulou a7 Mylonas, 2009).

Regarding the relationship between reward for application and other variables, Leung, Lam et al. (2012) claimed that there is a relationship between reward for application and agreeableness since people with high reward for application scores believe in putting efforts into interpersonal relationships. Furthermore, reward for application can relate to conscientiousness as it emphasizes people's efforts. The study results confirmed that there is a relationship between reward for application and both variables. Research has also confirmed positive relationships between reward for application and mastery (Neto, 2006), internal locus of control (Gari, Panagiotopoulou a7 Mylonas, 2009), life satisfaction (Lai et al., 2007), active coping (Bond, Leung, Au, Tong & Chemonges-Nielson, 2004), positive adjustment (Safdar, Lewise, and Daneshpour, 2006), hope (Bernardo, 2013; Bernardo & Nalipay, 2016), effortful behaviour (Singelis, Hubbard, and An, 2003), value of power (Leung et al., 2007), less unemployment, and weekly number of work hours (Bond et al., 2004).

In respect of the relationship between reward for application and well-being, Hui & Bond (2010), based on mediational analyses, suggested that social cynicism was related to less adaptive self-regulatory orientations, which in turn compromised subjective well-being, whereas reward for application was related to more adaptive self-regulatory orientations, which thereby enhanced subjective well-being.

Fate control

Fate control is the belief that there are impersonal, external forces that determine life events (e.g., fate, destiny, luck, etc.) and the possibility for individuals to exert influence over or shape their outcomes by engaging in various culture specific practices (Leung & Bond, 2004). In other words, people who endorse fate control try to adapt to their perceived fate, but at the same time they are also active in finding ways to improve their fate.

Given the highlighted role of external factors in events, there is a relationship or overlap between fate control and locus of control. However, the belief in fate control is different from a personal belief that events are controlled by external forces. It is thus close to the concept of religiosity because both emphasize a powerful external factor influencing events. By contrast, religiosity emphasizes a benevolent transcendental being who seeks positive outcomes (Hui & Hui, 2009).

Leung et al., (2012) found two subfactors for fate control in their study on a large sample from eleven countries: fate determinism and fate alterability. Items in the fate alterability

subfactor are about predicting fate and we argue that these predictions are typically for improving and hence altering fate. They concluded that fate determinism, but not fate alterability, related positively to neuroticism.

Research evidence indicates a positive relationship between fate control and distancing, a coping style characterized by being passive and avoidance of thinking about difficulties (Bond et al., 2004); better academic performance (Zhou, Leung, and Bond, 2009); and wishful thinking (Bond, Leung, Au, Tong, and Chemonges-Nielson, 2004).

SAS (Social Axiom Survey) across cultures

The five-dimensional structure described above needs to be examined by focusing on both individual and culture level data. Van de Vijver, Valchev & Suanet (2009) conducted a social axiom survey which involved data collection at the individual level. They focused on two key questions. First, they examined the structural equivalence of the SAS questionnaire in 41 countries, and then whether there are particular items or countries that are problematic. The three major results were (1) social axioms show important similarities across cultures; (2) numerical comparisons of scores obtained in different countries must be treated with caution; (3) the observed bias was due to both item and country characteristics. Several items showed secondary (i.e., deviant) loadings in the global factorial solution, which means that these items measure not only their intended constructs, but also tap other social axioms. The best example is the item, "Humility is dishonesty," which was apparently interpreted in different manners by the participants. Level of economic development and religion (main religious denomination of a country) were associated with bias.

Ismail (2009) examined the factor structure of the survey on a sample of Chinese, Malay, and Kadazan (an ethnic group indigenous to the state of Sabah in Malaysia) students. Using exploratory factor analysis through principal components analysis with varimax rotation, they concluded that the five-factor structure better reflects the correlation matrix, and the factors extracted were like the results of Leung & Bond (2004).

Gari, Panagiotopoulou and Mylonas, (2009) also examined the factor structure in a sample of 371 Greek students. The study indicated a five-factor structure like the original structure proposed by Leung & Bound (2004) and at the same time a six-factor structure including some items such as reward for application and social cynicism representing stereotypes about fairness in the world. Comunian (2009), in a study on a sample of 689 Italian students, showed similar findings confirming the five-factor structure. However, it should not be forgotten that dimensions at the individual level may differ in number and composition from dimensions at the culture level (e.g., Leung & Bond, 2008). Even if

similar structures emerged at both levels, the structures' implications would be different because there might be different bases for interpretations of the factor structure emerging from the data analysis at both levels. From a functional point of view, how culture allows people to respond to social and environmental factors in an adaptive manner is the basis for the interpreting SAS (Social Axiom Survey) structure at the individual level. But from a group-membership perspective, how people in a particular culture may share the same set of problems can be the basis for interpreting the factor structure of SAS at the culture level.

To evaluate this possibility, Bond et al. (2004) analysed the dimensionality of social axioms at the cultural level, using item means from 41 cultural groups of college students as the input data. Factor analysis of these culture averages (rather than individual scores) revealed a two-dimensional structure. Factor 1 contained items from four of the individual-level axiom dimensions: reward for application, religiosity, fate control, and social complexity and was labelled *dynamic externality*. The items in this factor "tapping religiosity and fate control involve the assertion of outside forces at play and give rise to the label externality, but the emphasis on effort and cognitive engagement gives a dynamic quality to this construct" (Leung & Bond, 2008, p. 205). Factor 2 is labelled *societal cynicism*, because "all the items are from the individual-level factor of social cynicism, but derived from a cultural group's average scores, thus representing "citizen" endorsements. The adjective societal is used to signal that this factor is derived from these culture-level inputs" (Leung & Bond, 2008, p. 205). The current thesis examined a limited number of cultural groups, and therefore the focus is on the five-dimensional individual-level structure. Thus, the constructs of interest are the five domains of social beliefs.

Although some significant correlations between social axioms and values have been found (Bond et al., 2004a; Leung et al., 2007), social axioms are thought to be largely independent of values (Hui & Hui, 2009). Prior studies have also shown that less than 20% of the variance of each axiom dimension was explained by Western and Chinese indigenous personality measurements (Chen, Bond, & Cheung, 2006; Chen, Fok, Bond, & Matsumoto, 2006). Putting all these findings together, it can be concluded that social axioms are distinct constructs with sufficient incremental validity that can add predictive power in psychological investigations, over and above that provided by value and personality constructs.

Other psychological correlates of social axioms have also been examined (for a review see Hui & Hui, 2009). Social cynicism has been found to correlate with such variables as competition (positively), accommodation (i.e., sacrificing one's own in the interest of preserving the relationship) (positively), avoidance conflict resolution styles (positively, Chen & Zhang, 2004, as cited in Hui & Hui, 2009), and general death anxiety (positively,

Hui, Bond, & Ng, 2007). Social cynicism has also been found to be correlated with lower amicability and empathy, higher hostility (Dinca & Iliescu, 2009), and lower interpersonal trust (Singelis, Hubbard, Her, & An, 2003).

Reward for application has been found to correlate significantly with such variables as cognitive flexibility (positively, Singelis et al., 2003), and accommodation (positively), as well as compromise and collaboration conflict resolution styles (positively, Bond et al., 2004). Social complexity has been linked to such variables as egalitarian political attitude (positively, Leung & Bond, 2002), compromise and collaboration conflict resolution styles (positively, Bond et al., 2004), and hostility (negatively, Dinca & Iliescu, 2009). Fate control has been linked to such variables as "freedom from regulation" political attitude (positively, Leung & Bond, 2002), external locus of control (positively), spiritual beliefs (positively), supernatural beliefs (positively, Singelis et al., 2003), and general death anxiety (positively, Hui, Bond, & Ng, 2007). Finally, religiosity has been found to relate significantly to traditional beliefs (positively, Singelis et al., 2003), and general death anxiety (negatively, Hui, Bond, & Ng, 2007).

In sum, much is known about the nomological network of social axioms, but a systematic investigation of the relationship between social axioms and aspects of mental well-being has not been conducted yet. The studies in the present thesis are conducted with the aim of filling this gap. The present studies are briefly outlined below.

Culture, context and well-being

Does the concept of well-being carry different meanings in different nationalities and cultures? Diener, Kahneman, and Helliwell (2010) examined the question in a dictionary-based study and argued that there are differences and similarities in the conceptualization of well-being in different nationalities. They concluded that well-being means luck and good fortune in Japan, China, Korea, France, Germany, and Russia while it represents satisfaction of one's desires, wishes and goals in Italy, Portugal, Spain, and Britain (See also Oishi, Graham, Kesebir, and Costa Galinha, 2013). In Persian dictionaries, the equivalents are happiness, joy, and gaiety (Amid and Dehkhoda Encyclopaedic Dictionaries), which seems to be closer to the first group.

In addition to cultural differences in the conceptualization of well-being and happiness, it seems that there are different and similar factors in different nationalities and cultures which can affect the sense of well-being and mental health. For example, Diener, Diener, and Diener (1995) examined the common predictors of well-being in an interesting study on a

sample of 55 different nationalities. The results indicate that income, individualism, and human rights were consistent and significant predictors.

Colby (2009) considers contemporary cultural study of well-being as understanding the self-world of individuals in context, a framework that encourages combining the personal/experiential with the cultural context. He assesses three domains that link a person's reports of happiness and well-being to the context: the natural and cultural ecology perceived by a person – the material and biophysical situation; the social relational and interpersonal realm; and the symbolic realm of language categories, religious, and other beliefs.

Kormi Nouri, Mokri, MohammadiFar, and Yazdani (2002) in a study conducted on an Iranian sample showed that health, economic status, autonomy in decision-making, job, sensation seeking, and having new experiences are the most important factors in well-being.

This overview indicates cultural differences in the conceptualization and predictors of well-being and the effects of culture on well-being and associated constructs such as mental health. These effects, that can be considered the rationale for the present study, are discussed in detail in the next chapter.

Big Five personality traits

There are numerous theories about personality based on different views on human nature. Free will or determinism, nature or nurture, past or present, generality or unity, balance or growth, and optimism or pessimism about human nature are factors which influence theorists' views about personality in the formulation of their theories. Trait theory is one of the most important approaches to the study of human personality. This approach uses lexical traits to describe personality. Big Five personality theory today represents the trait approach to personality (See also Deary & Matthews, 1993; Digman, 1990; John, 1990; McCrae & John, 1992).

These "Big-Five" factors have traditionally been numbered and labelled as follows:
(a) Extraversion, (b) Agreeableness, (c) Conscientiousness (or Dependability), (d) Emotional Stability (vs. Neuroticism), and (e) Culture. Alternatively, Factor V has been interpreted as Intellect (e.g., Digman & Takemoto-Chock, 1981; Peabody & Goldberg, 1989) and as Openness (e.g., McCrae & Costa, 1987).

Neuroticism (vs Adjustment) is a classic dimension of personality integrated into most models. It considers individual differences in the inclination to construct, perceive and feel 'reality' as being problematic, threatening and difficult (concern, worries, low opinion of self, etc.) and feel 'negative' emotions (fear, shame, anger, etc.) (McCrae & Allike, 2002).

Extraversion includes traits such as sociability, assertiveness, activity and talkativeness. Extraverts are energetic and optimistic. Introverts are reserved rather than unfriendly, independent rather than followers, even-paced rather than sluggish. Extraversion is characterized by positive feelings and experiences and is therefore seen as a positive affect (Clark & Watson, 1991).

Openness to Experience includes active imagination, aesthetic sensitivity, and attentiveness to inner feelings, a preference for variety, intellectual curiosity and independence of judgement. People scoring low on Openness tend to be conventional in behaviour and conservative in outlook. They prefer the familiar to the novel, and their emotional responses are somewhat muted. People scoring high on Openness tend to be unconventional, willing to question authority, and prepared to entertain new ethical, social, and political ideas (Rothmann & Coetzer, 2003).

Agreeableness is the tendency to be trusting, compliant, caring, considerate, generous, and gentle. Such individuals have an optimistic view of human nature. They are sympathetic to others and have a desire to help others; in return they expect others to be helpful. Agreeable individuals are prosocial and have a communal orientation toward others (Costa and McCrae, 1992; John and Srivastava, 1999).

Conscientiousness concerns individuals who are purposeful and determined. They have the tendency to act dutifully, show self-discipline, and aim for achievement against a measure or outside expectation. Conscientiousness describes socially prescribed impulse control that facilitates task- and goal-directed behaviour, such as thinking before acting, delaying gratification, following norms and rules, and planning, organising, and prioritising tasks (John and Srivastava, 1999).

There have been several criticisms of the five-factor model (FFM) of personality. For example, the FFM does not provide adequate coverage of the normal personality trait domain (let alone the abnormal personality trait domain); it is not linked to underlying physiological mechanisms or to neurochemical brain processes; it postulates heterogeneous broad traits which are too few in number to enable highly accurate predictions; it provides a static account of regularities in behavior; and a major difficulty with the FFM is that it has no established theoretical basis (Boyle, 2008). Other criticisms of the model relate to the statistical technique of factor analysis, and questionnaire measures of the Big Five.

Block, (1995) believed that the algorithmic method of factor analysis may not provide dimensions that are incisive. The "discovery" of *the* five factors may be influenced by unrecognized constraints on the variable sets analyzed. Lexical analyses are based on questionable conceptual and methodological assumptions and have achieved uncertain

results. The questionnaire version of the Five Factor Approach FFA has not demonstrated the special merits and sufficiencies of the five factors settled upon. Serious uncertainties have arisen regarding the claimed 5-factor structure and the substantive meanings of the factors. One of the criticisms that can be more related to the present study is its lexical approach to personality because this approach has prompted much debate. The controversy arose over dissimilar individual and language interpretations in different cultures, which were not expected in the Big Five model.

Moreover, the results of intercultural research in this field have not been consistent. On the one hand, factor analysis-based studies showed either extra factors or one of the main factors was not extracted in some languages including Italian, Dutch, Greek and Filipino (Church, Reyes, Katigbak, and Grimm, 1997; Di Blas & Forzi, 1998; Quo Lobrano, 2014; Saucier, Georgiades, Tsaousis, and Goldberg, 2005; Szirmak & De Raad, 1994;). Similar findings were also observed in Islamic countries such as Malaysia (e.g. Mastor, Jin, and Cooper, 2000). However, there were some intercultural research studies which confirmed the factor structure. Schmitt, Allik, Benet-Martinez et al. (2007) in a comprehensive study of 17837 students from 56 countries concluded that the five-factor structure is widely accepted. They had adopted a cross-cultural convergent validation strategy.

Controversy concerning the model included an argument by Ashton & Lee (2007) that the Big Five structure should be revised to accommodate a sixth broad trait domain: Honesty-Humility. They summarize evidence for the resulting six-dimensional structure and interpret these dimensions in terms of key evolutionary tasks.

Several Iranian studies were also found in which the researchers extracted and then confirmed the structure (Khormaei & Farmani, 2014; Yousefi & Molla Alizadeh, 2014). The main reason why this research was based on the five-factor model was its popularity among Iranian researchers, many of whom had used the model in their studies on personality. Moreover, the psychometric properties of different versions of NEO questionnaires which were developed to measure personality traits based on this model have often been confirmed over the past 15 years in Iran (e.g. Atari, Barbaro, Sela, Shackelford, and Chegeni, 2017; Erdle & Aghababaei, 2012; Gousheh, Ziaaddini, Baneshi, and Nakhaee, 2014; Zamani, Abedini, and Kheradmand, 2011). Even some studies, which adopted other models, referred to the popularity of the Big Five model and its widespread use in Iran (e.g. Wasserman, Aghababaei, and Nannini, 2016).

The Present Thesis

A distinction between eudaimonic and hedonic well-being has been shown to be theoretically and empirically warranted. Prior research suggests that hedonic and eudaimonic well-being have different (albeit sometimes overlapping) sets of correlates and predictors. For instance, openness to new experience has been found to be a significant and consistent predictor of eudaimonic well-being while it has been shown to be generally unrelated to hedonic aspects of well-being (Joshanloo, Rastegar, & Bakhshi, 2012). Prior studies have investigated many different predictors of well-being in different cultural contexts, including demographic variables (such as income, age, gender, etc.) and personality variables (such as the Big Five personality traits and self-esteem). Past research indicates that although demographic variables play a significant role, the contribution of personality traits are considerably more pronounced in determining people's sense of well-being (Joshanloo et al., 2012).

A closer look at the literature reveals that, to date, the relation between beliefs and aspects of well-being has been less frequently investigated by researchers. Prior research has documented the effects of some belief domains on individuals' mental health in different cultures. Some of these beliefs include belief in just world (Dzuka, & Dalbert, 2006; Correia, & Dalbert, 2007), self-efficacy beliefs (Caprara & Steca, 2005), meritocracy beliefs (Foster, & Tsarfati, 2005), existential beliefs (Cohen & Hall, 2009), and external control beliefs (Ferreira, & Sherman, 2006). However, a systematic investigation of the role of beliefs in determining mental well-being which is based on a comprehensive theory is lacking. Moreover, the contribution of beliefs over and above personality traits has received almost no research attention. To partially fill these gaps, this thesis sought to investigate the contribution of five domains of social beliefs in explaining the variance in dimensions of well-being. The five social belief domains used in the present thesis are the output of the relatively recent line of empirical research on social axioms (Leung & Bond, 2008).

Empirical evidence on the relation between social axioms and dimensions of well-being is rare. Only a few previous studies have investigated the relation between social axioms and subjective well-being (Chen et al., 2006; Lai et al., 2007; Mak et al., in press; Safdar et al., 2006). The relationship between psychological well-being and social axioms has not been explicitly investigated so far. All in all, it can be concluded that empirical evidence on the relation between dimensions of well-being and social axioms is rare and piecemeal, and therefore, this thesis can contribute novel insights in this regard.

Although the empirical findings suggest that it is wise to take the distinction between hedonic and eudaimonic well-being into account, past studies have generally focused on the relation between belief domains and subjective well-being. The relationship between belief domains and aspects of psychological well-being has been under investigated. This thesis sought to also partially fill these gaps by examining the predictive power of social axioms in predicting both hedonic and eudaimonic aspects of well-being.

This thesis also investigated the role of country by including samples from two national contexts: Iran and England. These two nations are different in terms of belief systems, religious beliefs, and political regimes. Research indicates that Iran is a relatively collectivistic culture, while England is a relatively individualistic culture (Hofstede, 1980). Iranians are mainly Shiite, while the British culture is more heterogeneous in terms of religious affiliation. Such cross-cultural studies let us examine if the patterns of relationship which emerge in one culture are generalizable to the other or not. Additionally, this thesis investigated an immigrant sample of Iranians who have been living in England for a while. The inclusion of this sample gives us the opportunity to examine the effect of social context as a moderator of the effects of social axioms on mental well-being. Moreover, comparing the beliefs of the immigrant sample to those of the host and heritage culture provides preliminary insights regarding the flexibility of social beliefs.

To increase the strength and breadth of this thesis, variables included were extracted from robust and comprehensive theories in psychological sciences. Well-being was measured using three variables related to subjective well-being (positive affect, negative affect, and life satisfaction), as well as the six aspects of Ryff's (1989) theory of psychological well-being (i.e., autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance). Social beliefs were measured using scales measuring the five domains of social beliefs as established in the field of social axioms (i.e., social cynicism, social complexity, and reward for application, religiosity, and fate control). Personality traits included were the Big Five traits (i.e., openness, conscientiousness, extraversion, agreeableness, and neuroticism), which are widely recognised as the main personality traits across all branches of psychology (McCrae & Costa, 1997; McCrae et al., 2005).

This thesis also recruited samples of Iranians living in Iran, Iranians living in England, and a UK student sample living in England. The purpose was to examine the main contribution of social beliefs, personality, and culture in the prediction of mental well-being in Iran and England (Study 1), examining possible mediators of these relationships (Study 2), examining Iranian immigrants in the UK with respect to focal variables of the study (Study 3), and

finally, interviewing Iranian immigrants in the UK about their views on well-being and social axioms (Study 4), which led to theory building. All these studies were designed to partially fill an obvious gap in the literature and inform future follow-up studies. The specific purpose of each study is briefly reviewed next.

Chapter 2

Research Framework

In this chapter, the focus is first on culture and its relationship with issues related to mental health and well-being as the basis of and rationale for the study. After that, the chapters and hypotheses discussed in each chapter are reviewed with the purpose of providing a general understanding of the research framework. The rationale for employing a mixed method approach is explained later and finally the researcher's epistemological position is presented.

Culture and its relationship with well-being and mental health

The concept of culture is deeply contested. Between 1920 and 1950 alone, at least 157 definitions were presented. Culture constructs the way in which human beings perceive reality. It can be broadly defined as a unique meaning and information system, shared by a group and transmitted across generations that allows the group to meet basic needs of survival, by coordinating social behaviour to achieve a viable existence, to transmit successful social behaviours, to pursue happiness and well-being, and to derive meaning from life (Matsumoto, 2009).

Culture shapes perceptual and experiential patterns, which people use to describe, understand, predict, and control the world around them (Marsella 2010). According to Marsella (2010), culture can be defined as shared learnt behaviour and meanings acquired in life activity contexts that are passed on from one generation to another for purposes of promoting survival, adaptation, and adjustment. These behaviours and meanings are dynamic and are responsive to change and modification in response to individual, societal, and environmental demands and pressures. Culture is represented externally in artifacts, roles, settings, and institutions. Culture is represented internally in values, beliefs, expectations, consciousness, epistemology (i.e., ways of knowing), ontology, and praxeology, personhood, and world views. Cultures can be situational, temporary, or enduring. (Marsella 2010, p. 19).

In psychology, core debates around culture include its relationship to function and role in the human condition and behaviour including mental health and well-being. Culture influences many aspects of well-being and mental health. These influences are summarised in the following sections.

Culture and personal experience of disorders and their symptoms

One way in which culture affects mental illness is through how patients describe (or present) their symptoms to their clinicians. There are some well recognized differences in symptom presentation across cultures. Some of the research findings support the view that patients in different cultures tend to selectively express or present symptoms in culturally acceptable ways (Kleinman, 1977, 1988). For example, Change, Jetten, Cruwys and Haslam (2017) conducted three studies to examine the role of cultural norms in symptom expression. In the initial study, they confirmed greater somatization, minimization of distress and suppression of emotional expression among Chinese participants compared with Australians. They found Asian normative expectations of collectivism moderated these effects such that somatization was higher among those who endorsed collectivism norms, but only among Chinese participants. They also found that only when Asian participants identified strongly with Asian culture did collectivism norms predict somatic symptoms.

In another study Weiss, Tram, Weisz, Rescorla & Achenbach (2009) compared somatic versus affective symptoms in American and Thai children, from community and mental health clinic samples. In the clinic sample, Thai children were reported to have higher levels of somatic versus depressive symptoms relative to American children, whereas in the community sample both groups were reported to have slightly higher levels of depressive than somatic symptoms. The data used in this paper show that Haitians neither experience nor present with depression in the ways often described in Westernized literature. For instance, Haitian women present with three distinct types of depression: (a) (pain in the body), which is often described by symptoms such as feelings of weakness and faintness; (b) Soulagement par Dieu, (relief through God), which is often associated with specific times, circumstances, and situations in the person's life and is often mediated by the client's belief in God; and (c) Lutte sons Victoire (fighting a winless battle), which often is painted as a very bleak generalized picture of the individual's life.

In the only study that was done in this field in Iran, Davidian, Shahmohammadi, Azardgan, Karimi & Bagheri Yazdi (2001) analyzed a sample of 2034 Iranian people aged 15 years and older in terms of clinical and verbal expression of mental disorders. The results indicated that expression of somatic symptoms is common, and patients in Iranian culture tend to express their mental state by using physical symptoms and metaphors.

Culture and treatment seeking

It seems that culture can influence treatment seeking behaviour. For example, it is well documented that racial and ethnic minorities in the UK and United States are less likely than

whites to seek mental health treatment, which largely accounts for their under-representation in most mental health services (Islam, Rabiee & Singh, 2015; Memon et al., 2017; Sussman et al., 1987; Kessler et al., 1996; Vega et al. 1998; Zhang et al., 1998). Roberts, Gilman, Breslau and Koenen (2011) compared trauma exposure and risk for PTSD among those exposed to trauma, and, they compared treatment-seeking among Whites, Blacks, Hispanics and Asians in the US general population. Results showed that all minority groups were less likely to seek treatment for PTSD than Whites (range: 0.39–0.61), and fewer than half of minorities with PTSD sought treatment (range: 32.7–42.0%).

Hsu & Alden (2008) examined culture-related influences on willingness to seek treatment for social anxiety in first and second-generation students of Chinese heritage, and their European heritage counterparts. Results showed that although at low- and high-severity levels of social anxiety, participants were similar on willingness to seek treatment, at moderate levels, first generation Chinese participants were significantly less willing to seek treatment compared to their European heritage counterparts. The reluctance of first generation Chinese participants to seek treatment was associated with greater Chinese heritage acculturation and was not related to perceiving symptoms of social anxiety as less impairing. The findings support the general contention that Asians in North America tend to delay treatment for mental health problems.

It seems that in the last decade in Iran, people showed resistance to mental health services and referral to specialized centres .Sadeghi, Kaviani, and Rezaei (2003) argued that a large percentage of the families of psychiatric patients feel ashamed in Iran. For example, about 49 per cent of families with schizophrenic patients claimed to be subject to discrimination and humiliation. The explanation may be found in Bayandor (2007). He believed that a distorted image of mental illness and people with mental disorders is presented in most of the media productions in Iran, especially in movies and TV series. Clearly, this can affect seeking treatment.

On the other hand, the way the government considers, organizes, and provides mental health services can influence the seeking of treatment. Mental health care prices are high, and insurance companies do not cover such costs. This can affect seeking treatment as well.

Culture and coping style

Cultural values and beliefs can influence coping goals. One of the relevant dimensions is whether a culture is individualist or collectivist. Based on Hofstede (2011) ten significant differences between collectivist and individualist societies are:

Everyone is supposed to take care of him- or herself and his or her immediate family only / People are born into extended families or clans which protect them in exchange for loyalty; I consciousness / we consciousness; Right of privacy / Stress on belonging; Speaking one's mind is healthy / Harmony should always be maintained; Others classified as individuals / Others classified as in-group or out-group; Personal opinion expected: one person one vote / Opinions and votes predetermined by in-group; Transgression of norms leads to guilt feelings / Transgression of norms leads to shame feelings; Languages in which the word "I" is indispensable / Languages in which the word "I" is avoided; Purpose of education is learning how to learn / Purpose of education is learning how to do; Task prevails over relationship / Relationship prevails over task.

Currently very few stress coping theories have incorporated the influences of cultural values, such as collectivism or individualism, into the understanding of stress and coping processes. In the conservation of resources theory, Hobfoll, (2001) assumes a social, collective framework in viewing individuals' stress-coping experiences. Hobfoll stipulated that stress is a product of individuals' need to ensure the survival of the species and to fend off potential threats to the survival of the self, family, or tribe (Dunahoo et al., 1998; Hobfoll, 2001). A person's coping, as a stress response, must be understood within the frame of ''individual in social context'' and be viewed as a function of one's family, neighbourhood, religion, employment, charitable organizations, ethnic in-group, etc (Kuo, 2012). Also, the cultural transactional theory of stress and coping proposed by Chun et al. (2006) attempts to address the direct and indirect links between collectivism–individualism and stress-coping. The authors assert that in cultures oriented toward individualism, the self is a central unit of society. Consequently, individual rights, a concern for oneself and immediate family, and personal autonomy and self fulfilment are emphasized. In contrast, in cultures oriented toward collectivism the ingroup forms the central unit of society and binds individuals to its needs, goals, and fate. Accordingly, duty and obligations to the ingroup, interdependence on other individuals within the group, and fulfilment of social roles are emphasized. These orientations have important ramifications for the environmental and personal systems, and for the extent to which context influences behaviour.

McCarty and her colleagues (1999) hypothesized that individualists with a more internal locus of control are likely to set primary control coping goals to modify or alter the environment to make it better fit their own personal agenda, whereas collectivists with a more external locus of control are likely to set secondary control coping goals to modify or alter themselves to fit environmental constraints. Thai children were more likely than American

children to have coping goals that reflected secondary control for stressors, but only for stressors that threatened their interdependence with others such as separation from others.

In addition, compared to Nepali children, American children preferred to use primary control coping strategies that aimed at altering the situation (Cole, Bruschi, & Tamang, 2002).

In Hofstede et al. (2010), Individualism Index scores are listed for 76 countries: individualism tends to prevail in developed and Western countries, while collectivism prevails in less developed and Eastern countries. On this dimension Iran, with a score of 41, is considered a collectivistic society. This is manifest in a close long-term commitment to the member 'group', be that a family, extended family, or extended relationships. Loyalty in a collectivist culture is paramount, and over-rides most other societal rules and regulations. The society fosters strong relationships where everyone takes responsibility for fellow members of their group. In collectivist societies, offence leads to shame and loss of face, employer/employee relationships are perceived in moral terms (like a family link), hiring and promotion decisions take account of the employee's in-group, and management is the management of groups. Therefore, we can claim that coping style in Iran is collectivist.

Culture and Epidemiology

There is ample documentary evidence to emphasize the cultural differences in the prevalence of mental disorders. For example, according to the World Health Organization statistics (2015) suicide rates in Western countries include Belarus 22.8, Belgium 20.5, France 16.9, Hungary 21.6 and UK 8.9 while for Islamic countries they include Egypt 2.6, Iraq 3, Kuwait 4, and Iran 3.6 (per 100.000 population). The lower suicide rates in some Islamic countries may relate to the prohibition of suicide in the Islam holy book, Quran.

According to the review above, cultural factors influence mental health and well-being. Culture was thus included as the moderator variable, the effect of which was examined in the study wherever necessary.

Rationale for mixed method

One of the key issues in mixed methods research is the identification of the reasons for mixing quantitative and qualitative methods in one study. The mixing poses numerous challenges so mixed methods research should be used only when there is good reason for this. Greene, Caracelli, and Graham (1989) introduced the first list of the main reasons for using a mixed method as follows:

Triangulation seeks to converge, confirm, and match the results of different methods.

Complementarity seeks elaboration, enhancement, illustration, and clarification of the results from one method with the results from the other method. **Development** uses the results from one method to help develop or inform the other and includes decisions on sampling, implementation, and measurement. **Initiation** looks for paradox, contradiction and new perspectives in the hope of discovering why such contradictions exist, which requires an iterative approach to redesign the questions or results of a method with the questions or results of another method. **Expansion** seeks to extend the breadth and range of research by using different methods for different research components.

The present study is an exploratory mixed method research study. Mixed methods research, that emerged to eliminate the disadvantages of purely quantitative or qualitative research and to provide a more comprehensive understanding of the phenomenon under study (Salehi & Golafshani, 2010), is based on combining qualitative and quantitative methods (Johnson & Onwuegbuzie, 2004).

In other words, a research problem allows for investigating uncertain situations or facilitating the process by applying a set of methods which are based on different paradigms (Creswell & Plano Clark, 2007). Using qualitative and quantitative approaches in a mixed manner leads to a better understanding of problems compared to using each method alone. Tashakkori & Teddli (2003) argued that mixing qualitative and quantitative methods lays the groundwork for the integration of data collection and analysis techniques in parallel steps and the development of research methodology (Salehi & Golafshani, 2010). In simple terms, the nature of complex research problems has led researchers to seek answers beyond the numbers of quantitative methods and words of qualitative methods and mixing the methods and the data obtained can provide a complete analysis (Creswell & Plano Clark, 2007).

There are various methods for data collection in qualitative research. The most common method is interview (Creswell, 2005).

In the present study, the interviews were in-depth, individual, and face to face. In such interviews, the interviewee need not fill in a form including questions with pre-defined answers and the interviewee is free to provide answers so there may be an intellectual exchange between the interviewee and interviewer from which a comprehensive range of in-depth questions and answers may emerge (Lofland & Lofland, 1995). Qualitative researchers generally use this kind of interview that is considered unstructured or semi-structured because structured interviews are inflexible while the flexibility in qualitative research is of great importance (Patton, 1990).

In the study, the researcher aimed at using the data obtained through the interviews to offer a qualitative explanation of the results obtained in the previous stages and thus develop a

theory on Iranians' mental health in England. To achieve this objective, grounded theory was used. Among the qualitative methods, grounded theory is a research method based on which a theory is developed through data collection. To put it another way, when a researcher believes that existing theories do not explain a process, he or she formulates a theory by collecting data on the problem or process. Since the theory is based on the data and suits the study situation, it can better explain the existing theories for an indefinite situation. Accordingly, the researcher adopted this method to develop a theory on Iranians' wellbeing in England.

Objectives

The present study will follow four major objectives:

1. Identifying the relationship between different aspects of social axioms and subjective and psychological well-being while controlling the role of personality traits and country in in Iran and a UK student sample (Study 1).

2. Identifying the relationship between social cynicism and subjective well-being with an emphasis on the mediating role of mindfulness and the relationship between social complexity and psychological well-being with an emphasis on the mediating role of perspective taking (Study 2).

3. Comparing subjective and psychological well-being and social axioms in Iranian immigrants living in England and a UK student sample and Iranians students living in Iran and examining how attachment to ethnic identity moderates the relationship between social axioms and well-being in the Iranian immigrants (Study 3).

4. Identifying the Iranian immigrants' understanding of different social beliefs and the possible benefits of such beliefs for well-being. (Study 4).

Structure of chapters, Hypotheses and Questions

The first chapter was a general introduction. This chapter first reviews the main variables including psychological and subjective well-being and social axioms and their relationship and provides a theoretical explanation and research evidence about the relationship and what distinguishes this study from previous research. Then, Study 1 (chapter 3) investigated the contribution of the five social axioms to the prediction of subjective and psychological well-being. This study included data from Iranian students living in Iran and a UK student sample living in England. The contribution of culture and the Big Five were controlled to examine unique contributions of social axioms over and above them. Study 1 formed the basis for other studies in this thesis

The hypotheses of Study 1 based on the objectives outlined are:

1. Social cynicism is negatively related to indicators of well-being in both Iranian and UK students.

2. Reward for application is positively related to indicators of well-being in both Iranian and UK students.

3. Social complexity is positively related to indicators of well-being in both Iranian and UK students.

4. Fate control is negatively related to indicators of well-being in both Iranian and UK students.

5. Religiosity is positively related to indicators of well-being in both Iranian and UK students.

6. Social axioms significantly predict psychological well-being over and above the contribution of country.

7. Social axioms significantly predict subjective well-being beyond the collective contribution of country and the Big Five.

8. Social axioms significantly predict psychological well-being beyond the collective contribution of country and the Big Five.

Study 2 (chapter 4) followed up on the findings of Study 1. The findings of the first study gave rise to the question of what the mechanisms of the influence of social axioms on mental well-being are. The second study predicted that two possible psychological variables would mediate the relationship between social axioms and mental well-being, mindfulness and perspective taking. The findings in an Iranian sample revealed that perspective taking partially mediated the relationship between social complexity and psychological well-being. In sum, this study shed light on the issue of the mechanisms of influence exerted by social axioms on well-being in Iranian students.

The hypotheses tested in this study are:

1- Mindful acceptance partially mediates the relationship between social cynicism and subjective well-being.

2- Perspective taking partially mediates the relationship between social complexity and psychological well-being.

Study 3 (chapter 5) followed up on the findings of Study 1. In this study, Iranian immigrants living in England were recruited to respond to a survey including the focal variables of the thesis (i.e., social axioms and well-being) together with a strength of ethnic identity measure. The main purposes of this study were two-fold: 1- to compare the immigrant sample with the Iranian and UK students sample from Study 1 on the variables of social axioms and mental well-being, 2- to investigate the role of ethnic identity on the relationship between social

axioms and well-being in the immigrant group. The findings of this study can feed into the literature on the relationship between general beliefs of the immigrants and immigrants' adaptation.

The hypotheses tested in this study are:

1. Iranians in the UK will show social cynicism scores which are between those of student participants in the UK and Iranians in Iran.

2. Iranians in the UK will show religiosity scores which are between those of the student participants in the UK and Iranians in Iran.

3. Iranians in the UK will show social complexity scores which are between those of student participants in the UK and Iranians in Iran.

4. Iranians in the UK will show reward for application scores which are between those of student participants in the UK and Iranians in Iran.

5. Iranians in the UK will show fate control scores which are between those of the student participants in the UK and Iranians in Iran.

Study 4 (chapter 6) followed up on and supplemented the findings of the previous studies in this thesis (in particular, Study 3). Inspection of the findings of the previous studies, which included findings related to an Iranian immigrant sample, revealed that there were several gaps in the literature. The previous studies in this dissertation as well as other existing studies did not help to explain some of the findings. This is not surprising given that research on Iranian immigrants and on the relationship between social axioms and well-being is rare. Iranian culture has rarely been the target of psychological studies of this sort. Therefore, a qualitative study using grounded theory methodology was designed to draw on participants' own understanding of their endorsement of various social beliefs and the possible well-being benefits of such beliefs. The findings of this study provided novel insights and helped explain part of the findings of Study 3 as well as other studies in this thesis. For example, the findings revealed one way in which social complexity and flexibility are understood in the context of Iranian-Islamic culture.

One of the main findings was that Iranian immigrants believed that by attributing the cause of various life events to oneself under favourable conditions, and to God under unfavourable conditions, a person can cope with difficulties more effectively. Attributing the cause of favourable conditions to oneself is believed to boost one's sense of self-worth, giving the individual a sense of satisfaction for exercising one's free will successfully. Attributing the cause of unfavourable conditions to God, on the other hand, helps the individual to see difficult situations as a divine trial which will be compensated in the afterlife.

Finally, the General Discussion provides a summary of the findings, discusses the main contributions of the studies to the field of well-being and social axioms, and discusses limitations of the research and potential avenues for future research.

Epistemological position

The present section clarifies the reason for adopting a specific methodological approach for data collection and analysis and to draw a conclusion from the results. Thus, it indicates the researcher's epistemological position.

The researcher claims to have taken a pragmatic approach to knowledge and truth in the present study. Pragmatism's central ideas were developed by Peirce, James, Cooley, Mead and Dewey (Hammersley, 1990).

In this approach, true ideas are those that we can assimilate, validate, corroborate, and verify. False ideas are those we cannot. That is the practical difference it makes to us to have true ideas; that, therefore, is the meaning of truth, for it is all that truth is known as (James, 1995, p.77).

Pragmatism provides a philosophical basis for research including; **A)** pragmatism is not committed to any one system of philosophy and reality. This approach applies to mixed methods research. **B)** Individual researchers have a freedom of choice. C) Pragmatists do not see the world as an absolute unity. D) Truth is what works at the time. E) Pragmatist researchers look to the what and how to research based on the intended consequences— where they want to go with it. F) Pragmatists agree that research always occurs in social, historical, political, and other contexts (Creswell, 2014).

According to the above, I have chosen the method, technique, and tools in a way that they serve my current needs for solving the problem, and I conducted the study by following procedures that, I believed, would be more consistent with the study objectives. I have directly focused on the objective and the study question, to answer which I could not limit myself to just quantitative or qualitative methods.

Therefore, I employed mixed methods (consistent with features A and B). I believe that although there are other theories and models, the value of a theory or model derives from its ability to explain a situation or solve a problem. Thus, I consider myself a pragmatist and will use what I think is the most helpful and workable in this regard.

Chapter 3

Social Axioms as Predictors of Mental Well-Being

Introduction

As elaborated in the Introduction, to date, the relation between general beliefs and aspects of well-being has been infrequently investigated by researchers. Prior research has documented the effects of some belief domains (e.g., religious beliefs) on individuals' mental well-being (e.g., Abdel-Khalek, 2010; Green, & Elliott, 2010). However, the contribution of beliefs over and above personality factors has received little research attention. The present study sought to investigate the contribution of five social axioms (social cynicism, social complexity, reward for application, religiosity, and fate control) in explaining the variance in well-being scores over and above that made by the Big Five personality factors.

The two dimensions of well-being included in this study were hedonic (subjective) and eudaimonic (psychological) well-being. Samples from Iran and the UK are used in the analyses, which enabled me to compare scores of participants in the two nations. Given that social axioms and dimensions of mental well-being were already reviewed in the previous chapter, two main issues are elaborated upon here: 1) the Big Five factors and their relevance to this study, and 2) prior research on the relationship between social axioms and mental well-being.

The Big Five Personality Traits and Their Relationship to Social Axioms and Well-being

The most widely known and researched model of personality traits is the Big Five model (McAdams & Pals, 2006). The Big Five are five personality traits labelled as extraversion, neuroticism, conscientiousness, agreeableness, and openness to experience (McCrae & Costa, 2003). The five-factor structure of personality traits has been replicated in almost all countries studied so far (McCrae & Costa, 1997; McCrae, Terracciano, et al., 2005; for a review of the cross-cultural evidence on the Five Factor Model of personality see McCrae, &

Costa, 2008). The same five traits have been replicated in Iranian student samples (e.g., Joshanloo, Daemi, Bakhshi, Nazemi, & Ghaffari, 2010; Nosratabadi, Joshanloo, & Jafari Kandovan, 2006).

"Briefly, Extraversion implies an energetic approach toward the social and material world and includes traits such as sociability, activity, assertiveness, and positive emotionality. Agreeableness contrasts a prosocial and communal orientation towards others with antagonism and includes traits such as altruism, tender-mindedness, trust, and modesty. Conscientiousness describes socially prescribed impulse control that facilitates task- and goal-directed behaviour, such as thinking before acting, delaying gratification, following norms and rules, and planning, organizing, and prioritizing tasks. Neuroticism contrasts emotional stability and even-temperedness with negative emotionality, such as feeling anxious, nervous, sad, and tense. Finally, Openness to Experience (vs. closed-mindedness) describes the breadth, depth, originality, and complexity of an individual's mental and experiential life." (John & Srivastava, 1999, p. 121)

The Big Five traits have been found to predict many important aspects of functioning and performance. Most germane to the current study, they are also correlated with different aspects of well-being (as reviewed below). Given their robust relationship with aspects of mental well-being, it is important to control the role of personality traits in the prediction of well-being. While personality traits are assumed by some researchers to be substantially under the influence of the biology of the brain (DeYoung, Hirsh, Shane, Papademetris, Rajeevan, & Gray, 2010), social axioms seem to be largely under the influence of culture and belief systems dominant in an individual's environment. It is therefore not surprising that the Big Five traits and social axiom domains are largely independent from each other.

The Big Five correlates of social axioms have been investigated in a study by Chen et al. (2006b). Social cynicism was significantly correlated with extraversion (negatively), neuroticism (positively), and agreeableness (negatively). Social complexity was significantly and positively correlated with neuroticism and openness. Reward for application was significantly and positively correlated with extraversion, agreeableness, and conscientiousness. Religiosity and fate control were not significantly correlated with the Big Five traits. All the relationships between social axioms and personality traits were weak or moderate. Prior studies have shown that less than 20% of the variance of each social axiom dimension could be explained by Western and Chinese indigenous personality measures

(Chen, Bond, & Cheung, 2006; Chen, Fok, Bond, & Matsumoto, 2006). Putting all these findings together, it can be concluded that social axioms are distinct constructs that can add predictive power in psychological investigations, over and above that provided by personality constructs. Following this reasoning, social axioms were expected to contribute to well-being over and above the personality factors measured in this study.

A question that arises, at this point, is whether personality is a significant predictor of mental well-being. Prior research indicates that personality exerts a strong influence on mental well-being. Among the Big Five personality traits, neuroticism and extraversion have been found to be most strongly correlated with subjective well-being as measured by scales of life satisfaction and affect balance (Costa & McCrae, 1980; DeNeve &Cooper, 1998). Conscientiousness and agreeableness also have been found to relate to subjective well-being in some studies (see DeNeve & Cooper, 1998). However, openness is not a robust and consistent predictor of subjective well-being.

The relationship between aspects of psychological well-being and personality traits has been investigated in a study by Schmutte and Ryff (1997) in an American sample. The Big Five traits were assessed using the 60-item NEO Five-Factor Inventory (NEO-FFI; Costa & McCrae, 1992), and psychological well-being was measured using the Ryff's psychological well-being scale (Ryff, 1989). They found neuroticism, extraversion, and conscientiousness to be strong predictors of particularly three aspects of well-being: self-acceptance, environmental mastery, and purpose in life. Openness and extraversion predicted personal growth. Agreeableness predicted positive relations with others. Finally, autonomy was predicted by neuroticism, conscientiousness, openness, and extraversion.

To summarize, extraversion, neuroticism, agreeableness, and conscientiousness have been consistently found to relate to subjective well-being, and all the five traits (including openness) have been found to correlate with different aspects of psychological well-being. Given that personality is a robust determinant of mental well-being, it would be impressive for any psychosocial variable to be able to predict mental well-being over and above personality traits. Below, the relationship between social axioms and mental well-being is discussed.

The Relationship between Social Axioms and Well-Being

As mentioned earlier, based on the functionalist approach to beliefs which proposes that beliefs and other attitudinal constructs serve some purpose for human survival and functioning, social axioms are expected to have consequences for the individual's sense of well-being and his or her functioning. Social axioms are believed to facilitate the attainment

of important goals (the instrumental function), help people protect their self-worth (the ego-defensive function), serve as a manifestation of people's values (the value-expressive function), and help people understand the world (the knowledge function). Social axioms researchers argue that social axioms play a key role in people's belief systems and enhance the survival and functioning of people in their social and physical environments.

Hui and Hui (2009) argue that social axioms serve as psychological tools helping individuals to understand, relate to, and control the social world. Hui and Hui further argue that social axioms serve as guiding principles facilitating progress towards the attainment of important goals in life. Above all, and most related to this study, Hui and Hui argue that, as social axioms define instrumentality of various means to reach a given goal, they should predict how individuals cope with the challenges of life and achieve self-worth and well-being. Empirical findings support these predictions. For instance, in a study by Kurman and Ronen-Eilon (2004), it was found that immigrants from Ethiopia and the former Soviet Union to Israel adapted better if they had accurate knowledge about social axioms characterizing the host culture. The authors conclude that lack of accurate knowledge about the social axioms in the host culture may interfere with adaptation of the immigrants.

Other empirical studies have investigated the relation between social axioms and indicators of mental well-being. Chen, Cheung, Bond, and Leung (2006) found that social cynicism (i.e., a negative view of human nature, life, and social institutions) and social complexity (i.e., belief in various ways of achieving a certain outcome, and belief that human behaviour is variable across situations) were negatively, and reward for application (i.e., belief that effort, knowledge, and careful planning will lead to positive outcomes and help avoid negative outcomes) was positively correlated with life satisfaction in a Chinese sample. The findings from hierarchical regression analyses reported in this study demonstrated that social axioms added predictive power over and above the effects of self-esteem (measured by Rosenberg self-esteem scale, Rosenberg 1965) and personality (measured by the Cross-Cultural Personality Assessment Inventory-2; CPAI-2; Cheung, Leung, Song, & Zhang, 2001).

In another study in Hong Kong Chinese students, Lai, Bond, and Hui (2007) found that social complexity and social cynicism were negatively correlated with life satisfaction. They also found that social cynicism was negatively correlated with self-esteem. Their 1-year longitudinal study suggested a possible causal influence of social cynicism on life satisfaction through self-esteem as a mediator. The authors argued that higher levels of social cynicism would lower life satisfaction because cynical individuals possess a self-fulfilling prophecy of unsatisfactory social outcomes, initiating a negative social feedback, which in turn leads to

lower self-esteem. Lever levels of self-esteem are in part responsible for lowering an individual's level of satisfaction with life.

Safdar, Lewis, and Daneshpour (2006) investigated the relationship between social axioms and adjustment. They showed that reward for application predicted active coping (positively) and social complexity predicted life satisfaction (positively) in an Iranian sample after controlling for gender, education, age, and occupation. In another study, Joshanloo, Afshari, and Rastegar (2010) investigated the relationship between social axioms and various indicators of interpersonal, social, and environmental functioning, namely, gratitude for what we already have, connectedness to nature, social participation, perspective-taking, and empathic concern in a sample of Iranian university students. Findings showed that reward for application, religiosity (i.e., belief in the existence of supernatural forces and the utility of religious beliefs), and social complexity significantly predicted gratitude. Social complexity and reward for application significantly contributed to explaining the variance in connectedness to nature. Social cynicism (negatively) and social complexity also predicted perspective-taking significantly. Social axioms were not successful in predicting social participation and empathic concern. Mak, Han, You, Jin, and Bond (2010) found that social cynicism and reward for application were significant predictors of life satisfaction as measured by the satisfaction with life scale (Diener, Emmons, Larsen, & Griffin, 1985), and served as mediators of the relationship between attachment styles and life satisfaction in Hong Kong Chinese and American participants.

The relationship between psychological well-being and social axioms has not been directly investigated. Only the study by Joshanloo et al. (2010) provides some relevant insights. This study investigated the relation between social axioms and some interpersonal and social functioning indicators, which may be considered to be related to the interpersonal aspect of psychological well-being (positive relations with others).

All in all, it can be concluded that the empirical evidence on the relationship between aspects of well-being and social axioms is scant and piecemeal. Only a few past studies have investigated the relation between social axioms and life satisfaction (Chen et al., 2006; Lai et al., 2007; Mak et al., 2010; Safdar et al., 2006). In particular, not much is known about the relationship between social axioms and eudaimonic aspects of well-being. Below, the relationships between individual social axioms and various aspects of mental well-being are discussed, which sets the stage for hypothesising in the present study.

Predictions of the Present Study

Social cynicism refers to a negative view of human nature, a view that life produces unhappiness, that people exploit others, and a mistrust of social institutions. Based on this definition, social cynicism is expected to correlate negatively with aspects of well-being. Endorsing this belief is likely to encourage a person to keep themselves separate from other people and damage his or her interpersonal relationships. Endorsing this belief is also expected to hurt the person's sense of social well-being (Keyes, 1998). Social well-being consists of some dimensions (such as social acceptance and social integration) showing whether and to what degree individuals are functioning well in their social world.

The expectation that social cynicism is negatively related to well-being has received some empirical support in past studies. For example, optimism, which is roughly the opposite of social cynicism, has been found to correlate positively with various aspects of well-being (see Carver & Scheier, 2002). Social acceptance and social integration (conceptual opposites of social cynicism) also have been found to correlate positively with aspects of psychological and subjective well-being (Robitschek & Keyes, 2009). Furthermore, prior research has documented negative associations between social cynicism and subjective well-being (e.g., Chen et al., 2006; Mak et al., 2010) and job satisfaction (Leung, Ip, & Leung, 2010). Lam, Bond, Chen, & Wu (2010) found that social cynicism was positively correlated with five well-established suicide indicators: suicidal ideation, psychache, perceived burdensomeness, thwarted belongingness, and low self-esteem. Likewise, Chen, Wu, and Bond (2009) found that social cynicism was positively correlated with perceived stress, depressive cognition, low self-esteem, and suicidal ideation.

Social complexity refers to the belief in multiple ways of achieving a given outcome, and agreement that human behaviour is variable across situations. Social complexity, therefore, is expected to be correlated with openness to experience, which describes the scope, complexity, novelty, and uniqueness of an individual's mental and experiential life. As mentioned earlier, openness has been found to correlate positively with aspects of eudaimonic well-being (e.g., personal growth). Two past studies on Chinese samples revealed that, in China, this social axiom dimension was related to lower life satisfaction (Chen et al., 2006; Lai, Bond, &Hui, 2007). In another study, Lam et al. (2010) found that social complexity was positively correlated with psychache and perceived burdensomeness, and that it was unrelated to thwarted belongingness, self-esteem, and suicidal ideation in a Chinese sample. Chen et al. (2009) found that social complexity was unrelated to perceived stress, depressive cognition, self-esteem, and suicidal ideation in a Chinese sample. Nevertheless, given that this dimension has been found to positively correlate with optimal functioning

indicators in Iran, it was expected that this dimension would be positively correlated with mental well-being in this study, at least in the Iranian sample.

Reward for Application refers to the general belief that effort, knowledge, and careful planning will lead to positive results. Theoretically, this belief domain is expected to relate to self-efficacy and internal locus of control. Therefore, it was expected that this belief domain would relate positively to diverse dimensions of well-being, especially those related to self-efficacy (e.g., environmental mastery). Empirical findings consistently indicate that this belief domain is related to better functioning and well-being. For example, Chen et al. (2006) showed that this belief domain was positively related to life satisfaction. Reward for Application has also been found to correlate positively with active coping (Safdar, Lewis, & Daneshpour, 2006) and better social and interpersonal functioning (Joshanloo et al., 2010). Reward for application has been found to correlate positively with self-esteem (Lam et al., 2010). Likewise, Chen et al. (2009) found that reward for application was negatively correlated with perceived stress, depressive cognition, low self-esteem, and suicidal ideation. Finally, Mak, Han, You, Jin, and Bond, (2010) showed that this belief dimension was an effective predictor of life satisfaction in Hong Kong Chinese and American students.

Religiosity refers to a belief in the reality of a supreme being and the positive (social) functions of religious practice. This belief domain is associated with religiosity and spirituality, which involve not only beliefs but also religious practice. Religiosity and spirituality have been consistently found to be associated with positive well-being both in Iran (e.g., Hadianfar, 2005) and European countries (for a review see Moreira-Almeida, Neto, & Koenig, 2006). However, empirical studies generally indicate that this belief domain is unrelated to aspects of well-being (Mak et al., 2010), perceived stress, depressive cognition, self-esteem (Chen et al., 2009), and suicidal ideation (Chen et al., 2009; Lam et al., 2010) mainly in Chinese samples.

Joshanloo et al.'s (2010) study in Iran however shows that this belief is associated with gratitude. Gratitude seems to be related to a number of socially healthy behaviours and attitudes (Emmons, McCullough, & Tsang, 2003). Within the context of positive psychology, gratitude is believed to be a human strength in that it enhances one's personal and relational well-being and is possibly beneficial for society as a whole (Emmons & Shelton, 2002). Gratitude has been found to predict psychological well-being in the United Kingdom over and above the Big Five (Wood, Joseph, & Maltby, 2009). Moreover, in Joshanloo et al.'s (2010) study, it was found that the religiosity dimension was related positively to two aspects of empathy, namely, perspective taking and empathic concern. Empathy is deemed to motivate prosocial behaviour (Batson, 1991; Eisenberg &Fabes, 1990) and to facilitate

people's socially competent interactions (Eisenberg et al., 1996). It is also considered to be a critical determinant of social transactions (Feshbach, 1978). Based on these findings in Iran, religiosity was expected to correlate positively at least to some interpersonal aspects of functioning.

Finally, fate control refers to a belief that life events are predetermined and that there are ways for people to influence these fated outcomes. Although this belief domain suggests that people can change the fated outcomes, it is theoretically associated with external locus of control and fatalism. Therefore, it is expected to have negative correlations with some aspects of well-being, especially those related to internal locus of control (e.g., autonomy). Chen et al. (2009) found that fate control was positively correlated with suicidal ideation among the Hong Kong Chinese. Other studies, however, have generally shown that this belief domain is unrelated to life satisfaction and indicators of interpersonal and social functioning (Joshanloo, Afshari, & Rastegar, 2010). Lam et al. (2010) also found that fate control was unrelated to five well-established suicide indicators: suicidal ideation, psychache, perceived burdensomeness, thwarted belongingness, and low self-esteem in Hong Kong. Therefore, the findings on the relationship between fate control and well-being are mixed and inconclusive.

Earlier I summarized the evidence that personality traits and social axioms do not largely overlap and are separate sources of variation in human behaviour. Keeping this in mind and aiming to examine the unique contribution of social axioms to mental well-being, in the current study, both social axioms and personality traits were included. The main purpose was to control for the influence of personality traits and calculate the strength of the relationship between social axioms and well-being over and beyond personality.

In the present study, I used samples from two nations: Iran and the UK. These two countries are vastly different in terms of social, political, and economic indicators. Iran has a religious and traditional culture, whereas the UK is much more secular. Iranian culture is strongly influenced by Islam, whereas the British culture is largely affected by Christian heritage. Iran is a developing nation dealing with problems such as poverty, environmental pollution, slow socio-economic development, and lack of personal and religious freedom, whereas the UK is a relatively developed, democratic, and wealthy country (Brown & Landreth, 1983; Ghaffarian, 1998; Porter, 2013). It has also been found that the UK scores higher than Iran on indicators of subjective well-being (e.g., Minkov, 2009).

Having data from more than one nation enabled me to compare the results in the two nations. This possibility is very important in the context of the present study, considering that social axiom research is rare in Iran, and there is not much research published on this topic to draw on and to compare the current findings with. Availability of data from another country could

help put the findings from Iran in perspective. However, it should be noted that the present thesis is not focused on investigating actual cross-cultural comparisons. Various aspects of culture (such as individualism and collectivism) are not measured in the present study. Given the small size of the samples of the present study, and exclusion of indicators of cultural orientation, this study focuses on country (rather than cultural) differences in the major variables of the study.

As noted earlier, there is not enough empirical data to let us develop informed hypotheses about the role of country in the present analyses. Most of the studies on social axioms have been conducted in China and Hong Kong. Research on social axioms and eudaimonic well-being in England and Iran is very scarce. Based on the literature review presented above, I expected social axioms to predict aspects of mental well-being in both nations. However, given the differences between the two nations, the size and direction of the relationships between social axioms and dimensions of well-being may turn out to be different in them. Lack of previous research and the large number of variables used in   the present study make hypothesising about cultural differences very difficult.

With regards to the hedonic and eudaimonic aspects of well-being, the size and direction of the relationships between social axioms and the subjective and psychological dimensions of well-being may also turn out to be different. However, again, lack of previous research makes it difficult to hypothesize about the differential relationships between social axioms and subjective and psychological dimensions of well-being. Therefore, the present study made no predictions in this regard.

Based on the prior empirical findings, several hypotheses were developed to guide the analyses. All the expectations are summarized in the following hypotheses categorized into three groups:

Contribution of the social axiom dimensions to well-being

1. Social cynicism is negatively related to indicators of well-being in both nations.

2. Reward for application is positively related to indicators of well-being in both nations.

3. Social complexity is positively related to indicators of well-being in both nations.

4. Fate control is negatively related to indicators of well-being in both nations.

5. Religiosity is positively related to indicators of well-being in both nations.

Contribution of the social axiom dimensions to well-being over and above the role of   nation

6.   Social axioms significantly predict subjective well-being over and above the contribution of country.

7.   Social axioms significantly predict psychological well-being over and above the contribution of country.

Unique contribution of social axiom dimensions to well-being over and above the Big Five factors and country

8.   Social axioms significantly predict subjective well-being beyond the collective contribution of country and the Big Five.

9.   Social axioms significantly predict psychological well-being beyond the collective contribution of country and the Big Five.

Method

Participants

In the present study, a non-random convenience sampling method was adopted at the Universities of Tehran and Hertfordshire in Iran and England respectively.

Those who were selected as the study sample using convenience sampling, were those available now of sampling. For this purpose, the sample included undergraduate and postgraduate students from different disciplines who were visiting the university's campus and library, or those who had volunteered to participate in the study in response to talk with them.

The number of people who refused to participate in the study was not counted exactly, but they are approximately double the sample group. Some of them mentioned their specific residence conditions (e.g. refugee status) and lack of trust in the goal of the research as reasons for refusing to participate in the study, and others mentioned the large number of questions.

Prior to data collection, the participants were informed about the study objectives and assured there was no deception or misleading information to obtain their full consent. They were also assured that their identifying information and responses would remain confidential and inaccessible to others and that participation in the study would not be any risk to them. Their participation was voluntary, and they could leave at any time they wished. The Participants' anonymity was preserved, and no unacceptable language was noticed in the formulation of

questions or during qualitative interviews and they were treated respectfully during the entire study period. The forms related to the commitments are available in the appendices.

The participants in this study were 73 students in Iran and 66 students in the UK. Of the Iranian sample, 37 were female students (50.7%) and 36 were male students. The sample was comprised of 72 undergraduates and the remaining one participant was a graduate student. Age ranged from 18 to 29, with a mean of 21.97 (SD= 1.95). Forty-one students reported that they had no partner, 17 reported that they were "in a relationship but not living with partner", two students reported that they were "single and living with partner", nine students were married, one student was separated, and three students chose "other". Sixty-four students reported that they had no jobs, and nine students reported that they had part-time jobs. Fifty-four, two, 11, and one reported their ethnicity to be Fars, Kurd, Turk, and Lor, respectively, and one student did not answer this question. Sixty-eight students reported being Muslims, one "secular humanist", and four chose "no religious preference". In response to the question: "Do you consider that you are actively practising your religion?" 29 chose "no" and 41 chose "yes". Three students did not answer this question.

One of the students reported that his father was illiterate. Five students reported their fathers' highest educational qualification to be elementary school diploma, six secondary school diplomas, 22 high school diplomas, five junior college diplomas, 23 bachelor's degrees, eight master's degree, and three PhD. Ten of the students reported their mothers' highest educational qualification to be elementary school diploma, six secondary school diplomas, 32 high school diplomas, five junior college diplomas, 16 bachelor's degrees, three master's degree, and one of the students did not know the answer to this question.

Of the UK student sample, 45 were female students (68.2%) and 21 were male students. The sample was comprised of 65 undergraduates and the remaining one participant was a graduate student. Age ranged from 18 to 45, with a mean of 21.35 (SD= 4.24). Thirty-four students reported that they had no partner, 13 students reported that they were "single and living with partner", four students were married, two students were separated, and one student was widowed. Five students did not report their relationship status. Thirty-six students reported that they had no jobs and thirty students reported that they had part-time jobs.

Thirty-seven students reported their ethnicity to be white, five Black – African, six Indian, four Pakistani, one Bangladeshi, 12 chose "other", and one student did not answer this question. Five students reported their religion to be Anglican, seven Roman Catholic, one Protestant, one Eastern Orthodox, one Free Church, six "other Christian", one Shia Muslim,

eight Sunni Muslim, five Hindu, 12 Sikh, 12 atheists, five agnostic, and 10 chose "no religious preference". In response to the question: "Do you consider that you are actively practising your religion?", 34 chose "no" and 24 chose "yes". Eight students did not answer this question.

Eight of the students reported that their fathers were illiterate. Twelve students reported their fathers' highest educational qualification to be GCSEs or equivalent, 18 A-levels or equivalent, 11 bachelor's degrees, three master's degree, and three PhD. Ten of the students reported that they did not know about their fathers' highest educational qualification. Eight of the students reported that their mothers were illiterate. Twenty students reported their mothers' highest educational qualification to be GCSEs or equivalent, 21 A-levels or equivalent, eight bachelor's degrees, and eight of the students reported that they did not know about their mothers' highest educational qualification. One student did not answer this question.

The two samples were compared in terms of age, gender, and relationship status. The results are reported in Table 3.1. The two samples were not significantly different with respect to age [t (83.407) = -1.385, p = .170]. However, they were significantly different in terms of gender [χ^2 (1) = 4.386, $p<0.05$] and relationship status [χ^2 (6) = 34.589, $p<0.01$].

Table 3.1 Descriptive statistics of the samples and inferential tests

| | | M(SD) | | | |
		Iranian Sample	UK student sample	test	*p*
Age		21.97 (1.958)	21.08(4.919)	t	.17
Sex				χ^2	0.036
	female	37	45		
	Male	36	21		
relationship				χ^2	0.000
	No partner	41	34		
	Not living with partner	17	18		
	Single with partner	2	0		
	Married	9	6		
	Separated	1	2		
	Widowed	0	1		
	Other	3	0		
	Missing	0	5		
employment status					
	No jobs	64	36		
	Part time jobs	9	30		
ethnic					
	Fars	54	White	37	
	Kurd	2	Black	5	
	Turk	11	Indian	6	
	Lor	1	Pakistani	4	
	Missing	1	Bangladeshi	1	
			Others	12	
Father's education					

Illiterate	1			8
Elementary diploma	5	GCSEs		12
Secondary diploma	6	A- level		18
High school diploma	22			
Junior	5			
Bachelor	23			11
master	8			3
PhD	3			3
Missing	-			10
Mother's education				
Illiterate	-			8
Elementary diploma	10	GCSEs		20
Secondary diploma	6	A- level		21
High school diploma	32			
Junior	5			
Bachelor	16			8
master	3			
missing	1			9
Religion				
Muslim	68	Anglican		5
Secular humanist	1	Roman Catholic		7
No religion	4	Protestant		1
		Eastern Orthodox		1
		Free Church		1
		Other Christian		1
		Muslim		2
		Hindu		5
		Sikh		12
		atheist		12
		agnostic		5
		No religion preference		10
Practicing religion				
Yes	41			24
No	29			34

Measures

Social Axiom Survey (SAS; Leung et al., 2002). The 60-item Social Axiom Survey was used to measure social axioms. The 5-point Likert-type response format was anchored by "*1 =strongly disbelieve*" and "*5 =strongly believe.*" This instrument is divided into five subscales: Social Cynicism (18 items, e.g., "Kind-hearted people are easily bullied"), Reward for Application (14 items, e.g., "Knowledge is necessary for success"), Social Complexity (12 items, e.g., "One's behaviours may be contrary to his or her true feelings"), Fate Control (8 items, e.g., "All things in the universe have been determined"), and Religiosity (8 items, e.g., "Belief in a religion makes people good citizens"). In two past studies in Iran (Joshanloo et al., 2010; Safdar et al., 2006), the subscales of this survey yielded Cronbach alpha values which are comparable to those emerging in other countries (approximately between .51 and .74); for example, see studies by Chen et al. (2006a) in a Chinese sample, Singelis, Hubbard,

and Her (2003) in an American sample, Leung et al. (2007) in samples from Hong Kong, mainland China, the Netherlands, Israel, and Estonia.

Big Five Inventory (BFI: John, Donahue, & Kentle, 1991, John & Srivastava, 1999). This inventory was developed to address the need for a short instrument measuring the prototypical components of the Big Five that are common across various lines of research. The goal of developing this inventory was to create a brief inventory that would allow efficient and flexible assessment of the five dimensions when there is no need for more differentiated measurement of individual subdimensions. The BFI uses short phrases based on the trait adjectives known to be prototypical markers of the Big Five. It consists of 44 items to measure Extraversion (8 items, e.g., "Is talkative"), Agreeableness (9 items, e.g., "Tends to find fault with others"), Conscientiousness (9 items, e.g., "Does a thorough job"), Neuroticism (8 items, e.g., "Is depressed, blue"), and Openness to experience (10 items, e.g., "Is curious about many different things "). The items were rated on a 5-point scale ranging from *1 =disagree strongly* to *5 =agree strongly*. According to John and Srivastava (1999), in U.S. and Canadian samples, the Cronbach alpha reliabilities of the BFI scales typically range from .75 to .90. Three-month test-retest reliabilities of the scales range from .80 to .90, with a mean of .85. Prior research indicates substantial convergent relations between this inventory and other Big Five instruments as well as with peer ratings (for a review see John & Srivastava, 1999; John, Naumann, & Soto, 2008).

Considering that the five-factor model of personality originated in Western cultures, there is less concern regarding the applicability of this model to Western cultures (like England). Fortunately, the five-factor model of personality has also been found to be relevant and applicable in Iranian contexts. Therefore, for the Iranian sample a Farsi (Persian) version of the Big Five Inventory which had been previously validated was used.

Joshanloo et al. (2010), using the NEO-FFI-R (NEO Personality Inventory-Revised, Costa & McCrae, 1992), found that the five-factor structure of personality was replicated in a sample of Iranian students. In another study, Nosratabadi, Joshanloo, and Jafari Kandovan (2006) investigated the validity of the BFI in an Iranian university student sample. Face validity of the scale was confirmed by 6 experts (Iranian psychologists and psychiatrists). The authors found that this inventory has a five-factor structure in Iran. Internal consistency of the subscales of the BFI ranged from .61 to .80. They concluded that the BFI's reliability and validity are acceptable, and it can be applied with Iranian university student populations.

Psychological Well-Being Scale (Ryff, 1989). The 54-item version of Ryff's (1989) scale of psychological well-being was used to assess the six dimensions of psychological well-being based on Ryff's conceptualisation of well-being. The six scales are as follows: self-

acceptance (e.g., "I like most parts of my personality"), positive relations with others (e.g., "maintaining close relationships has been difficult and frustrating for me"), personal growth (e.g., "For me, life has been a continual process of learning, changing, and growth"), purpose in life (e.g., "I sometimes feel as if I've done all there is to do in life"), environmental mastery (e.g., "I am good at managing the responsibilities of daily life"), and autonomy (e.g., "I tend to be influenced by people with strong opinions"). Each subscale contains nine items. Items are scored on a 7-point scale ranging from *1 =strongly disagree* to *7 =strongly agree*. Although Springer and Hauser (2005) provide some evidence suggesting that this scale's validity is not acceptable, Ryff and Singer (2006) review the evidence from five categories of studies (i.e., factorial validity, psychological correlates, sociodemographic correlates, biological correlates, and intervention studies) that document the distinctiveness of the six dimensions of well-being. They conclude that the reliability and construct validity of these subscales is well-established. Some empirical studies confirm the six-factor structure of this scale in various samples (e.g., Cheng & Chan, 2005; Clarke et al., 2001; Ryff & Keyes, 1995; Springer & Hauser, 2006; van Dierendonck, 2004).

Shokri, Kadivar, Farzad, Daneshvarpour, Dastjerdi, and Paeezi (2008) examined the factor structure of the 54-item Persian versions of Ryff's Psychological Well-Being Scale in Iranian students. Results of the confirmatory factor analysis revealed that the six-dimensional model of psychological well-being (hypothesizing six distinct yet correlated factors) showed an acceptable fit to the data. They also showed that the face validity of the items of this scale was confirmed by a panel of experts. In another study, Bayani, Koocheky, and Bayani (2008) used a student sample to examine the reliability and convergent validity of the 84-item version of Ryff's Psychological Well-Being Scale in Iran. They found two-month test-retest reliability coefficients greater than .71 for the six subscales of this scale. They also found that Cronbach's alpha values of the six subscales ranged from .57 to .76. This scale also was found to correlate positively with some other scales of well-being, showing its acceptable convergent validity in Iran.

Satisfaction With Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985). The SWLS assesses global life satisfaction. This scale consists of five items (e.g., "In most ways my life is close to my ideal"). Each item is rated on a 7-point scale ranging from *strongly disagree* (1) to *strongly agree* (7). This scale has been extensively used in many cultures. Almost all the past studies have confirmed the one-factor structure and acceptable reliability of this scale (e.g., Diener, Emmons, Larsen, & Griffin, 1985; Pavot, Diener, Colvin, & Sandvik, 1991; Shevlin, & Bunting, 1995). Pavot et al. (1991) reported test-retest reliability coefficients of .83 and .85 for this scale in American samples.

Joshanloo and Daemi (in press) investigated the reliability and validity of this scale in an Iranian student sample. Their confirmatory factor analysis results confirmed the unidimensional factor structure of this scale in Iran. They reported a Cronbach's alpha reliability of .84 and a three-week test-retest reliability coefficient of .92 for this scale. Their findings also supported the convergent validity of this scale in this sample.

Positive and negative affect scales (Mroczek & Kolarz, 1998). To measure the affective dimension of subjective well-being, positive and negative affect scales were used. These scales assess the frequency of positive and negative affect. Respondents indicate how much of the time during the past 30 days—" all," "most," "some," "a little," or "none of the time"—they felt six symptoms of positive and negative affect (e.g., "cheerful" and "nervous"). The sum of the six negative effects can be subtracted from the sum of the six positive affects to obtain a measure of affect balance.

Mroczek and Kolarz (1998) report internal consistencies of .86 and .91 for negative and positive affect scales respectively in a national sample of Americans. Bakhshi, Daemi, and Ajilchi (2009) investigated the reliability and validity of these two scales in Iranian students. Their exploratory factor analyses confirmed the unidimensional factor structure of the two scales in Iran. They found a Cronbach's alpha of .85 for both scales. They also found that the scales evidenced acceptable convergent validity.

Data analysis

Given that the purpose of this study was to examine how much of the variance in mental well-being is explained by a group of predictors (the Big Five, nation, and social axioms), and the outcome and predictors are all continuous variables (with the exception of a dichotomous variable –country–as explained below), Pearson correlation and multiple regression analyses were used to analyse the data. Zero-order Pearson correlation is a univariate statistical technique used to investigate the relationship between two continuous variables (Clark-Carter, 2009). To investigate hypotheses 1 through 5 of the present study, five separate Pearson correlation analyses were conducted.

In multiple regression, the relationships between a single outcome variable and two or more potential predictors are investigated (Clark-Carter, 2009). In this technique, all the predictors are usually entered simultaneously into the model. However, in the present study, for hypotheses 6 to 9, a variation of regression analysis was used, which is known as hierarchical multiple regression. This technique is used when the researcher places the predictors into the model in a prearranged order. This technique helps the researcher to examine how much of

the variance in the dependent variable is explained by one or more predictors when the contributions of one or more other variables are partialled out (Clark-Carter, 2009). In other words, this technique helps to determine if the unique contribution of a variable or a set of variables is significant over and beyond the contribution of other variables, which are placed in the model in earlier steps. Given that in the present study, the aim is to examine the contribution of social axioms over and above the personality traits and country, hierarchical regression is the most appropriate technique (for testing hypotheses 6 to 9). Here, country and personality were entered the model first to control for their effects.

It is also noteworthy that in multiple regression analysis, dichotomous variables can be included as predictors. In the present study, I used the dichotomous variable 'country' (1 = Iran, 2 = UK) to control for country of origin. Therefore, if this variable turned out to be positively associated with an outcome, UK sample participants would have scored higher than Iranians on the tested outcome variable. If the association is negative, we would conclude that Iranians scored higher than UK sample participants on a certain outcome.

The analysis was conducted using SPSS 19 and the G*power software was used to calculate statistical power. This is a tool to compute statistical power analyses for many different t tests, F tests, $\chi 2$ tests z tests and some exact tests. G*Power can also be used to compute effect sizes and to display graphically the results of power analyses[1]. Also, I used these two software packages in the other quantitative studies according to each analysis used in each study. For all the sample sizes that I used, the power was above 0.95.

Results

Preliminary Analyses

The total psychological well-being score was obtained by summing all six dimensions of psychological well-being, and the total subjective well-being score was calculated by summing the scores of life satisfaction and affect balance. Table 3.2 and 3.3 show the means and standard deviations for all variables measured in the study as a function of sex and country. Prior to analysis, all nondemographic variables of the study were examined for accuracy of data entry, missing values, outliers, and normality.

Missing data. As a rule, missing data on 5% or fewer of the cases in a single variable can be ignored (Meyers, Gamst, & Guarino, 2006). Analyses showed that all the variables contained missing data on 2.9% or fewer of the cases (ranging from 0 to 2.9%) in both samples. In view

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[1]. (http://www.gpower.hhu.de/en.html).

of this relatively low rate of missing data, missing data does not appear to be a serious problem in the current study. Therefore, no post-hoc data treatment was needed to handle missing values.

Table3.2. Descriptive statistics for the variables as a function of country

	Iran		UK	
	N	*M (SD)*	*N*	*M (SD)*
Psychological well-being				
Autonomy	73	41.67 (7.28)	65	40.86 (8.14)
Environmental mastery	71	41.53 (8.20)	66	42.24 (5.76)
Personal growth	73	43.35 (6.73)	65	46.13 (7.75)
Positive relations	72	40.95 (10.52)	63	45.20 (7.62)
Purpose in life	73	43.39 (8.42)	65	45.76 (7.83)
Self-acceptance	71	41.07 (9.42)	66	44.09 (6.86)
Subjective well-being				
Life satisfaction	73	22.02 (7.10)	65	24.70 (4.67)
Positive affect	73	18.78 (4.27)	66	20.22 (5.16)
Negative affect	73	14.76 (4.82)	66	13.07 (4.01)
Social axioms				
Social cynicism	71	53.46 (6.47)	64	52.31 (8.66)
Reward for application	73	51.95 (7.00)	64	49.84 (6.36)
Social complexity	73	44.17 (3.83)	64	45.89 (4.56)
Fate control	73	22.69 (3.91)	64	20.70 (5.17)
Religiosity	73	29.82 (5.15)	65	24.26 (7.19)
Personality factors				
Extraversion	71	24.90 (4.69)	66	27.18 (5.27)
Conscientiousness	72	30.22 (5.01)	66	30.54 (5.88)
Agreeableness	73	31.02 (5.60)	66	32.90 (5.47)
Neuroticism	73	24.00 (6.46)	66	22.90 (4.82)
Openness	72	34.80 (5.07)	64	34.95 (5.51)

Note: Different Ns are a result of missing data

Table 3.3. Descriptive statistics for the variables as a function of sex and country

	Iran						UK					
	N		M		SD		N		M		SD	
	male	female	male	female	male	female	male	female	male	female	male	female
Psychological well-being												
Autonomy	36	37	40.25	43.05	7.76	6.60	21	44	41.14	40.72	7.38	8.56
Environmental mastery	35	36	39.31	43.69	7.58	8.31	21	45	39.90	43.33	5.07	5.78
Personal growth	36	37	42.44	44.24	6.24	7.15	20	45	43.50	47.31	8.31	7.28
Positive relations	36	36	37.27	44.63	10.54	9.25	19	44	41.47	46.81	7.96	6.95
Purpose in life	36	37	41.77	44.97	9.04	7.56	21	44	42.42	47.36	7.12	7.72
Self-acceptance	35	36	39.91	42.19	8.13	10.5	21	45	41.14	45.46	7.39	6.21
Subjective well-being												
Life satisfaction	36	37	21.75	22.29	6.30	7.88	20	45	23.00	25.46	5.09	4.32
Positive affect	36	37	18.44	19.10	3.57	4.89	21	45	21.28	19.73	6.30	4.53
Negative affect	36	37	14.88	14.64	4.29	5.35	21	45	13.14	13.04	4.50	3.81
Social axioms												
Social cynicism	34	37	53.88	53.08	5.80	7.09	19	45	55.57	50.93	7.92	8.66
Reward for application	36	37	52.16	51.75	7.95	6.03	19	45	51.63	49.08	6.47	6.23
Social complexity	36	37	44.22	44.13	4.24	3.45	20	44	44.35	46.59	5.60	3.87
Fate control	36	37	23.41	22.00	3.33	4.33	19	45	22.42	19.97	6.09	4.61
Religiosity	36	37	29.05	30.56	5.51	4.72	21	44	26.14	23.36	7.32	7.04
Personality factors												
Extraversion	36	35	23.86	25.97	4.53	4.67	21	45	26.76	27.37	5.17	5.36
Conscientiousness	36	36	30.22	30.22	4.43	5.60	21	45	30.04	30.77	5.54	6.08
Agreeableness	36	37	30.05	31.97	6.36	4.62	21	45	31.80	33.42	5.10	5.61
Neuroticism	36	37	24.38	23.62	6.52	6.46	21	45	20.76	23.91	4.79	4.55
Openness	36	36	34.75	34.86	5.00	5.21	20	44	35.80	34.56	3.94	6.09

Outliers. To identify univariate outliers, the variables were examined separately for Iranian and British samples. Three cases in the Iranian sample were univariate outliers, because of their extremely low *z* scores on social cynicism (one case) and social complexity (two cases). The criterion used for identifying outliers was *z* scores more than the absolute value of 3.29 as proposed by Tabachnick and Fidell (2001). Based on the procedure proposed by Tabachnick and Fidell, to reduce the impact of these cases on the analyses, new scores were assigned to these outlying cases that were one unit larger than the next most extreme score in the distribution. No univariate outlier was identified in the British sample. No multivariate outlier was identified in both samples by means of inspection of Mahalanobis distances with *p*< .001 (Tabachnick & Fidell, 2001).

Normality. A further step was to examine the normality of the distribution of the variables. For this purpose, the skewness and kurtosis of the variables were calculated separately for the two samples. Skewness and kurtosis of all variables are shown in Table 3.4. The results revealed that the skewness and kurtosis of all variables in the two samples were well within the generally accepted range of -2 to +2, indicating that deviations from normality were not severe. Therefore, no transformation of the data was needed in the two samples. However, Tables 3.2 and 3.3 show that the SD differences for some of the variables are still large,

raising concern about normality. Standard Deviation (SD) is the second component of the distribution, skewness the third, and kurtosis the fourth, which are calculated based on different formula and indicators (Ferguson & Takane, 1989). A high standard deviation does not indicate whether the data includes skewness or kurtosis. As shown in Table 3.4, none of the kurtosis and skewness values are more than 1.96 and, therefore, all the data are acceptable.

Internal consistency. To examine the internal consistency of the scales, Cronbach's alpha values were calculated for all scales. The Cronbach's alpha values for both samples are shown in Table 3.5. Fate control and social complexity yielded relatively low Cronbach's alpha values. However, the alpha values for the social axiom subscales were comparable to those reported by many researchers in several past studies in samples from different countries, for example, Chen et al.(2006a) in a Chinese sample, Singelis, Hubbard, and Her (2003) in an American sample, Leung et al. (2007) in samples from Hong Kong, mainland China, the Netherlands, Israel, and Estonia. Low alpha values should be interpreted with caution given the small size of the samples in this study.

Table 3.4. Skewness and kurtosis of the variables in the Iranian and UK samples

	Iran		UK	
	skewness	kurtosis	skewness	kurtosis
Psychological well-being				
Autonomy	.546	-.049	-.377	-.328
Environmental mastery	-.027	-.027	-.039	-.646
Personal growth	-.173	-.130	-.466	-.013
Positive relations	-.344	-.034	-.497	.049
Purpose in life	-.305	-.875	-.290	-.205
Self-acceptance	.170	-.333	-.399	.009
Subjective well-being				
Life satisfaction	-.319	-.604	-.659	.816
Positive affect	-.077	.119	-.370	.550
Negative affect	.246	-.552	.432	.082
Social axioms				
Social cynicism	-.166	-.685	.083	-.313
Reward for application	-.254	1.109	.185	.421
Social complexity	-.835	.404	.071	.853
Fate control	-.419	.591	.532	-.210
Religiosity	-.465	.441	.135	-.442
Personality factors				
Extraversion	.232	-.435	-.148	.245
Conscientiousness	.065	-.305	-.030	-.474
Agreeableness	-.510	.539	-.609	.630
Neuroticism	.600	-.044	-.035	-.432
Openness	-.269	-.139	-.743	1.699

Table 3.5. Cronbach's alpha values for the used scales in the Iranian and UK samples

	Iran	UK
Psychological well-being		
Autonomy	.64	.75
Environmental mastery	.73	.55
Personal growth	.56	.77
Positive relations	.85	.74
Purpose in life	.73	.76
Self-acceptance	.80	.67
Subjective well-being		
Life satisfaction	.85	.70
Positive affect	.84	.87
Negative affect	.83	.64
Social axioms		
Social cynicism	.65	.78
Reward for application	.83	.73
Social complexity	.60	.60
Fate control	.55	.70
Religiosity	.86	.84
Personality factors		
Extraversion	.50	.75
Conscientiousness	.64	.77
Agreeableness	.70	.71
Neuroticism	.82	.62
Openness	.58	.70

Gender and cultural differences.

To compare the variables in terms of gender and country, a two-way ANOVA (gender × country) was conducted. In this regard, gender was analysed in two categories (male/female) and country in two categories (Iranian/ UK student sample) and interactive and direct effects were then examined

The results obtained from assessing the equality of variances using Leven's test confirmed the null hypothesis, that is, the equality of variances for the groups on all dependent variables except for environmental mastery. Given the similar group sizes (73 Iranians, and 66 UK students sample), it seems that further analysis was possible.

The results indicated significant direct effects for gender ($W_{11,109}$=.703, F=2.11, p<.001) and country ($W_{11,109}$=.601, F=3.31, p<.00), but not a significant interaction effect ($W_{11,109}$=.78, F=1.39, p>.043). Gender explained 30% of the differences (η=.297), country 40% (η=.399), and the interaction of both 21% (η=.218). A between subject effect revealed a significant gender effect on some variables, i.e. social cynicism (F=6, p< .05), social complexity

(F=4.96, p< .05), fate control (F=6.74, p< .05), environmental mastery (F=6.45, p< .001), positive relation (F=15.18, p< .0001), and purpose in life (F=7.49, p< .001) and for other variables was not significant.

In terms of gender, post hoc tests showed that males scored higher in social cynicism (MD= 3.7, *p*< .05), and fate control (MD= 2.25, *p*< .05), and females scored higher in environmental mastery (MD= 3.6, p< .05), positive relation (MD= 7, p< .05), and purpose in life (MD=4.4, *p*< .01).

In terms of country the results showed a significant difference between the two groups in certain variables, religiosity (F=27.67, p< .0001), personal growth (F=6.60, p< .05), and negative affect (F=4.90, p< .05). Post hoc tests showed that the Iranian sample scored higher in religiosity (MD=6.45, *p*< .001) and negative affect (MD= 2.05, *p*< .05), and the UK sample scored higher in personal growth (MD= 3.56, *p*< .05).

Results concerning the interaction effect of gender and country showed no significant effect.

Table 3.6 gender and country differences results

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
COUNTRY	social cynicism	.00	1	.00	.00	.99	.00
	reward for application	164.44	1	164.44	3.65	.05	.03
	fate control	83.56	1	83.56	4.57	.03	.03
	religiosity	1087.81	1	1087.81	31.05	.000	.21
	Social complexity	5.56	1	5.56	.33	.56	.00
	environmental mastery	2.30	1	2.30	.04	.82	.00
	autonomy	16.16	1	16.16	.26	.60	.00
	personal growth	285.59	1	285.59	6.21	.01	.05
	positive relation	211.35	1	211.35	2.60	.10	.02
	purpose in life	27.07	1	27.07	.43	.51	.00
	self-acceptance	122.55	1	122.55	1.98	.16	.01
	life satisfaction	126.62	1	126.62	3.39	.06	.02
	positive affect	11.10	1	11.10	.50	.47	.00
	negative affect	95.57	1	95.57	4.50	.03	.03
	extraversion	77.68	1	77.68	3.22	.07	.02
	agreeableness	47.13	1	47.13	1.60	.20	.01
	conscientiousness	.40	1	.40	.01	.90	.00
	neuroticism	61.53	1	61.53	1.76	.18	.01
	openness	9.54	1	9.54	.35	.55	.00
SEX	social cynicism	324.06	1	324.06	5.62	.01	.04
	reward for application	9.96	1	9.96	.22	.63	.00
	fate control	87.41	1	87.41	4.78	.03	.04
	religiosity	12.05	1	12.05	.34	.55	.00
	Social complexity	106.47	1	106.47	6.48	.01	.05
	environmental mastery	371.04	1	371.04	7.86	.00	.06
	autonomy	39.67	1	39.67	.64	.42	.00
	personal growth	46.62	1	46.62	1.01	.31	.00
	positive relation	1167.73	1	1167.73	14.39	.00	.11
	purpose in life	655.69	1	655.69	10.54	.00	.08
	self-acceptance	177.53	1	177.53	2.87	.09	.02
	life satisfaction	34.32	1	34.32	.91	.34	.00
	positive affect	3.90	1	3.90	.17	.67	.00

		negative affect	.00	1	.00	.00	.99	.00
		extraversion	50.32	1	50.32	2.08	.15	.01
		agreeableness	102.72	1	102.72	3.50	.06	.03
		conscientiousness	7.05	1	7.05	.23	.63	.00
		neuroticism	25.54	1	25.54	.73	.39	.00
		openness	26.07	1	26.07	.97	.32	.00
COUNTRY	*	social cynicism	140.81	1	140.81	2.44	.12	.02
SEX		reward for application	6.84	1	6.84	.15	.69	.00
		fate control	19.72	1	19.72	1.07	.30	.00
		religiosity	32.92	1	32.92	.94	.33	.00
		Social complexity	82.40	1	82.40	5.01	.02	.04
		environmental mastery	25.18	1	25.18	.53	.46	.00
		autonomy	71.00	1	71.00	1.16	.28	.01
		personal growth	6.36	1	6.36	.13	.71	.00
		positive relation	10.69	1	10.69	.13	.71	.00
		purpose in life	29.41	1	29.41	.47	.49	.00
		self-acceptance	10.08	1	10.08	.16	.68	.00
		life satisfaction	17.05	1	17.05	.45	.50	.00
		positive affect	2.76	1	2.76	.12	.72	.00
		negative affect	8.57	1	8.57	.40	.52	.00
		extraversion	18.12	1	18.12	.75	.38	.00
		agreeableness	.26	1	.26	.00	.92	.00
		conscientiousness	20.83	1	20.83	.68	.41	.00
		neuroticism	141.83	1	141.83	4.07	.04	.03
		openness	54.39	1	54.39	2.02	.15	.01

Table 3.7. Correlations of measures for the Iranian sample

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1.Total psychological well-being	-																			
2.Autonomy	.68**																			
3.Environmental mastery	.88**	.44**																		
4.Personal growth	.80**	.46**	.64**																	
5.Positive relations	.85**	.52**	.71**	.52**																
6.Purpose in life	.83**	.45**	.72**	.76**	.60**															
7.Self-acceptance	.84**	.44**	.72**	.58**	.67**	.57**														
8.Total subjective well-being	.61**	.24*	.62**	.40**	.57**	.34**	.73**													
9.Life satisfaction	.56**	.12	.65**	.40**	.49**	.33**	.69**	.90**												
10.Positive affect	.53**	.27*	.48**	.33**	.56**	.25*	.65**	.87**	.67**											
11.Negative affect	-.48**	-.30*	-.45**	-.30**	-.45**	-.30**	-.53**	-.83**	-.57**	-.68**										
12.Social cynicism	-.45**	-.23*	-.44**	-.32**	-.45**	-.27*	-.44**	-.60**	-.44**	-.57**	.61**									
13.Reward for application	.15	-.05	.22	.23*	-.02	.24*	.20	.14	.15	.11	-.10	-.01								
14.Social complexity	.27*	.19	.26*	.27*	.08	.39**	.12	-.06	-.02	-.14	.01	.20	.49**							
15.Fate control	-.16	-.29*	.008	-.19	-.18	-.06	-.09	-.006	.05	-.002	.09	.36**	.17	.16						
16.Religiosity	.28*	.16	.24*	.34**	.14	.29*	.24*	.22	.09	.21	-.33**	.36**	.52**	.23*	-.22					
17.Extraversion	.28*	.29*	.19	.27*	.32**	.14	.20	.24*	.19	.25*	-.21	-.15	-.07	.06	-.12	-.03				
18.Conscientiousness	.50**	.22	.49**	.45**	.31**	.43**	.55**	.42**	.42**	.37**	-.30**	-.36**	.07	.05	-.14	.17	.10			
19.Agreeableness	.62**	.23*	.61**	.38**	.72**	.46**	.56**	.54**	.55**	.44**	-.37**	-.27*	.02	.03	-.16	.12	.18	.41**		
20.Neuroticism	-.54**	-.34**	-.51**	-.28*	-.56**	-.26*	-.60**	-.68**	-.57**	-.65**	.59**	.57**	.15	.15	-.01	-.05	-.26*	-.33**	-.41**	
21.Openness	.34**	.26*	.22	.38**	.24*	.36**	.19	.11	.03	.19	-.10	-.16	.11	.04	-.01	.12	.21	.38**	.20	-.20

** p< .01 (2-tailed), * p< .05 (2-tailed)

Table 3.8. Correlation of measures for the UK students sample

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1.Total psychological well-being	-																			
2.Autonomy	.62**																			
3.Environmental mastery	.75**	.32**																		
4.Personal growth	.75**	.39**	.48**																	
5.Positive relations	.78**	.31*	.57**	.40**																
6.Purpose in life	.71**	.16	.55**	.54**	.58**															
7.Self-acceptance	.80**	.47**	.56**	.62**	.60**	.42**														
8.Total subjective well-being	.41**	.16	.52**	.08	.54**	.19	.46**													
9.Life satisfaction	.34**	-.02	.55**	.10	.39**	.24	.36**	.72**												
10.Positive affect	.18	.10	.25*	-.16	.37**	-.01	.24*	.83**	.36**											
11.Negative affect	-.48**	-.33**	-.41**	-.32**	-.51**	-.22	-.49**	-.74**	-.27*	-.50**										
12.Social cynicism	-.23	.005	-.30*	-.05	-.38**	-.29*	.06	-.02	-.10	.01	.009									
13.Reward for application	.14	.07	.06	.09	-.04	.16	.07	.05	-.10	.17	.008	.28*								
14.Social complexity	.12	.05	-.04	.11	.03	.10	.16	-.04	-.15	.007	-.03	.04	.29*							
15.Fate control	-.38**	.26*	-.34**	-.35**	-.31*	-.39**	-.23	-.12	-.02	.01	.34**	.49**	.24	-.03						
16.Religiosity	-.12	-.22	-.10	-.17	.06	-.04	-.19	.06	.03	.11	.03	.04	.31*	-.04	.18					
17.Extraversion	.21	.38**	.08	.11	.27*	-.01	.31**	.35**	.09	.40**	-.31**	.05	-.20	-.07	-.17	.25*				
18.Conscientiousness	.10	-.12	.40**	.01	.01	.46**	.008	.003	.27*	-.14	.149	-.20	.15	.02	-.12	-.12	-.24			
19.Agreeableness	.25	-.003	.34**	.12	.35**	.35**	.19	.08	.20	-.05	-.04	-.21	.07	-.10	-.10	.12	-.02	.49**		
20.Neuroticism	-.42**	-.48**	-.37**	-.27*	-.25*	-.12	-.41**	-.43**	-.07	-.45**	.46**	-.11	-.14	.10	.16	.03	.28*	-.02	.02	
21.Openness	.13	.32**	.15	.12	.06	-.12	.14	.10	-.08	.21	-.11	.21	-.14	.12	.19	.34**	.42**	-.17	-.03	-.32**

** $p < .01$ (2-tailed), * $p < .05$ (2-tailed)

Main analyses

Hypothesis 1. Hypothesis 1 suggested that social cynicism is negatively related to indicators of well-being in both nations. This hypothesis was supported by the results of correlation analysis in the Iranian sample. As can be seen in Table 3.7, social cynicism was negatively correlated with all aspects of psychological well-being as well as life satisfaction and positive affect. It was also positively correlated with negative affect.

This hypothesis was also partially supported by the results of correlation analysis in the UK student sample. As can be seen in Table 3.8, social cynicism was negatively correlated with environmental mastery, positive relations, and purpose in life in the British sample.

Hypothesis 2. Hypothesis 2 suggested that reward for application is positively related to indicators of well-being in both nations. This hypothesis received some support in the Iranian sample. As can be seen in Table 3.7, reward for application was positively correlated with personal growth and purpose in life. However, contrary to this hypothesis, in the UK student sample, reward for application was unrelated to all aspects of subjective and psychological well-being (see Table 3.8).

Hypothesis 3. Hypothesis 3 suggested that social complexity was positively related to indicators of well-being in both nations. This hypothesis received some support in the Iranian sample. As can be seen in Table 3.7, social complexity was positively correlated with personal growth, environmental mastery, and purpose in life. However, contrary to this hypothesis, in the UK student sample, social complexity was unrelated to all aspects of subjective and psychological well-being.

Hypothesis 4. Hypothesis 4 suggested that fate control is negatively related to indicators of well-being in both nations. This hypothesis received some support in the Iranian sample. As can be seen in Table 3.7, fate control was negatively correlated with autonomy. This hypothesis also received support in the UK student sample. As suggested by Table 3.8, fate control was negatively correlated with autonomy, environmental mastery, personal growth, positive relations, and purpose in life and positively correlated with negative affect in this sample.

Hypothesis 5. Hypothesis 5 suggested that religiosity is positively related to indicators of well-being in both nations. This hypothesis was supported by the results of correlation analyses in the Iranian sample. As can be seen in Table 3.7, religiosity was positively correlated with environmental mastery, personal growth, purpose in life, and self-acceptance. It was also negatively correlated with negative affect. However, contrary to this hypothesis, religiosity was unrelated to aspects of well-being in the UK student sample (see Table 3.8).

Hypothesis 6. This hypothesis suggested that social axioms significantly predict subjective well-being beyond the role of nation. For testing this hypothesis, a hierarchical regression analysis was conducted. Overall subjective well-being (obtained by summing the scores of life satisfaction and affect balance) was entered as the outcome variable. In the first step, country (1 = Iran, 2 = UK) was entered as one potential predictor. In the second step all social axioms were entered as potential predictors. Results of the regression analysis are demonstrated in Table 3.9.

The results indicate that 18.6% of the total variance in subjective well-being was explained by the overall model comprising nation and social axioms, $R^2 = .186$, adjusted $R^2 = .145$, $F (6, 120) = 4.55$, $p = .001$. In block 1, country ($\beta = .216$) significantly predicted subjective well-being, with UK students reporting higher scores on subjective well-being than Iranian students. After controlling for participants' country, social cynicism significantly explained subjective well-being ($\Delta R^2 = .139$, $p = .002$). This variable was negatively related to subjective well-being ($\beta = -.35$). These results are partially consistent with hypothesis 6, showing that social axioms predict subjective well-being when the influence of country is partialled out.

Table 3.9. Hierarchical regression models testing hypotheses 6 and 7

Dependent variable	Predictors	β	t	R^2	ΔR^2
Subjective well-being					
	Step 1			.04	
	nation	.21	2.472*		
	Step 2			.18	.13
	social cynicism	-.35	-3.77***		
	reward for application	.16	1.59		
	social complexity	-.05	-.61		
	fate control	.04	.49		
	religiosity	.03	.32		
Psychological well-being					
	Step 1			.03	
	nation	.19	2.22*		
	Step 2			.25	.21
	social cynicism	-.32	-3.45**		
	reward for application	.16	1.63		
	social complexity	.22	2.54*		
	fate control	-.13	-1.46		
	religiosity	-.00	-.03		

* $p < .05$; ** $p < .01$; *** $p < .001$.

Hypothesis 7. This hypothesis suggested that social axioms significantly predict psychological well-being over and above the influence of country. For testing this hypothesis,

a hierarchical regression analysis was conducted. Overall psychological well-being (obtained by summing all six dimensions of psychological well-being) was entered as the outcome variable. In the first step, the dichotomous variable of country was entered as the sole predictor. In the second step, all social axioms were entered as potential predictors. The results of the regression analysis are shown in Table 3.9.

The results indicate that 25.7% of the total variance in psychological well-being was explained by the overall model comprising nation and social axioms, $R^2 = .257$, adjusted $R^2 = .219$, $F (6, 116) = 6.68$, $p = .001$. In block 1, nation ($\beta = .198$) significantly predicted psychological well-being, with UK students reporting higher scores on psychological well-being than Iranian students. After controlling for country, social cynicism and social complexity significantly explained psychological well-being ($\Delta R^2 = .218$, $p < .001$). Social cynicism ($\beta = -.32$) was negatively and social complexity ($\beta = .22$) was positively related to psychological well-being. These results are consistent with hypothesis 7, suggesting that social axioms predict psychological well-being after factoring out participants' country.

Hypothesis 8. This hypothesis predicted that social axioms significantly predict subjective well-being over and above the effects of nation and the Big Five. For testing this hypothesis, a hierarchical regression analysis was conducted. The overall subjective well-being score was entered as the outcome variable. In the first step, country was entered as the predictor. In the second step, all the Big Five factors were entered as potential predictors. Finally, in the third step, all social axioms were entered. The results of the regression analysis are shown in Table 3.10.

The results indicate that 52.9% of the total variance in subjective well-being was explained by the overall model comprising country, the Big Five, and social axioms, $R^2 = .529$, adjusted $R^2 = .482$, $F (11, 110) = 11.22$, $p < .001$. In block 1, country ($\beta = .225$) significantly predicted subjective well-being, with UK students reporting higher scores on subjective well-being than Iranian students. After controlling for nation, in the second block, neuroticism ($\beta = -.538$) and agreeableness ($\beta = .192$) were significant predictors of subjective well-being ($\Delta R^2 = .418$, $p < .001$). In the third block, social cynicism significantly explained subjective well-being ($\Delta R^2 = .060$, $p = .02$). Social cynicism ($\beta = -.185$) was negatively related to subjective well-being. These results are consistent with hypothesis 8, suggesting that social axioms predict subjective well-being over and above nation and personality.

Table 3.10. Hierarchical regression model testing hypothesis 8

Dependent variable	Predictors	β	t	R^2	ΔR^2
	Step 1			.05	
	nation	.22	2.52*		
	Step 2			.46	.41
	extraversion	.14	1.87		
	agreeableness	.19	2.44*		
	conscientiousness	.00	.01		
Subjective well-being	neuroticism	-.53	-7.25***		
	openness	-.08	-1.09		
	Step 3			.52	.06
	social cynicism	-.18	-2.25*		
	reward for application	.12	1.60		
	social complexity	.00	.11		
	fate control	.10	1.28		
	religiosity	.11	1.32		

* *p*< .05; ** *p*<.01; *** *p*<.001.

Hypothesis 9. This hypothesis predicted that social axioms significantly predict psychological well-being over and above the effects of country and the Big Five. For testing this hypothesis, a hierarchical regression analysis was conducted. The overall psychological well-being score was entered as the outcome variable. In the first step, country was entered as the predictor. In the second step, all the Big Five factors were entered as potential predictors. In the third step, all social axioms were entered. Results of the regression analysis are displayed in Table 3.11.

Results indicate that 58.3% of the total variance in psychological well-being was explained by the overall model comprising country, the Big Five, and social axioms, R^2= .583, adjusted R^2 = .540, F (11, 105) = 13.35, *p*< .001. In block 1, country (β = .19) significantly predicted psychological well-being, with UK students reporting higher scores on psychological well-being than Iranian students. After controlling for country, in the second block, neuroticism (β = -.367) and agreeableness (β =.325) were significant predictors of psychological well-being (ΔR^2=.407, *p*< .001). In the third block, social complexity significantly explained psychological well-being (ΔR^2= .137, *p*< .001). Social complexity (β =.284) was positively related to psychological well-being. These results are consistent with hypothesis 9,

suggesting that social axioms predict psychological well-being over and above participants' country and personality traits.

Table 3.11. Hierarchical regression model testing hypothesis 9

Dependent variable	Predictors	β	t	R^2	ΔR^2
	Step 1			.04	
	nation	.19	2.17*		
	Step 2			.44	.40
	extraversion	.13	1.73		
	agreeableness	.32	4.00***		
	conscientiousness	.10	1.27		
psychological well-being	Neuroticism	-.36	-4.75***		
	openness	.04	.54		
	Step 3			.58	.13
	social cynicism	-.12	-1.58		
	reward for application	.10	1.37		
	social complexity	.28	3.93***		
	fate control	-.11	-1.50		
	religiosity	.06	.79		

* p< .05; ** p<.01; *** p<.001.

Discussion

Nine hypotheses were developed to guide the analyses. All the hypotheses were supported by the data at least in one country. Below, findings related to each hypothesis are summarized and discussed.

Hypothesis 1

This hypothesis predicted that social cynicism would be negatively related to indicators of mental well-being. This hypothesis was supported in both samples, albeit more so in the Iranian sample. Social cynicism was negatively correlated with all aspects of well-being and positively correlated with negative affect in Iran (see Table 3.7), indicating that this axiom dimension is a strong negative correlate of both subjective and psychological well-being in this country. Among the UK student sample, social cynicism was negatively correlated with environmental mastery, positive relations, and purpose in life (see Table 3.8), suggesting that in the UK student sample this axiom dimension harms the eudaimonic well-being of individuals.

These findings are in line with those of many past studies conducted in different cultures. For instance, this axiom dimension has been found to be negatively correlated with subjective well-being (e.g., Chen et al., 2006; Mak et al., 2010) and job satisfaction (Leung, Ip, & Leung, 2010). It has also been found to be positively correlated with some suicide indicators (e.g., suicidal ideation, psychache, Lam et al., 2010; Chen et al. 2009).

Findings of this study along with those of prior research in other cultures consistently suggest that this axiom dimension has negative implications for individuals' subjective well-being and optimal functioning. Past research suggests some pathways from social cynicism to lowered well-being. For example, it can be suggested that those high in social cynicism are more attentive to negative events and ignore positive events in their lives. According to Leung et al. (2010), people high in social cynicism tend to attend to and register negative events and unfavourable outcomes that occur to other people as well as to them, and this leads to a negative attitude towards life, which, per se, can produce negative affect.

Another pathway might be that those high in social cynicism use ineffective problem-solving strategies or coping styles. Bond, Leung, Au, Tong, and Chemonges-Nielson (2004) found that those scoring higher on social cynicism rejected collaboration and compromise in resolving interpersonal conflicts. Singelis, Hubbard, Her, and an (2003) also found that social cynicism was negatively correlated with interpersonal trust and cognitive flexibility. When "socially cynical individuals face stressful life events, their lack of interpersonal trust and reluctance to collaborate may lead them to detach themselves from their interpersonal world, leaving them without interpersonal support and their problems unresolved" (Chen et al., 2009, p. 135). Ineffective coping styles may be one of the mechanisms through which social cynicism harms mental well-being.

Finally, it can be suggested that self-esteem mediates the relation between social cynicism and well-being. In a study in Hong Kong Chinese students, Lai, Bond, and Hui (2007) found that social cynicism was negatively correlated with self-esteem. Their longitudinal study suggested a possible causal influence of social cynicism on life satisfaction through the mediation agency of self-esteem.

Hypothesis 2

This hypothesis predicted that reward for application would be positively related to indicators of well-being in both nations. This hypothesis received support in the Iranian sample. Reward for application was positively correlated with personal growth and purpose in life (see Table

3.7), suggesting that reward for application is mainly associated with existential aspects of eudaimonic well-being in Iran. But, contrary to this hypothesis, in the UK student sample, reward for application was unrelated to all aspects of subjective and psychological well-being (see Table 3.8).

That reward for application was positively correlated with some aspects of well-being in Iran was in line with the results of past studies. This belief domain has been found to relate positively to life satisfaction (Chen et al., 2006; Mak et al., 2010), better social and interpersonal functioning (Joshanloo et al., 2010), self-esteem (Lam et al., 2010), and negatively to suicidal ideation, depressive cognition, and perceived stress (Chen et al., 2009).

Surprisingly, reward for application (a belief that effort is instrumental to overcoming problems and difficulties) was not significantly correlated with eudaimonic well-being indicators like autonomy and environmental mastery, which capture internal locus of control. Results of this study and past studies do not seem to help explain this finding. Future studies should explore the reasons for this pattern of result in the Iranian sample.

Reward for application was positively correlated with existential aspects of well-being (personal growth and purpose in life) in Iran. Although at first glance, these aspects of well-being may seem irrelevant to reward for application, these findings can be taken to indicate that for Iranian young adults to find meaning and direction in their lives and have a sense of continued growth and development in life, a certain level of internal locus of control is needed. This is particularly relevant in the Iranian culture, which is relatively more collectivistic-traditional than the British culture. In Iran, family structure is more hierarchical and the children in the family are supposed to conform to the desires and decisions of their parents in important domains of their life (e.g., selection of job, course of study, wife and husband, etc.). It is likely that in such a context, those scoring higher on reward for application perceive themselves as having more freedom in making their decisions on their own and based on their own personal wishes, and this may lead to a sense of purpose in life and personal growth.

Another pathway from reward for application to eudaimonic well-being could be optimal coping styles. Safdar et al. (2006) found that reward for application positively predicted active coping in Iran. Reward for application has been also found to correlate positively with cognitive flexibility (Singelis et al., 2003), and accommodation, compromise, and collaboration conflict resolution styles (Bond et al., 2004), which are all related to better adaptation and higher well-being.

Hypothesis 3

This hypothesis predicted that social complexity would be positively related to indicators of well-being in both nations. This hypothesis received support in the Iranian sample. Social complexity was positively correlated with personal growth, environmental mastery, and purpose in life in Iran (see Table 3.7), suggesting that there is significant relation between this axiom dimension and some aspects of eudaimonic well-being. However, contrary to this hypothesis, in the UK student sample, social complexity was unrelated to all aspects of subjective and psychological well-being.

Previous findings related to social complexity are mixed and inconclusive. Past studies conducted mainly in East Asia have documented a negative link between this belief domain and aspects of subjective well-being and functioning. It has been found to be a negative correlate of life satisfaction (Chen et al., 2006; Lai, Bond, &Hui, 2007). Moreover, past research in East Asia has documented positive links between this variable and psychache and perceived burdensomeness (Lam et al., 2010). However, it is also noteworthy that some studies in East Asia have found that this variable is unrelated to negative functioning and well-being (e.g., Chen et al., 2009).

However, two past studies in Iran have revealed that social complexity has positive consequences for individuals' well-being. Safdar et al.'s study (2006) demonstrated that social complexity positively predicted life satisfaction in Iran. Furthermore, Joshanloo et al. (2010) found that this axiom dimension was positively related to gratitude, connectedness to nature, perspective taking, and empathic concern. Social complexity has also been found to be positively related to empathy and amicability and negatively correlated with hostility (Dinca& Iliescu, 2009) in Romania.

I agree with Hui and Hui (2009) that this variable is likely to have a different effect in different situations. For example, in contemporary Iran, considering that the country is currently ruled by a theocratic regime, which is generally trying not to consider non-traditional ways of doing things, and because generally Iranian youths are demanding their more traditional parents to demonstrate more tolerance and understanding, endorsing social complexity beliefs has a significant role to play. In other words, now that the Iranian society is in transition from traditional-hierarchical ways to more democratic and modern ways of being, such variables as social complexity (which involves acknowledging complexity and difference in views) become more important.

Social complexity may function through the mediator variable of perspective taking. Perspective taking refers to spontaneous attempts to adopt the perspectives of other people and see things from their point of view (Davis, 1980). Social complexity refers to the belief in

multiple ways of achieving a given outcome, and agreement that human behaviour is variable across situations. Clearly, endorsement of social complexity beliefs facilitates perspective taking. Interestingly, consistent with this idea, social complexity has been found to be positively associated with such variables as egalitarian political attitudes (Leung & Bond, 2002). Thus, it can be suggested that in the Iranian context, social complexity contributes to well-being through perspective taking. This idea deserves to be further investigated in future studies.

Joshanloo et al. (2010) showed that social complexity beliefs are positively correlated with gratitude in Iran. Emmons et al. (2003) point out that the expression of gratitude is beneficial for the health and vitality of both citizenry and society. Positive psychologists believe that gratitude is a human strength in that it enhances one's personal and relational well-being and is possibly beneficial for society as a whole (Emmons & Shelton, 2002). Considering that Iran is a Muslim country where gratitude towards God and others is considered a virtue contributing to positive mental well-being and functioning, gratitude also can be considered as one of the potential mediators of the relation between social complexity and eudaimonic well-being in Iran.

Hypothesis 4

This hypothesis predicted that fate control would be negatively related to indicators of well-being in both nations. This hypothesis was supported in the Iranian sample. Fate control was negatively correlated with autonomy (see Table 3.7). This hypothesis was also supported in the UK student sample. Fate control was negatively correlated with autonomy, environmental mastery, personal growth, positive relations, and purpose in life in the UK sample. It was also positively correlated with negative affect in the UK student sample (see Table 3.8).

The results are at odds with those of past studies. Whereas past research has generally documented a non-significant correlation between fate control and indicators of social and interpersonal functioning (Joshanloo, et al., 2010), life satisfaction, and suicidal ideation (Lam et al., 2010), in this study, this belief domain was found to be significantly and negatively correlated with multiple aspects of functioning in both nations. It is likely that the use of different outcome variables used in the present study and the previous studies explain the inconsistent findings regarding fate control. Moreover, past research has been conducted mainly in East Asian cultures, but this study used one sample from Middle East and one from Europe. Nevertheless, the conclusion that fate control has more pronounced negative consequences in Iran and England (or generally in non-East Asian cultures) seems to be

premature as some of the outcome variables used in this study have not been used in East Asian cultures before.

A person who endorses fatalistic beliefs believes that he or she can do little to change a situation. However, in "fate control, there is also the proactive component that fate can be improved by the individual's active and judicious intervention, which is adaptive in meeting the challenges of difficult living construed as imposed by fate" (Zhou, Leung, Bond, 2009, p. 367). The results of this study indicate that, in the two samples used here, the control component of the fate control apparently cannot neutralize the fatalistic component's negative consequences, and this leads to lower well-being. As expected, fate control was negatively correlated with autonomy (in both nations) and environmental mastery (in England), indicating that this axiom dimension is associated with external locus of control in these two nations.

The findings revealed that fate control has more pronounced negative effects in the UK students than in Iranian students. This difference might be explained considering the differences between religious affiliations of the two samples. Whereas almost all the Iranian participants were Muslim, most of the UK students were not Muslim. According to Islam, all events happening in the universe (including human being's actions) are predetermined:

> "And with Him are the keys of the unseen; none knoweth them but he. And He knoweth whatsoever is in the land and the sea. Not a leaf falleth but he knoweth it, nor a seed-grain groweth in the darkness of the earth, nor aught of fresh or dry but is in a Book luminous." (Quran, 6:59)[2]

> "And ye shall not will unless it be that Allah, the Lord of the worlds, willeth." (Quran, 81:29).

In Muslim cultures, acceptance of everything that happens and not complaining about negative events in one's life are considered virtuous. A Muslim is taught to rely on and accept God's will in all aspects of his life. In contrast, in the Western cultures (like England), where independence, goal-orientation as well as instrumental practices and ideas in organizing social relations are emphasised, a predominant form of action tends to be using one's individual goals, desires, judgments, and other internal attributes to cause changes in the environment. This form of action is called *primary control,* which is supposed to be the

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[2] . Obtained from: http://quranexplorer.com

opposite of the *secondary control* which is prevalent in non-Western countries (Kitayama, Duffy, & Uchida, 2007; Weisz, Rothbaum, & Blackburn, 1984).

In sum, Muslim cultures are much more likely than Western cultures to accept fatalism and in general accepting one's fate and staying grateful to God in all situations is socially prescribed. Thus, in Iranian culture although fatalism undermines the person's autonomy, it may not have any significant effects on other aspects of psychological functioning, whereas in the British culture it may have more far-reaching effects on more dimensions of well-being. As mentioned before, findings of this study also showed that Iranian students scored significantly higher than UK students on fate control, which is consistent with this line of reasoning.

Hypothesis 5

This hypothesis predicted that religiosity would be positively related to indicators of well-being in both nations. This hypothesis was supported by the results of the correlation analyses in the Iranian sample. Religiosity was positively correlated with environmental mastery, personal growth, purpose in life, and self-acceptance (see Table 3.7). It was also inversely correlated with negative affect. But contrary to this hypothesis, religiosity was unrelated to aspects of well-being in the UK student sample (see Table 3.8).

The patterns of results obtained in the UK student sample were in line with those of past studies conducted in East Asia. Empirical studies, conducted mainly in China, generally indicate that this belief domain is unrelated to aspects of well-being (Mak et al., 2010), perceived stress, depressive cognition, self-esteem (Chen et al., 2009), and suicidal ideation (Chen et al., 2009; Lam et al., 2010). However, in the present study, it was found that religiosity was positively and significantly correlated with multiple aspects of well-being in the Iranian sample.

These findings might be interpreted in view of the dominant religious influence in the Iranian sample. Islam "is not merely a religion, but a code of life. On the one hand, it establishes a relationship between the individual and his or her Creator and, on the other hand; it postulates one's relationship with the community and this world" (Murken & Shah 2002, p. 249). In a theocratic society like Iran, socio-political arrangements formally organise daily life around Islamic principles. Obviously, living in a Muslim country is different from living in secular countries (like England). In a country like Iran where all the religious laws are enforced by the government in the public domains of life and nonconformity with Islamic rules may be harshly punished, religious people are likely to be better off. Indeed, prior studies have

documented strong correlations between religiousness and mental well-being in Iranian samples (e.g., Hadianfar, 2005). Since the Iranian population is religiously homogeneous and is ruled by a theocracy, which actively tries to enforce Islamic laws, it can be suggested that low religiosity would lead to higher levels of cultural estrangement in Iran. Cultural estrangement is conceptualized as discrepancies between personal value priorities and perceived societal values, which may lead to lowered well-being (Cozzarelli & Karafa, 1998).

Another possible mediator between religiosity and well-being in Iran might be gratitude. Joshanloo et al., (2010) showed that religiosity was positively associated with gratitude in Iran. As mentioned earlier, gratitude towards God and others is one of the most fundamental aspects of Islam. Gratitude has been suggested to be a positive predictor of well-being across cultures (Wood et al., 2009).

Hypotheses 6-7

Hypotheses 6 and 7 predicted that social axioms would predict subjective and psychological well-being over and above nation. Hierarchical regression analysis was used to test these hypotheses. Results supported these two hypotheses. Findings showed that after controlling for country, social cynicism significantly predicted subjective well-being, indicating that this variable is a significant predictor of subjective well-being over and above the influence of country. Findings also showed that after controlling for nation, social cynicism (negatively) and social complexity (positively) predicted psychological well-being, suggesting that these two variables are predictive of psychological well-being in both samples.

The present study extended prior research by showing that social complexity can be a positive predictor of well-being in some cultures. Prior research (conducted mainly in East Asia) has documented a negative relation between this variable and well-being. However, this study together with two past studies in Iran (Joshanloo et al, 2010; Safdar et al., 2006) and a study in Romania (Dinca & Iliescu, 2009) show that this variable can be a positive predictor of well-being in cultures other than East Asian.

Although the bivariate correlation between this variable and individual aspects of psychological well-being was not statistically significant in England, in the regression analysis this variable significantly predicted psychological well-being over and above country. This is probably due to using the aggregate score of psychological well-being in the regression analysis, compared to using individual well-being dimensions in the correlation analyses. Moreover, it is noteworthy that although the correlations between this variable and aspects of psychological well-being are not significant in England they are positive. For instance, this variable is positively correlated with personal growth ($r=$ .11) and self-

acceptance (r= .16) in the UK student sample. At any rate, social complexity is a stronger predictor of well-being in Iran than in England.

Hypotheses 8-9

Hypotheses 8 and 9 predicted that social axioms would predict subjective and psychological well-being over and above the country and the Big Five personality factors. The results of the present study showed that social axioms predicted subjective and psychological well-being over and above country and the Big Five. Social cynicism predicted subjective well-being after controlling for the influence of country and the Big Five. And social complexity predicted psychological well-being after factoring out the influence of country and the Big Five.

Social axioms are distinct constructs that can add predictive power in psychological investigations, over and above that provided by personality constructs. Past studies show that social axioms make unique contribution to explaining individual differences in some variables over and above the role of personality, values, and self-esteem. For example, Lam et al. (2010) found that social axioms made unique contributions to explaining individual differences in suicidal ideation over and above those of Big Five personality factors. They suggested their findings support the position that beliefs and personality traits are conceptually and functionally distinct individual differences.

Chen et al. (2006) found that social axioms added predictive power over and above the effects of self-esteem and personality on life satisfaction among Chinese respondents. They argued that one's assessment of the social world 'out there' can explain variance in addition to self-evaluation as measured by self-esteem and personality in one's overall judgment about life. In another study, Bond et al. (2004) used hierarchical regression to establish that social axioms added predictive power over and above that provided by basic human values on styles of conflict resolution, vocational choice, and coping styles. They found that many specific relationships between social axioms and the behavioural tendencies examined were significant, after the effects of value orientations were factored out in the hierarchical regression.

The point should be taken into consideration that on the one hand, the results indicated a relationship between all aspects of social axioms and well-being in the Iranian sample, but only the two aspects of social cynicism and fate control had significant relationships with some aspects of well-being in the UK student sample. On the other hand, the results showed that students living in the UK are more extroverted and emotionally stable compared to the

Iranian sample. The question is how these personality traits explain the variation in the results?

In Study 1 (Chapter 3), the roles of personality and country were statistically controlled, and the results revealed that there was a significant relationship between some components of social axiom and subjective and psychological well-being even after controlling the effects of country and personality traits.

On this basis the differences in personality traits between different cultural groups seemingly cannot explain the variation, but it can be attributed to other factors.

The findings of the present study are consistent with past research and add to the literature by showing that social axioms can add unique contribution to explaining aspects of hedonic and eudaimonic well-being over and above personality factors in Iranian and British students.

Summary of the Findings

This study examined the relationship between social axioms and both hedonic and eudaimonic aspects of well-being in an Iranian and a UK students sample. Two main strengths of the present study are:

1- In this study, a comprehensive set of well-being scales were used to assess multiple aspects of hedonic and eudaimonic well-being. Prior research is limited in that it has only focused on the relation between social axioms and a few aspects of well-being (mainly life satisfaction), and the distinction between hedonic and eudaimonic well-being has been ignored by researchers. Specifically, this study has added to the literature by showing that social axioms have significant associations with aspects of eudaimonic well-being, which have been largely neglected in previous research.

2- This study included samples from two nations which are noticeably different from each other in terms of cultural, religious, economic, social, and political characteristics. This allowed examining if country can influence the relationship between social axioms and aspects of well-being.

All the hypotheses of the study were supported by the data at least in one of the countries. The relationship between social axioms and aspects of well-being was stronger in Iran than the England. That is, the hypotheses were more strongly supported in Iran than England. I will try to partly explain this difference in the General Discussion (Chapter 7) of the present thesis.

It is important to note that the present findings highlight the fact that in some cases axiom dimensions relate differentially to various aspects of well-being. For example, it turns out that social complexity is more strongly related to eudaimonic well-being than hedonic well-being.

Such findings further attest to the fact that the distinction between hedonic and eudaimonic aspects of well-being is empirically and conceptually warranted in Iranian and UK students samples. This issue will be elaborately discussed in the General Discussion (Chapter 7) of this thesis.

In the present study, I found that social cynicism was the most important and robust predictor of subjective well-being when the contribution of nation and personality was partialled out. I also found that social complexity was the strongest and most robust predictor of psychological well-being over and above the role of nation and personality. I was interested in further examining the mechanisms of these relationships. Study 2 (the next chapter) of this thesis was designed towards this end. Two variables were chosen as candidate mediators of these relationships: mindful acceptance and perspective taking. More specifically, Study 2 examined whether mindful acceptance would mediate the relationship between social cynicism and subjective well-being, and whether perspective taking would mediate the relationship between social complexity and psychological well-being.

Chapter 4

Mediators of the Relationship between Social Axioms and Well-Being

Introduction

The findings of Study 1 revealed that social cynicism and social complexity were significant predictors of hedonic and eudaimonic well-being over and above the Big Five personality factors both in England and Iran. More specifically, based on the previous findings social cynicism can be considered the strongest predictor of subjective well-being, and social complexity can be considered the strongest predictor of eudaimonic well-being in both Iranian and UK student samples.

Study 1 and previous studies conducted by other researchers have largely focused on the effects of social beliefs on certain outcomes. Another important question is what the underlying mechanisms of these effects are. In explaining the findings of Study 1, I speculated about some of these mechanisms. For example, I suggested that the relationship between social cynicism and mental well-being may be partially mediated by mindfulness, and that the relationship between social complexity and well-being may be partially mediated by perspective taking. The relationship between social cynicism and well-being may be affected by mediator variables. One of these mediator variables could be mindfulness. Mindfulness is commonly defined as the process of 'paying attention in a particular way: on purpose, in the present moment, nonjudgmentally' (Kabat-Zinn 1994, p. 4).

The mediating role of mindfulness can be assessed by considering its components. A basic component of mindfulness is acceptance without judgment and reaction. This non-judging acceptance paves the way for acquiring vitality (Kabat-Zinn, 1994, pp. 4-5) and could affect well-being (Bear, 2006).

Mindfulness is influenced by social factors both theoretically and empirically. In theory, it seems that those people who tend to social cynicism have a social evaluation and judgment, which is in contradiction with the emphasized non-judgment in mindfulness, and then will experience negative thoughts. The lower the social cynicism the higher the non-judging acceptance, meaning that an individual is subject to higher mindfulness and less likely to

non-adaptive coping mechanisms which impair his/her well-being. In contrast, individuals with higher social cynicism tend less to non-judging acceptance or mindfulness and they are subject to the abovementioned mechanisms (Herbert & Cardaciotto, 2005).

When mindfulness increases, our ability to stand back and observe conditions like anxiety increases as well. Therefore, not only can we break up our automatic behavioural patterns and not be any longer under the control of conditions such as anxiety and fear through re-comprehension, but also, we can use the information arising from these conditions and associate ourselves with emotions and thus improve our psychological well-being (Shapiro, 2006).

Also, I suggested that the relationship between social complexity and well-being may be partially mediated by perspective taking. Retaining behavioural flexibility in different situations (social complexity), especially interpersonal situations, may require that a person can understand others' situations and motives and see the situation from others' points of view and perspectives (perspective taking) because interpreting their actions is not possible without this ability (Wu & Keysar, 2007). Perspective taking helps those who are socially excluded to ask themselves at the first step why they were excluded (Knowles, 2014) or failed to face a social situation correctly. Hence, the relationship between social complexity and perspective taking is predictable and previous studies have confirmed it (e.g. Joshanloo, Afshari, and Rastegar, 2010).

On the other hand, the relationship between perspective taking and variables like satisfaction with life (Gaderman, Schonert-Reichl, and Zumbo, 2010), that will be reviewed later, nominates it as a candidate for the mediator role in the relationship between social complexity and well-being although other variables, e.g. achievement, could play the mediator role in the relationship between social beliefs and well-being.

Given that these hypotheses have not been tested to date, the present study was designed to test them. The reason the present study focused on the underlying mechanisms of the effects of social complexity and social cynicism, and not other social axiom domains, was that in Study 1 these two variables were found to be the strongest predictors of well-being when partialling out the effects of country and the personality traits.

Mindfulness and its Relationship with Mental Well-being

In the last decade, there has been increased interest in the concept of 'mindfulness', with a growing number of psychologists demonstrating an enthusiasm to study it. Psychotherapists have become very keen on using the techniques of mindfulness, and to integrate them into their therapeutic work. Salmon, Santorelli, and Kabat-Zinn (1998) documented that there were more than 240 therapeutic programmes using mindfulness-based techniques up to 1998, and this number has increased by now. Examples include mindfulness-based stress reduction (MBSR; Kabat-Zinn, 1990), acceptance and commitment therapy (ACT; Hayes, Strosahl, & Wilson, 1999), and dialectical behaviour therapy (DBT; Linehan, 1993).

The construct of mindfulness dates back to Buddha's teachings. In the Buddhist tradition, mindfulness has been referred to as "bare attention" or "a nondiscursive registering of events without reaction or mental evaluation, which emphasizes the process of sustained attention rather than the content to what are attended" (Cardaciotto, Herbert, Forman, Moitra, & Farrow, 2008, p. 205). The fact that the concept has its roots in the Buddhist tradition, however, does not mean that it can only be applied to Buddhists. In contemporary psychology, the training and practice of mindfulness can be effectively adopted by all individuals no matter what their religious, philosophical, or cultural background is (Melbourne Academic Mindfulness Interest Group, 2006).

In contemporary psychology, many psychologists have tried to conceptualise mindfulness. Mindfulness is typically regarded as a particular way of paying attention in the present moment. Kabat-Zinn (2003) defines mindfulness as "the awareness that emerges through paying attention on purpose, in the present moment, and non-judgmentally to the unfolding of experience, moment by moment" (p. 145). Likewise, Marlatt and Kristeller (1999) described mindfulness as "bringing one's complete attention to the present experience on a moment-to-moment basis" (p. 68). More recently, Cardaciotto et al. (2008) conceptualized mindfulness as "*the tendency to be highly aware of one's internal and external experiences in the context of an accepting, nonjudgmental stance toward those experiences*" (p. 205, italics in the original). In a state of mindfulness, thoughts and feelings are considered events, and the person does not react to them automatically and habitually. Rather, this kind of self-observation introduces a 'space' between one's perceptions and responses, and accordingly the person can respond to the situations more reflectively (Bishop, et al., 2004).

Two components of mindfulness have been emphasised in the literature: awareness and acceptance (for reviews see Bishop, 2004; Cardaciotto et al., 2008). Below, these two components are briefly introduced.

Awareness. Awareness is characterised as a continuous monitoring of experience with a focus on current experience rather than preoccupation with past or future events (Cardaciotto et al., 2008; Deikman, 1996). This involves successful regulation of attention and concentration (Astin, 1997; Bishop, 2004). A core process of mindfulness is a state of "psychological freedom" that occurs when attention remains unfocused, without attachment to any particular thing or point of view (Martin, 2002). This unbiased receptivity of mind facilitates insight into reality, wherein phenomena that would otherwise remain hidden are noticed (Brown, Ryan, & Creswell, 2007). Rather than getting caught up in ruminative, elaborative thought streams about one's experience, awareness facilitates non-elaborative awareness of thoughts, feelings, and sensations as they arise. Mindfulness thus involves a direct experience of events in the mind and body (Bishop, 2004; Teasdale, Segal, Williams, & Mark, 1995).

Acceptance. In a state of mindfulness, present-moment awareness is conducted nonjudgmentally, with an attitude of acceptance, openness, and compassion toward one's experience (Cardaciotto et al., 2008). In this state, one should act as an impartial witness to one's own experience (Kabat-Zinn, 1990), that is, to abandon one's tendency to categorise and judge one's experiences. In other words, acceptance involves letting go of one's intention to have a different experience and involves an active process of staying experientially open to current thoughts, feelings, and sensations (Bishop, 2004; Hayes, Strosahl, & Wilson, 1999). The mindful mode of processing is pre- or para-conceptual (Brown & Ryan, 2003; Brown, Ryan, & Creswell, 2007; Teasdale, 1999), that is, "it does not compare, categorize, or evaluate, nor does it contemplate, introspect, reflect, or ruminate upon events or experiences based on memory" (Brown, Ryan, & Creswell, 2007, p. 213).

Acceptance allows for increased contact with distressing stimuli (Cardaciotto et al., 2008), and facilitates a direct contact with uncomfortable realities or experiences (Brown, Ryan, Creswell, 2007). This is mainly because adopting a stance of curiosity and acceptance eventually leads to a reduction in the use of cognitive and behavioural strategies to avoid aspects of experience and therefore contributes to improved affect tolerance (Bishop, 2004).

Mindfulness and well-being. Mindfulness has been consistently found to be associated with positive mental health. Brown and Ryan (2003) found that mindfulness was correlated positively with positive affect, self-esteem, life satisfaction, and optimism and negatively with negative affect, anxiety, and depression. Using the Symptom Checklist (SCL-90; Derogatis, 1977) to assess psychological distress, Walach et al. (2006) found that mindfulness was negatively correlated with global psychological distress. Cardaciotto et al. (2008) reported a negative correlation between mindfulness and anxiety and depression. They

also found that a nonclinical student sample scored significantly higher on mindfulness than a clinical sample.

Past research has also documented a negative correlation between mindfulness and neuroticism (Baer, Smith, & Allen, 2004; Baer et al., 2006), which is associated with negative affectivity and mental illness. Two meta-analyses (Grossman, Niemann, Schmidt, & Walach, 2004; Baer, 2003) have found significant relationships between mindfulness and mental health indicators as well. Finally, mindfulness has also been found to have positive implications for mental health in Iran. For example, Ghorbani, Watson, and Weathington (2009) revealed that mindfulness predicted greater self-esteem and subjective well-being and lower levels of anxiety, depression, perceived stress, and impaired control over mental activities in Iranian university students.

Brown and Ryan (2003) argue that mindfulness can add clarity and vividness to current experience and encourage closer, moment-to-moment sensory contact with life. Apart from this, it has been suggested that mindfulness boosts mental health indirectly and through some intervening variables. For example, Brown, Ryan, and Creswell (2007) suggest that mindfulness may operate through the enhancement of "self-regulated functioning" associated with ongoing attentional sensitivity to psychological, somatic, and environmental cues. Another mechanism suggested by the researchers is ruminative thinking. Ruminative thinking is associated with depression and anxiety (Siegle, Moore, & Thase, 2004). The ability to control effectively the focus of attention, and attention to the present moment (i.e., high mindfulness) are believed by some researchers to prevent ruminative thinking (Baer, 2003), which in turn contributes to positive mental health.

Perspective Taking and its Relationship with Mental Well-Being

Perspective taking is defined as a tendency or ability of the respondent to adopt the perspective, or point of view, of other people (Davis, 1980). In other words, perspective taking is a process where a person places himself or herself in another person's shoes to obtain an understanding of that person's thoughts and feelings. It is an interpersonal process that involves "decentering" or a conscious effort to differentiate one's personal view from the view of another (Hogan 1969, Lobchuck, 2006). Perspective taking is considered to be the cognitive dimension of empathy (Williams, 1990; Stephen & Finlay, 1999, see also Davis, 1980). In a study involving twins, it was found that emotional components of empathy (such as emphatic concern) are more heritable than perspective taking (Davis, Luce, & Karus, 1994), which is a basically learned cognitive skill.

Perspective taking has been shown to be associated with lower interpersonal aggression (Richardson, Hammock, Smith, Gardner, & Signo, 1994), higher relationship satisfaction (Franzoi, Davis, & Young, 1995), more valuing of outgroup members (e.g., Galinsky, Ku, & Wang, 2005), and less stereotyping and stigmatising attitudes towards many minorities and groups (e.g., Batson et al., 1997; Vescio, Sechrist, & Paolucci, 2003). It is also associated with successful conflict resolution (Galinsky, Maddux, Gilin, & White, 2008) and greater cooperation (Parker & Axtell, 2001). Todd, Bodenhausen, Richeson, and Galinsky (2011) found that perspective taking attenuated automatic expressions of racial bias.

Perspective taking has been found to correlate positively with life satisfaction, self-efficacy, and optimism in children (Gadermann, Schonert-Reichl, & Zumbo, 2010). Past research has also documented a positive link between perspective taking and connectedness to nature in American samples (Mayer & Frantz, 2004). Finally, in an Iranian university student sample, Joshanloo, Afshari, and Rastegar (2010) found that perspective taking was positively correlated with gratitude, connectedness to nature, and emphatic concern. It can be concluded that perspective taking, as a cognitive skill, contributes to different aspects of mental well-being.

In sum, both mindfulness and perspective-taking have been found to be positively associated with mental well-being. I will outline below why these two variables may mediate the relationship between social cynicism and mental well-being as well as social complexity and well-being, respectively.

Hypotheses

Social cynicism refers to a negative view of human nature, a view that life produces unhappiness, that people exploit others, and a mistrust of social institutions. Prior research suggests that those high in social cynicism are more attentive to negative events and ignore positive events in their lives. According to Leung et al. (2010), people high in social cynicism attend to and register negative events and unfavourable outcomes that occur to other people as well as to themselves. Those high on social cynicism tend to stick to their pessimistic beliefs even in the face of events disproving those beliefs. Such a tendency suggests that the individual does not view the world mindfully and non-judgmentally. In view of this, it can be suggested that social cynicism is negatively related to mindfulness.

 As suggested above, mindfulness can be defined as a receptive attention to and awareness of present events and experiences (Brown & Ryan, 2003). In other words, it is "the awareness that emerges through paying attention on purpose, in the present moment, and non-

judgmentally to the unfolding of experience, moment by moment" (Kabat-Zinn, 2003, p. 145). Social cynicism seems to be more connected to the acceptance component of mindfulness than the awareness component. The acceptance component of mindfulness refers to abandoning one's tendency to categorise and judge one's experiences. In other words, acceptance involves abandoning one's intention to have a different experience and an active process of staying experientially open to the current thoughts, feelings, and sensations (Bishop, 2004; Hayes, Strosahl, & Wilson, 1999). Given that cynicism comes with a high level of judgementality, it seems to be at odds with mindful acceptance. On this basis, it can be suggested that lowered mindfulness is one of the mechanisms through which social cynicism harms mental health. In other words, it is suggested here that mindful acceptance mediates the relationship between social cynicism and well-being. Given the more intuitive conceptual link between social cynicism and the acceptance component, the present study included only a measure of mindful acceptance.

Prior empirical findings support this mediation hypothesis. Mindfulness has been found to correlate negatively with neuroticism (Baer, Smith, & Allen, 2004; Baer et al., 2006), which is a positive correlate of social cynicism (Chen et al., 2006). Mindfulness has also been found to correlate positively with optimism (Brown & Ryan, 2003), which is roughly the opposite of social cynicism. Past research also shows that a lower negativity bias (i.e., the tendency to weight negative information, events, or emotions more than positive ones) is associated with higher mindfulness (Kiken & Shook, 2011). Mindfulness is also associated with fewer cognitive errors (Herndon, 2008). Therefore, it can be hypothesised that the acceptance component of mindfulness mediates the relationship between social cynicism and subjective well-being. Since social cynicism was the strongest predictor of *subjective* well-being (see Study 1), this hypothesis can be stated as the following:

1- Mindful acceptance partially mediates the relationship between social cynicism and subjective well-being.

As mentioned earlier, perspective taking refers to spontaneous attempts to adopt the perspectives of other people and see things from their point of view (Davis, 1980). This concept seems to be clearly associated with the concept of social complexity, which refers to the belief in multiple ways of achieving a given outcome, and the belief that human behaviour is variable across situations. It can, therefore, be suggested that endorsement of social complexity beliefs facilitates perspective taking. Past empirical research in Iran supports this prediction. Using a sample of Iranian students, Joshanloo et al. (2010) documented a positive correlation between social complexity and perspective taking.

We also know that perspective taking is generally related to positive well-being (e.g., Gadermann et al., 2010). Therefore, it can be hypothesised that social complexity contributes to eudaimonic well-being through the mediation agency of perspective taking. Since perspective taking was the strongest predictor of *psychological* well-being (see Study 1), this hypothesis can be stated as the following:

2- Perspective taking partially mediates the relationship between social complexity and psychological well-being.

As a secondary aim, this study applied a measure of social desirability to exclude the possibility that the correlations between the two belief domains (i.e., social cynicism and social complexity, respectively) and aspects of well-being are affected by participants' tendency to respond to questions in a socially desirable manner. Social desirability has been defined as "a need for social approval and acceptance and the belief that this can be attained by means of culturally acceptable and appropriate behaviours" (Marlowe & Crowne, 1961, p. 109). A socially desirable style of response is used either to unconsciously repress thoughts and feelings that are psychologically threatening, or to consciously distort responses in order to self-enhance (Paulhus, 1984, 1989). A high correlation between social desirability measures and any psychological scale raises concern about the validity of that scale. Considering that all of the measures in this study and Study 1 were based on the self-report of participants, in the present study, the contribution of social desirability was partialled out to see if the correlation between the predictors (i.e., social cynicism and social complexity, respectively) and the hypothesised outcomes (subjective well-being and psychological well-being) would remain significant.

Method

Participants

The participants in this study were 72 Iranian university students, because from the outset, the basis and purpose of the study was to compare Iranians living in Iran with Iranians living in the UK.

As mentioned in Study 1, convenience sampling was used for the students at the University of Tehran, and those who were randomly available at the moment of sampling were selected as the sample. For this purpose, the sample included those students having both undergraduate and postgraduate degrees who were visiting the university's campus and

library, or those who had volunteered to participate in the study in response to a talk with them.

Of the sample, 34 were female students (47.2%) and 38 were male students. Sixty-nine participants were undergraduates and the remaining two participants were graduate students (one student did not answer this question). Age ranged from 18 to 27, with a mean of 21.10 ($SD = 2.05$). Forty-four students reported that they had no partner, 24 reported that they were "in a relationship but not living with partner", one reported that he was "in a relationship and living with partner", one reported that her partner was dead, and one student did not answer this question. Sixty-eight students reported that they had no jobs and two students reported that they had part-time jobs.

Forty-two, six, 17, and four reported their ethnicity to be Fars, Kurd, Turk, and Lor, respectively, and three students chose "others". Seventy students reported being Muslims and two students did not self-report their religion. In response to the question: "Do you consider that you are actively practising your religion?", 34 chose "no" and 35 chose "yes". Three students did not answer this question.

Four of the students reported that their fathers were illiterate. Twelve reported their fathers' highest educational qualification to be elementary school diploma, four secondary school diplomas, 22 high school diplomas, 10 junior college diplomas, 10 bachelor's degrees, and eight master's degree. One student did not know the answer to this question, and one student did not report his or her father's educational qualification. Six of the students reported that their mothers were illiterate. Ten reported their mothers' highest educational qualification to be elementary school diploma, 11 secondary school diplomas, 24 high school diplomas, five junior college diplomas, 13 bachelor's degrees, one master's degree, and one PhD. One of the students did not report his or her mother's educational qualification.

Measures

In addition to social cynicism, social complexity, affect balance, life satisfaction, and psychological well-being scales (as described in Study 1), three other scales were applied.

Perspective taking. The perspective taking subscale of the Empathy Questionnaire (Davis, 1980) was used to measure this construct in the current study. This scale contains seven items (e.g., "I try to look at everybody's side of a disagreement before I make a decision."), which assess spontaneous attempts to adopt the perspectives of other people and see things from their point of view. Respondents indicated for each question how well the items described them on a 5-point scale anchored by 1 "*does not describe me well*" and 5 "*describes me very*

well". The questionnaire content including the aforementioned sub-scale was fully validated in an Iranian (Farsi speaking) sample and the validity and reliability were confirmed. Feizabadi, Farzad, and Shahraray (2008) also examined and confirmed the validity in their study on a large group of male and female students at state universities in Tehran. The 7-item version of the subscale used in this study was previously involved in many other studies (e.g. Allah Qolilu, 2009; Zahid, Allah Qolilu, Abolghasemi, and Narimani, 2009; Feizabadi, Farzad, and Shahraray, 2007).

Mindfulness. The acceptance subscale of the Philadelphia Mindfulness Scale (Cardaciotto et al., 2008) was employed to assess mindful acceptance. Items (e.g., "I tell myself that I shouldn't have certain thoughts.") of this 10-item scale were rated on a 5-point scale with endpoints of 1 = *never* and 5 = *very often*. Cardaciotto et al. reported good levels of internal consistency for this scale. Convergent and discriminant validity of the subscales of the Philadelphia Mindfulness Scale have been established in prior research (Cardaciotto et al., 2008), the questionnaire was validated in an Iranian student sample (e.g. Parto & Besharat, 2011) and appropriate psychometric properties were reported (e.g. Parto, 2010).

Social desirability. Paulhus's Balanced Inventory of Desirable Responding (BIDR; Paulhus, 1984) was applied for assessing social desirability. The BIDR consists of 40 items developed to assess a participant's tendency to give socially desirable responses. The items are rated on a 7-point scale ranging from 1 = *not true* to 7 = *very true*. Two subscales include self-deception (e.g., "I am a completely rational person.") and impression management (e.g., "I have never dropped litter on the street."). The self-deceptive enhancement subscale measures honest but inflated self-descriptions that reflect an unconscious bias toward favourable self-portrayal. The impression management subscale measures conscious inflated self-descriptions, faking, or lying. Item No. 13 ("The reason I vote is because my vote can make a difference.") of the self-deceptive enhancement was eliminated before administration of the questionnaire because of its political content (considering the unresolved post-election political crisis in Iran after the presidential election in 2009). According to its manual, this scale is dichotomously scored (Paulhus, 1991). After inversely keyed items were reversed, only extreme responses were counted. That is, 1 point was awarded for each "6" or "7" response on both self-deceptive enhancement and impression management items. The total score was computed by summing up scores of both subscales (Paulhus, 1984).

Typical alphas are .67-.77 for self-deception enhancement, and .77-.85 for impression management (Paulhus, 1991). Test-retest correlations over a 5-week period were reported by

Paulhus (1991) to be 0.69 for self-deceptive enhancement, and 0.65 for impression management. This scale thus has satisfactory structural, concurrent, and discriminant validity (Paulhus, 1991).

Although a Farsi version is available, this has not been published. Therefore, to ensure accuracy, the English version was translated into Farsi by the researcher and a Farsi language expert. Examining the similarity between the new translation and the previous version showed that they were largely similar. The Farsi translated version was again translated back into English by a bilingual person, and the researcher was assured of the similarity. After ensuring the translation accuracy, a pilot study was conducted on a small sample of Iranian students, and none of the items were recognized as unacceptable or needing to be removed or modified. The questionnaire was then considered as the final questionnaire. In the study, the Cronbach's alpha obtained was 0.75, which was favourable.

Results

Statistical analysis revealed that the Cronbach's alpha value for the perspective taking scale could be improved by omitting two of the items (items 1 and 4). By omission of these items, the Cronbach's alpha value for the scale increased from .38 to .60. Joshanloo et al. (2010) report an alpha of .72 for this scale in an Iranian sample. They also needed to omit the first item to improve the internal consistency of the scale.

Table 4.1 shows means, standard deviations, Cronbach alpha values, skewness and kurtosis scores of all variables of the study for both sexes. Prior to the analyses, all the variables of the study were examined for accuracy of data entry, missing values, outliers, and normality.

Table 4.1. Cronbach's alpha values and descriptive statistics for the variables used in the study

	α	Total M (SD)	Females M (SD)	Males M (SD)	Skewness	Kurtosis
PWB						
Autonomy	.61	40.1 (7.3)	40.5 (8.6)	39.8 (5.9)	.37	.16
Environmental mastery	.73	41.2 (8.0)	43.1 (8.1)	39.6 (7.7)	-.24	.29
Personal growth	.69	44.1 (7.7)	46.2 (7.0)	42.1 (7.9)	-.16	-.53
Positive relations	.79	45.5 (8.8)	48.7 (8.1)	42.8 (8.6)	-.09	-.91
Purpose in life	.75	43.3 (8.7)	45.2 (7.8)	41.5 (9.2)	-.24	-.06
Self-acceptance	.77	41.0 (8.8)	43.0 (8.2)	39.3 (9.0)	-.23	.89
Total PWB	.91	253.8 (36.4)	267.5 (34.3)	241.6 (34.1)	.06	-.41
SWB						
Life satisfaction	.78	22.1 (5.7)	24.4 (4.3)	20.0 (6.1)	-.67	.60
Positive affect	.83	19.33 (4.1)	19.9 (4.4)	18.7 (3.9)	-.16	-.20
Negative affect	.87	14.8 (5.4)	14.4 (5.4)	15.1 (5.4)	.35	-.70
Overall SWB	-	00 (1.7)	.52 (1.3)	-.48 (1.8)	-.55	-.04
Social axioms						
Social cynicism	.78	54.6 (8.8)	54.0 (9.8)	55.2 (7.8)	.44	.65
Social complexity	.53	44.1 (4.0)	45.4 (2.6)	43.0 (4.7)	-.93	1.50
Social desirability						
Self-deceptive enhancement	.61	4.7 (2.7)	4.5 (2.4)	4.9 (3.0)	.42	-.26
Impression management	.70	6.2 (3.3)	6.5 (2.7)	6.0 (3.9)	.89	1.21
Overall social desirability	.74	11.0 (5.0)	11.1 (4.1)	11.0 (5.8)	.36	-.01
Mindfulness						
Acceptance	.62	31.7 (5.3)	31.2 (5.3)	32.1 (5.3)	-.21	.44
Empathy						
Perspective taking	.61	16.8 (4.1)	17.2 (3.8)	16.5 (4.3)	.17	-.07

Note. PWB = Psychological well-being; SWB = Subjective well-being

Missing data. As a general rule, missing data on 5% or fewer of the cases can be ignored (Meyers, Gamst, & Guarino, 2006). Analyses showed variables contained missing data on 1.4% or fewer of the cases (ranging from 0 to 1.4%) in the sample. In view of this low rate of missing data, missing data does not appear to be a serious problem in this study. Therefore, no extra measures were taken.

Outliers. To identify the univariate outliers, the variable score distributions were examined. One univariate outlier was detected. This case had an extremely low *z* score on social complexity (the criterion used for identifying of outliers was z scores in excess of the absolute value of 3.29, as proposed by Tabachnick & Fidell, 2001). Based on the procedure proposed by Tabachnick and Fidell, to reduce the impact of this case on the analyses, a new

score was assigned to the outlying case on the variable in question that was one unit larger than the next most extreme score in the distribution. One multivariate outlier was also detected by means of inspection of Mahalanobis distances with $p < .001$. This case was excluded from the analyses. The final sample used for analyses, therefore, consisted of 71 students.

Normality. A further step was taken to examine the normality of the variables. For this purpose, the skewness and kurtosis scores of the variables were calculated. Skewness and kurtosis of all variables are demonstrated in Table 4.1. The results revealed that skewness and kurtosis scores of all variables were well within the generally accepted range of -2 to +2, indicating that deviation from normality was not considerable. Therefore, no extra corrective measures were needed.

Gender differences. Gender differences for all variables of the study were examined using independent t tests. Results of the t tests showed that there were several significant gender differences: female students scored significantly higher than male students on social complexity, $t(68) = 2.7$, $p = .009$, overall psychological well-being, $t(65) = 3.29$, $p = .002$, life satisfaction, $t(64.3) = 3.4$, $p = .001$, subjective well-being, $t(68) = 2.69$, $p = .009$, personal growth, $t(68) = 2.44$, $p = .01$, positive relationships, $t(69) = 3.01$, $p = .004$, and purpose in life $t(68) = 2.04$, $p = .04$.

Bivariate intercorrelations. Table 4.2 shows the Pearson's r intercorrelations for all variables measured in the study.

Table 4.2. Pearson's r intercorrelations for all study variables

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1.Total psychological well-being	1														
2.Autonomy	.48**	1													
3.Environmental mastery	.82**	.37**	1												
4.Personal growth	.83**	.35**	.57**	1											
5.Positive relations	.68**	.11	.48**	.58**	1										
6.Purpose in life	.77**	.26*	.60**	.65**	.38**	1									
7.Self-acceptance	.81**	.25*	.71**	.54**	.52**	.61**	1								
8.Total subjective well-being	.54**	.09	.46**	.33**	.23*	.51**	.66**	1							
9.Life satisfaction	.33**	-.03	.26*	.23*	.11	.43**	.47**	.85**	1						
10.Positive affect	.39**	.09	.31**	.15	.18	.31**	.47**	.70**	.39**	1					
11.Negative affect	-.58**	-.23*	-.55**	-.38**	-.28**	-.43**	-.63**	-.74**	-.38**	-.45**	1				
12.Social cynicism	-.43**	-.09	-.47**	-.37**	-.40**	-.33**	-.46**	-.17	-.03	-.09	.33**	1			
13.Social complexity	.42**	.23	.41**	.41**	.42**	.27*	.18	.18	.17	-.05	-.23*	-.10	1		
14.Social desirability	.16	.11	.21	.16	.15	.27*	.12	.13	.09	.02	-.20	-.26*	.06	1	
15.Perspective taking	.25*	.04	.28*	.19	.33**	.18	.23*	.08	.01	.05	-.16	-.11	.27*	.46**	1
16.Mindful acceptance	.06	.20	-.00	.01	-.02	.08	.03	.15	.01	.27*	-.17	-.18	-.19	.05	-.17

$* < 0.05 \quad ** < 0.01$

Main analyses

The two hypotheses of the present study concern meditational relationships between certain variables. According to Baron and Kenny (1986), mediating factors are those that explain the relationship between predictor and outcome variables. "Mediators explain how external physical events take on internal psychological significance. Whereas moderator variables specify when certain effects will hold, mediators speak to how or why such effects occur" (p. 1176). In the present study, Baron and Kenny's (1986) method for mediation analysis was used to test the mediating relationships. Baron and Kenny introduced their method for mediation analysis in a landmark and far-reaching article, which is one of the most highly cited articles in the history of social sciences. According to Google Scholar, this article has been cited about 40000 times[3]. Baron and Kenny's method posits that a variable may be considered a mediator if it meets the following conditions:

a)   The independent variable should be correlated with the outcome.

b)   The independent variable should be correlated with the mediator.

c)   The mediator should be correlated with the outcome.

d)   Lastly, a full mediation requires that the previously significant relationship between the outcome and independent variable is no longer significant when the mediator is controlled in a separate hierarchical regression. Partial mediation is the case in which the relationship between the predictor and the outcome is reduced in absolute size but is still different from zero when the mediator is controlled for.

Baron and Kenny's method for examining mediation was used to test the two meditational hypotheses of the present study. For each hypothesis, a separate set of analyses were conducted.

Hypothesis 1. Hypothesis 1 suggested that mindful acceptance partially mediates the relationship between social cynicism and subjective well-being. As explained before, Baron and Kenny's (1986) method posits that a variable may be considered a mediator if it meets the following conditions:

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[3] Last checked on 9/6/2013
http://scholar.google.co.nz/scholar?cites=8691983795575065024&as_sdt=2005&sciodt=0,5&hl=en

a)	The predictor variable should be correlated with the outcome variable. For the present hypothesis, this would entail establishing a significant relationship between the predictor variable of social cynicism and the outcome variable of subjective well-being.

b)	The predictor should be correlated with the mediator. For the present hypothesis, this would involve formulating a regression analysis. social cynicism is the predictor of the mediator variable of mindful acceptance.

c)	The mediator should be correlated with the outcome. For the present hypothesis, this would involve showing that mindful acceptance significantly predicts subjective well-being.

d)	Lastly, for a mediation effect to be significant, it is required that the previously significant relationship between the dependent (social cynicism) and outcome variable (subjective well-being) is no longer significant when the mediator (mindful acceptance) is controlled for in a separate hierarchical regression.

Following these guidelines, three regression analyses were conducted. In the first regression analysis, social cynicism (the predictor) (β = -.17) failed to predict subjective well-being (the outcome), R^2= .03, adjusted R^2 = .016, F (1, 67) = 2.11, p = .151. This finding was surprising, as social cynicism was found to be a strong predictor of subjective well-being in Study 1. In the second regression analysis, social cynicism (β = .15) failed to predict mindful acceptance (the mediator), R^2= .035, adjusted R^2 = .021, F (1, 67) = 2.43, p = .123. In the third regression analysis, mindful acceptance (β = .15) failed to predict subjective well-being, R^2= .024, adjusted R^2 = .009, F (1, 67) = 1.61, p = .208. Considering that the first three criteria for a significant mediation were not met, there was no point in testing the fourth criterion. Based on the results of the mediation analysis, therefore, the first hypothesis of this study was not supported.

Hypothesis 2. Four regression analyses were conducted. In the first regression analysis, social complexity (the predictor) (β =.42) significantly predicted psychological well-being (the outcome), R^2= .182, adjusted R^2 = .17, F (1, 65) = 14.49, p = .000. In the second regression analysis, social complexity (β = .27) significantly predicted perspective taking (the mediator), R^2= .07, adjusted R^2 = .06, F (1, 68) = 5.32, p = .02. In the third regression analysis, perspective taking (β = .25) significantly predicted psychological well-being, R^2= .06, adjusted R^2 = .05, F (1, 66) = 4.70, p = .03. And finally, a hierarchical regression analysis was conducted to examine if the predictor's contribution to the outcome would be reduced after controlling for the mediator. Psychological well-being was entered as the outcome variable. Perspective taking was entered in the first step and social complexity was entered in the second step. Twenty percent of the total variance in psychological well-being was

explained by the overall model comprising perspective taking and social complexity, $R^2 = .20$, adjusted $R^2 = .18$, $F(2, 64) = 8.22$, $p = .001$. After controlling for perspective taking ($\beta = .15$), social complexity ($\beta = .38$) significantly explained psychological well-being ($\Delta R^2 = .142$, $p = .001$). No multicollinearity was found between the predictors. Results of the hierarchical regression are demonstrated in Table 4.3. The relationship among the variables of this hypothesis is schematically demonstrated in Figure 4.1. These findings show that perspective taking accounts for about 4% of the shared variance between social complexity and psychological well-being. This finding is consistent with the prediction of hypothesis 2, verifying the prediction that perspective taking partially mediates the relationship between social complexity and psychological well-being.

Figure 4.1. Standardised regression coefficients for the relationship between social complexity and psychological well-being, as mediated by perspective taking. The standardised regression coefficient controlling for perspective taking is presented in parentheses.
* $p < .05$ ** $p < .01$

Table 4.3. Hierarchical regression models for testing Hypothesis 2

	β	t	R^2	ΔR^2	.
Step 1			.06	-	
Perspective taking	.24	2.07*			
Step 2			.20	.14	
Social complexity	.38	3.38**			

* $p < .05$; ** $p < .01$
Note. In a separate regression analysis, social complexity predicted psychological well-being significantly $\beta = .42$, $R^2 = .182$, $F(1, 65) = 14.49$, $p = .000$

Post Hoc Analyses

The pattern of relationships in this study was somewhat different from that in the first study. The most surprising finding is that, while social cynicism was strongly correlated with subjective well-being in Study 1, it was not significantly correlated with it in the second

study. I was also interested to see if there have been any differences in the average scores of central variables between the samples of Study 1 and that of Study 2. Examining the cross-sample differences in the scores of the variables might provide insights that help explain some of the differences. For example, dramatic mean level differences between the two samples, may lead to different correlation patterns. On this basis, several independent sample *t* tests were conducted to examine if there were any differences in variable scores between the Iranian samples used in Study 1 and Study 2. These variables included age, autonomy, environmental mastery, personal growth, positive relations, self-acceptance, purpose in life, social complexity, social cynicism, and satisfaction with life, positive affect, and negative affect. The results of the t tests are reported in Table 4.4.

Table 4.4. t tests between Iranian samples of study 1 and 2

Variable	Study 1		Study 2		t	df	*p*
	M	SD	M	SD			
age	21.97	1.95	21.13	2.052	-2.47	138	0.01
Social cynicism	53.46	6.47	54.68	8.88	-.93	139	.35
Social complexity	44.17	3.83	44.18	4.06	-.01	141	.99
Autonomy	41.67	7.28	40.18	7.30	1.22	142	.22
Environmental mastery	41.53	8.20	41.27	8.10	.192	139	.84
Personal growth	43.35	6.73	44.18	7.80	-.68	141	.49
Positive relations	40.95	10.52	45.59	8.93	-2.83	141	.00
Purpose in life	43.39	8.42	43.38	8.80	.00	141	.99
Self-acceptance	41.07	9.42	41.09	8.87	-.01	140	.98
Negative affect	14.76	4.82	14.81	5.44	-.05	141	.95
Positive affect	18.78	4.27	19.44	4.26	-.92	141	.35
Life satisfaction	22.02	7.10	22.09	5.77	-.06	137.66	.94

The two samples were found to be significantly different only on positive relations, $t(141) = -2.83$, $p = .01$, and age, $t(138) = -2.47$, $p < .05$. Moreover, the results of a χ^2 test showed that there was no significant relationship between the gender ratio and sample $\chi^2(1) = .25$, $p = .61$. Therefore, in terms of mean differences on the focal variables of this thesis, similarities between the samples seem to outweigh differences.

Considering that mindful acceptance failed to mediate the relationship between social cynicism and subjective well-being, a moderation analysis was conducted to see if it moderated this relationship. Moderation effects concern the effect of a third variable (moderator) on the strength or direction of a predictor–outcome correlation. When mediation does not hold, it is worthwhile to examine if moderation holds. Indeed, sometimes, counterintuitive or conflicting findings motivate researchers to re-examine their underlying theoretical models, which is justifiable. "For example, the researchers may attempt to specify the conditions under which the hypothesized predictor–criterion relationship will hold true" (Beaubien, 2005, p. 1256).

The fact that, in the present study, the correlation between social cynicism and mindful acceptance was weak and non-significant (r = -.18), shows that the respondents' scores on social cynicism and mindful acceptance were to a large extent independent. As an alternative to the mediation hypothesis tested above, one could hypothesise that social cynicism would be associated negatively with subjective well-being when a respondent's score on mindful acceptance is low, but not when he or she is high on mindful acceptance. In a sense, this post-hoc hypothesis suggests that acceptance could serve as a protective factor. That is, a high score on mindful acceptance may compensate for the negative effects of social cynicism. This makes sense considering the finding that social cynicism and mindful acceptance had a small amount of shared variance in the present study.

For testing this hypothesis, regression analysis was used (Baron & Kenny, 1986). For this purpose, the predictor and the moderator as well as the interaction term of the predictor and moderator are entered in a regression analysis to predict the outcome. It is necessary to centre the scores on the predictor and moderator before forming the interaction term. The aim of centring is to decrease the correlation between the interaction term and the predictor and moderator, in order to keep the product term distinguishable from the two original variables (Warner, 2012). To centre a variable, the sample mean is subtracted from a variable's scores. Subjective well-being was used as the criterion variable. The predictor variable (social cynicism), the moderator (acceptance), and the interaction term between the predictor and moderator were entered as predictors. A significant interaction term indicates a significant moderating effect (Warner, 2012). The results of the hierarchical regression are demonstrated in Table 3.5. As can be seen in the table, the interaction term was not a significant predictor of subjective well-being after controlling for the moderator and predictor's unique contributions. Therefore, it can be concluded that acceptance does not moderate the relationship between these two variables.

Table 4.5. Hierarchical regression model for testing the moderating role of acceptance on the relationship between social cynicism and subjective well-being

	β	t	p	R^2	ΔR^2
Social cynicism	-.173	-1.425	.159	2.28	.08
Acceptance	.176	1.440	.155		
Social cynicism $\times$ acceptance	.207	1.715	.091		

Social Desirability

Because of potential susceptibility of self-reports to social-desirability response bias (Fisher, 1993), a measure of social desirability was also included in this study to investigate whether

such bias was present. Table 4.6 demonstrates the bivariate and partial correlations between the predictors, mediators, and outcome variables (overall social desirability partialled out). The results reveal that social desirability is not a serious threat in the context of this study. First, social desirability is not significantly correlated with subjective and psychological well-being, indicating that participants' self-reports of well-being are largely unaffected by social desirability tendencies. Secondly, the correlation estimates between social cynicism, social complexity, and mindful acceptance with the two aspects of well-being are largely unaffected when social desirability is partialled out, as indicated by the lack of substantial change in the direction and size of these correlations.

However, the correlation between perspective taking and psychological well-being turns out to be non-significant when social desirability is partialled out. Although the difference in size between the two correlation estimates is slight, this finding deserves more attention. If similar effects are replicated in future studies, researchers might want to choose another scale to assess perspective taking that is unaffected by social desirability tendencies (which, given the dearth of scales for measuring perspective taking, seems to be a difficult task). It is also noteworthy that social cynicism was negatively correlated with social desirability, which will be discussed in the Discussion. However, in the context of this study, the effect of social desirability seems to be limited, and the findings are largely unaffected by this variable.

Table 4.6. Bivariate Pearson's r and partial correlations between the variables.

	Subjective WB		Psychological WB	
	r	partial	*r*	partial
Social cynicism	-.17	-.15	-.44**	-.41**
Social complexity	.18	.18	.42**	.43**
Mindful acceptance	.15	.16	.06	.06
Perspective taking	.08	.02	.25*	.18
Self-deceptive enhancement	.13	-	.08	-
Impression management	.09	-	.15	-
Overall social desirability	.13	-	.16	-

$*\ < 0.05\ **\ < 0.01$

Note: Partial correlations show correlations after social desirability has been partialled out

Discussion

The present study sought to further explain the relationship between social axioms and well-being by use of mediation analysis. This study followed up on Study 1 by examining whether mindful acceptance was a potential mediator of the relationship between social cynicism and subjective well-being, and perspective taking was a potential mediator between social complexity and psychological well-being. Findings indicate that acceptance does not mediate

or moderate the relationship between social cynicism and subjective well-being. Hypothesis 1 was rejected by the findings of this study. It was found that the predictor (social cynicism) and the mediator (mindful acceptance) were not significantly correlated with the outcome (subjective well-being). Therefore, fundamental criteria for a significant mediating relationship were not met. The fact that mindful acceptance was not significantly correlated with subjective well-being is inconsistent with past findings in Iran (e.g., Ghorbani, Watson, & Weathington, 2009) and other countries (e.g., Brown & Ryan, 2003; Baer, 2003; Cardaciotto et al., 2008; Grossman, Niemann, Schmidt, & Walach, 2004).

Also, the fact that social cynicism was not significantly correlated with subjective well-being was surprising, considering that it did correlate strongly with subjective well-being in Study 1 (see Table 2.6). Prior research in other cultures has documented negative associations between social cynicism and subjective well-being (e.g., Chen et al., 2006; Mak et al., 2010) and job satisfaction (Leung, Ip, & Leung, 2010) as well.

That social cynicism was associated with subjective well-being in Study 1 and was not associated with subjective well-being in Study 2 may be explained considering some societal changes that have occurred in Iran in the interval between the two data collection times. The first data was collected in 2008 before the disputed presidential election in Iran and the second was collected in 2011. Iranian society was facing major economic and social problems in the period between 2009 to 2011 due to post-election issues and international political and economic sanctions. Iranians voiced doubts about the authenticity of the results of Iran's tenth presidential election held on 12 June 2009. Protests following the election against the disputed victory of President Mahmoud and in support of opposition candidates occurred in major cities in Iran and around the world starting on June 13, 2009[4]. Iranian police forces and militia suppressed riots as well as peaceful demonstrations and protests using force and firearms[1]. Protests erupted again several times through 2010 and 2011. Furthermore, the government had intensively militarised critical areas of the cities (where protests generally took place).

This has weakened Iran's economy. The official unemployment rate in Iran has recently been about 30% for the under 25s, which is considered to be seriously problematic (Ottolenghy, 2012). Iran's inflation rate was constantly rising and reached its highest level (27.1%) in recent years (Central Intelligence Agency, 2012). These economic problems are partly due to the lifting of governmental subsidies and the resulting rising in the prices.

There are other sources of dissatisfaction in recent years. For example, the internet speed in Iran is deliberately kept low and many websites and social networks (e.g., Facebook, Twitter,

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[4] http://en.wikipedia.org/wiki/2009_Iranian_election_protests

etc.) are blocked by the state to control the flow of information in the country. In consumer download speed, Iran ranks 169 among 172 countries[4], which is not at all accepted by the general population, especially young people. The current situation has led to an increased dissatisfaction among Iranians, and their lack of trust in social institutions. It is not surprising that according to the world happiness report, Iranians' level of self-reported happiness has shown a decrease between 2007 and 2012[5].

From all these data, one can conclude that Iranians' quality of life has declined over this period. This change may help us speculate about the reasons causing the differences between the two samples in the relationship between social cynicism and mental well-being. Below, I will elaborate on this possibility, drawing on culture-level studies on social cynicism.

Bond et al. (2004) analysed the dimensionality of social axioms at the culture level, using item means from groups of college students from 41 countries as the input data. This factor analysis revealed a 2-dimensional structure. One of the factors extracted was labelled societal cynicism (see also Leung & Bond, 2008). Societal cynicism is associated with indicators of financial hardship and social and political dissatisfaction.

> "Bond et al. (2004) reported that after controlling for economic development, societal cynicism is associated with lesser voter turnout in a nation, a lower average satisfaction with one's company or work organization, citizens' lower life satisfaction, a lower average level of conscientiousness (a factor in the big five personality model), a general rejection of the view that leadership is based on charisma and values, generally more disagreement within in-groups, and a stronger belief among the citizenry in exerting an amount of effort that is proportional to the pay received. This pattern of national characteristics suggests a disengagement of a nation's citizenry, its human capital, from investment of their resources into their own society." (Leung & Bond, 2008, p. 212)

As noted earlier, it is believed that social axioms serve some function for our survival. Empirical findings support this prediction. For instance, in a study by Kurman and Ronen-Eilon (2004), it was found that immigrants adapted better if they had accurate knowledge about social axioms characterizing their host cultures (see more empirical evidence in Hui & Hui, 2009). Based on such empirical evidence, Hui and Hui (2009) argue that social axioms serve as psychological tools to help individuals to understand, relate to, and control the social

world. Hui and Hui further argue that social axioms serve as guiding principles steering progress towards the attainment of important goals in life.

Based on this line of reasoning, it can be suggested that the functions of social cynicism might have changed in Iran after the election. That is, given that life conditions have become tougher and less pleasant in recent years, the negative implications of social cynicism have decreased in the context of Iran.

People often think that the world is safe, predictable, benevolent, and meaningful. In fact, this set of beliefs is the core of our basic assumptions about humanity and the world (Janoff-Bulman, 1992). Regarding the cosmos and creation, Muslims believe that there are rules, procedures or traditions based on which almighty God rules the universe, including human social life (Sadri, 2007). When things happen and progress in our daily life as we expect beliefs in the benevolence and meaningfulness of the world help people to maintain a balance between what they do and what they achieve as outcomes. But when this routine is disrupted, for example by trauma, the balance is upset, and the condition could cause devastating effects on inherent assumption about the world's benevolence and meaningfulness (Janoff-Bulman, 1989) and, moreover, on beliefs in the sovereignty of God in ruling the universe, which may lead to social cynicism and distrust. On this basis, we can conclude that people's view on the benevolence, fairness, and reliability of the world depends on their response to and interpretation of traumatic events. However, few studies have addressed this issue.

Biruski, Ajdukovic, and Low Stanic (2014) studied the role of negatively-changed worldview in the relationship between traumatization and readiness for social reconstruction, including three processes: intergroup rapprochement, rebuilding trust, and need for apology. Mediation analyses showed that the worldview change fully mediated between traumatization and all three aspects of social reconstruction .More severe war-related trauma symptoms were linked to a more profound worldview change, which was in turn associated with people being less ready to become closer with the members of the group with which they had been in violent conflict, less engaging in trustful relations and more demanding of an apology from the 'other side.' The mediating effect of the worldview change was the largest between war-related trauma symptoms and intergroup trust. This may indicate that (intergroup) trust is most seriously violated by trauma inflicted during intergroup violence, as suggested by intergroup reconciliation literature (Ajdukovic, 2004; Bar-Tal, 2013; Nadler, 2002).

Nonetheless, Calhoun, Cann, Tedeschi, and McMilan (1998) examined the relationship between traumatic events, the difference between generations, and assumptions about the fairness of the universe. In their study, critical life events were considered as a covariate, gender and generation as predictors, and the perception of the fairness of the universe as a

criterion variable. The results revealed that the generational main effect was significant for 5 of the 10 subscales, and the world view that emerged was consistent across these differences. The youngest group tended to view the world as less just and less benevolent, and the oldest group tended to view the world as luckier and more controllable. The results somewhat confirmed the effects of negative life events on worldview. The effects seemingly vary according to age. This issue should be considered in future studies, i.e. the mechanism of the effects.

Consistent with this argument, Leung and Bond (2008) argue that

> "Social cynicism has survival value for the individual. At the culture level, societies higher in societal cynicism are usually associated with political or economic turmoil triggered by rapid social changes over the past decades. Perhaps cynicism is also adaptive in a society marked by a history of disruptive events, working to demobilize citizens, to focus their attention onto personal matters, and to resist personal investment in social institutions. The survival value of cynicism at both levels seems to be able to account for the cross-level invariance of this axiom dimension." (p. 214)

Therefore, it makes sense to suggest that in the face of poor social and financial situations in current Iran, social cynicism is less of a negative belief domain to endorse for citizens. Under such conditions, social cynicism may turn out to be sometimes useful, and this may compensate for parts of its negative consequences. In other words, a negative bias and pessimism seems to be more useful in the current Iranian society than it was a few years ago, and this might have led to a non-significant correlation between social cynicism and subjective well-being in the current study. These are, however, only mere speculations, which need to be empirically tested in future research.

The level of social cynicism has not in fact changed in Iranian society after the disputed election, since the result of a t test (as reported above) involving samples from Study 1 and Study 2 did not show any significant difference between the samples on social cynicism. However, the t test merely reveals changes in the levels of a variable not in its functions. My argument centres on changes in the function of social cynicism, which is consistent with the correlation patterns found in the two samples.

Another aspect of my argument is that the quality of life and mental well-being has decreased between the two data collection times. The results of a t test reported above indicate no

significant change in the levels of mental well-well-being between samples of Study 1 and Study 2. However, it should be noted that two small samples of Iranians may not reflect the whole set of socio-political changes occurring in the whole Iranian population. The world happiness report does show that Iranians' level of happiness has shown a noticeable decrease between 2007 and 2012.

Moreover, a Leven's test for equality of variances ($F = 4.41$, $p = .03$) shows that variation of life satisfaction scores was significantly smaller in Study 2 ($SD = 5.77$) than in Study 1 ($SD = 7.10$). This may indicate actual differences between the samples; however, this also indicates that the life satisfaction scale is a less sensitive scale in Study 2, which does a poorer job at capturing individual differences.

Findings of this study supported the predictions of Hypothesis 2. That is, the results of the mediation analysis revealed that perspective taking mediates the relationship between social complexity and psychological well-being. This study was the first to examine the role of perspective taking as a mediator of the relationship between social complexity and psychological well-being and, therefore, this finding can be considered a unique contribution of this study to the literature.

The fact that perspective taking was positively correlated with psychological functioning was in line with past studies. As noted earlier, perspective taking has been found to correlate positively with multiple aspects of successful functioning such as higher relationship satisfaction (Franzoi, Davis, & Young, 1995), successful conflict resolution (Galinsky et al., 2008), life satisfaction, self-efficacy, and optimism in children (Gadermann, Schonert-Reichl, & Zumbo, 2010). It also has been found to be positively correlated with gratitude, connectedness to nature, and empathic concern in Iran (Joshanloo et al., 2010). That social complexity was positively correlated with perspective taking is also in keeping with my reasoning in the introduction and past empirical findings in Iran (Joshanloo et al., 2010).

The findings related to the second hypothesis however should be interpreted with caution because when controlling for social desirability, the correlation between perspective taking and psychological well-being becomes non-significant (although still positive and marginally significant, see Table 4.7). Therefore, future studies should replicate these findings using a different measurement of perspective taking before any firm conclusion can be made. However, considering that the findings are consistent with those of past studies in Iran and other cultures and the mediating relationship is theoretically justified, it is also possible that using a more reliable perspective taking scale and larger samples in future studies will lend more support to the second hypothesis of this study.

Another noteworthy finding was that social desirability had no influence on the relationship between social axioms dimensions and aspects of well-being (see Table 4.7). That is, partialling out the influence of social desirability leaves the correlations between social complexity and social cynicism and the aspects of well-being almost unchanged. This finding supplements the findings of the first study by showing that the relationship between the two belief domains and aspects of well-being are not affected by participants' tendency to respond to questions in a socially desirable manner.

However, social cynicism was found to correlate negatively with social desirability. This finding cannot be considered a validity issue for the social cynicism scale as the two concepts are conceptually opposite. That is, social desirability involves some degrees of positivity bias whereas social cynicism involves some degrees of negativity bias. Singelis, Hubbard, Her, and an (2003) also found a negative and significant correlation between social cynicism and social desirability ($r = -.21$) in the USA. They did not find this result surprising "as cynicism is not generally compatible with wanting to do the socially proper actions" (p. 280). However, this significant correlation may cast doubt on the findings related to the first hypothesis of this study, which was not supported by the data. Future studies should try to test this hypothesis using cynicism scales that are not at all affected by social desirability. Currently, other social cynicism scales are not available though.

Finally, the fact that overall subjective and psychological well-being scales used in this study did not correlate significantly with social desirability is promising for Iranian well-being studies. Interestingly, several past studies have documented positive correlations between social desirability as assessed by the BIDR and self-perceptions of mental health in other cultures (e.g., Bonanno, Field, Kovacevic, & Kaltman, 2002; Nichols & Greene, 1997; Paulhus, 1998; Paulhus & Reid, 1991). This cross-national difference is not surprising as most of these studies are done on Western samples and past research shows that the self-enhancement bias (striving to feel good about oneself, a concept clearly related to desirable responding) is more prevalent in Western cultures than non-Western ones (for a review, see Heine, Lehman, Markus, & Kitayama, 1999).

Altogether, the findings of the present study demonstrate that it is beneficial to test hypotheses regarding the mediators of the relationship between social axioms and real-life outcomes. That perspective taking significantly mediates the relationship between social complexity and psychological well-being indicates that general beliefs (which are in fact certain ways of seeing the world) may be translated into certain ways of being (such as perspective taking), which then lead to certain outcomes (such as higher mental well-being).

That the findings did not support the first hypothesis of the study is rather surprising. There seems to be considerable change in the function of social cynicism beliefs in Iranian society (at least among the younger generation) in a rather short amount of time. That is, social cynicism, which was negatively correlated with subjective well-being in the first study, turned out to be uncorrelated with it in the second study. Although, this unexpected change between the two Iranian samples invalidated the first hypothesis of the study, the hypothesis may receive better empirical support in more stable Iranian subsamples (such as groups unaffected by the recent socio-political clashes), and other national contexts. Therefore, it would be useful to test this hypothesis in other samples before completely dismissing it.

Study 1 in the present thesis showed that social axioms may play different roles in various national contexts. For example, some social beliefs are related to well-being in Iran but not related to well-being in the UK. Study 2 focused on the mechanisms of the relationships between two axiom dimensions and aspects of mental well-being. One interesting avenue for expanding the findings of the previous two studies is to investigate differences between social axiom scores and their relationships with well-being among the Iranian and UK student samples as well as an Iranian immigrant sample living in England. Would the levels of social axioms and the relationships between social axioms and well-being in the immigrant sample be more like those in Iranians or more like those in the UK sample? In other words, do Iranian immigrants take with them their social beliefs when emigrating to England, or leave their beliefs in Iran and try to embrace new ways of looking at the world? Study 3 (next chapter) will try to partially respond to these questions.

Chapter 5

Study 3

Social Axioms and Mental Well-Being in Iranian Immigrants in the UK

Introduction

It is believed that social beliefs help a person make sense of what happens around him/her, and to function effectively in the culture in which he/she lives. Therefore, social beliefs that are functional in a specific cultural context may turn out to be not useful or even dysfunctional in another cultural context. These widely accepted assumptions formed the basis for Study 1, where I investigated which social beliefs were functional in Iran and which ones were functional in the UK, in the sense of predicting subjective and psychological well-being. The findings indicated that some social axioms such as social complexity were significant positive predictors of well-being in both Iran and the UK. In contrast, I found that some social beliefs (such as fate control) had differential relationships with mental well-being in the two nations. However, the findings of Study 1 and Study 2 merely speak to individual and country-level differences in the levels of endorsing certain social axioms and mental well-being as well as the relationship between these variables.

One fruitful avenue for expanding the findings of the previous studies is to investigate what happens to individuals who have been raised in one country and live in another one. These individuals are likely to be subject to two sets of social beliefs. For these people, the sets of beliefs that they habitually apply to make sense of their surroundings and function effectively in their original country may turn out to be not that useful within the new environment, or even may turn out to be dysfunctional in some ways. Study 3 sought to answer several questions in this regard.

Immigration of Iranians

The last decades have seen an upsurge in the number of Iranian immigrants to Western countries including the United States of America and the UK. Starting with the Islamic revolution of 1979, many Iranians have left Iran for more democratic and developed

countries. International immigration has been described as an especially stressful experience (Berry & Annis, 1974). This is especially true about Muslims emigrating to Western nations, as these individuals generally move from a religious context to a much more secular context. What complicates the situation for Muslims emigrating to secular countries is that they are generally raised in nations where religion is a strong part of individuals' identity (Saroglou & Mathijsen, 2007).

Furthermore, there is evidence that Muslim immigrants value religion and involvement in religious practice more than many other groups of immigrants to Western nations (Saroglou & Galand, 2004). They also show evidence of a more traditional version of religiosity, which largely lacks religious doubt and questioning. Sartawi and Sammut (2012) present data showing that negotiating Muslim identities in the British context involves a host of pragmatic problems. They also show that Orthodox and more traditional Muslims are more vulnerable to these difficulties. Therefore, for Muslim immigrants, integration into more or less secular cultures of Europe may be more difficult than for many other groups of immigrants. For these reasons, acculturation involves high levels of stress for Muslims (Wrobel, Farrag, & Hymes, 2009).

It can be expected that Iranian immigrants are not an exception. Western culture is very different from Iranian culture. Whereas Iran has a religious and traditional culture, Western cultures are more secular and less traditional. Whereas Iran has a strongly Islamic culture, Western cultures generally are affected by Christian heritage. Iran is a developing nation struggling with problems such as poverty, slow economic progress, and overpopulation in certain cities, while the Western countries are developed and wealthy. Iran has a theocratic government, while governments in Western Europe are generally democratic (Brown & Landreth, 1983; Ghaffarian, 1998).

Representations of Muslims and Islam in the British media are generally negative (Ameli & Islamic Human Rights Commission, 2007). In Europe, there is evidence of public hostility against Islam and Muslims, especially after the events of 11 September 2001, which led to stronger anti-Muslim sentiments shown in Westerners (Ahmad, 2006; Allen & Nielsen, 2002; Güngör, Fleischmann, & Phalet, 2011; Raiya, Pargament, Mahoney, & Trevino, 2008). Given reported cases of direct and institutional discrimination against Muslims, and the negative images of Islam and Muslims shown in the Western media, Muslims in the UK generally perceive themselves as discriminated against, undervalued, and threatened (Sartawi & Sammut, 2012). Jamil et al. (2008) found that in a large sample of immigrants of Arab, Chaldean, and African ethnic backgrounds in the USA, the highest rate of depression was found in Arab American participants (23.2%), who were mainly Muslims.

Therefore, Iranian immigrants may have special difficulties in adjusting to Western cultures. Difficulty in adjusting to the host culture may lead to psychological problems (Ghaffarian, 1998). Lipson's (1992) study on Iranian immigrants in the USA revealed that a good number of Iranian immigrants were indeed highly stressed. Major sources of stress among these Iranians were found to be culture shock, a poor command of English, and perceived loss of socio-economic status in the host culture compared to Iran, perceived lack of social support, occupational and financial difficulties, and perceptions of ethnic bias towards Iranians (Lipson, 1992).

Part of the maladjustment experienced by immigrants may be caused by differences in social beliefs in the original and host culture, which may be one of the main reasons for culture shock. As Lipson's (1992 see above) study shows, culture shock is one of the main stressors in Iranian immigrants. Past research and the results of the first study in this thesis indicate that social axioms have consequences for people's psychological adjustment (e.g., Chen et al., 2006; Lai et al., 2007; Mak et al., 2010; Safdar et al., 2006). It can be argued that endorsing certain social beliefs may have significant consequences for immigrants in adjusting to the new environment.

Ethnic identity and adjustment

Previous research makes it clear that ethnic identity (Phinney, 1992; Phinney & Ong, 2007) is also an important factor in the adjustment of immigrants. This concept can be defined as the strength of the subjective sense of belonging to one's original ethnic group (Clément & Noels, 1992; Phinney, 1990). The ways people handle their multiple ethnic identities have been linked to a number of well-being related outcomes (Berry, Phinney, Sam, &Vedder, 2006). Some past research indicates that holding on to one's native culture leads to adjustment problems for immigrants (Griffith, 1983). For example, Abouguendia and Noels (2001) found that holding on to one's heritage culture and refusing to participate in the host culture was negatively associated with self-esteem and positively associated with depression in South Asian immigrants in Canada.In contrast, other research indicates that abandoning one's native identity and replacing it by the host culture's identity may also lead to adjustment problems (Abu-Rayya, & Abu-Rayya, 2009a; Abu-Rayya, & Abu-Rayya, 2009b; Ortiz & Arce, 1984). In a sample of 506 adolescents from four ethnic backgrounds (i.e., Vietnamese, Pakistani, Turkish, and Chilean) living in Norway, Sam (2000) found that a tendency to hold on to one's heritage culture and refuse to participate in the host culture was positively related to life satisfaction. Therefore, the findings so far are mixed and seem to be dependent on native and host cultures under study in each specific research.

The relationship between attachment to one's ethnic identity and psychological functioning has been tested in a few studies using samples of Muslim immigrants. Among Muslim immigrants, attachment to one's heritage ethnic identity has generally been found not to have negative implications for psychological adjustment. Güngör, Fleischmann, and Phalet (2011) found that attachment to an Islamic identity posed little challenge in the way of adopting Belgium culture for Muslims immigrants. Aswat and Malcarne (2007) examined the acculturation strategies and depression of a sample of Muslim immigrants in Canada. They found that immigrants with high original culture identification reported less lifetime (but not past-year) depressive symptoms. In sum, in Muslim cultures, research has largely documented positive implications for attachment to one's original culture.

Besides its direct effect on immigrants, I suggest that ethnic identity may also interact with social beliefs in their effect on mental well-being. That is, one's level of attachment to one's original country may moderate the relationship between social beliefs and mental well-being. This prediction is based on the speculation that scoring high or low on ethnic identity may be associated with differential endorsement of social axioms (as explained below). I suggest that high and low ethnic identity create noticeably different backdrops for immigrants (Phinney, 1992) and, therefore, the relationship between social beliefs and mental well-being may be moderated by this variable. Ethnic identity has social components such as belonging and commitment to the ethnic community, and, in addition, social beliefs related to ethnic identity are part of the broader concept of attachment to national identity, which can affect well-being. The aforementioned social beliefs are a sense of common identity and belonging, accepting each other as compatriots, positive attitude to others, being proud of belonging to an ethnic community, being willing to pay the necessary costs for the membership in an ethnic community and for its survival, positive attitude towards the principles of social solidarity and cooperation (Abolhasani, 2008) and intellectual, religious, and social attachment to each other (Jafarian, 2002).It is clear that the above mentioned influence a person's well-being.

On the other hand, some research has clearly showed that there is a significant positive relationship between attachment to ethnic identity and social trust. For example, Heath & Roberts (2006) found that attachment to the British identity is linked with social trust. Putnam (2007) argued that one is more likely to trust another person if there is a shared element of identity such that the other person is not perceived as 'socially distant'.

Therefore, we can conclude that ethnic identity, particularly its social dimensions, can play a moderator role in the relationship between social beliefs and well-being.

The research questions

The present study examined the following: firstly, differences between the levels of social axioms endorsed by a sample of Iranian immigrants in the UK, an Iranian sample, and a UK student sample. Secondly, this study examined the relationship between social axioms and mental well-being in the immigrant sample. Finally, the direct influence of ethnic identity on mental well-being, and the moderating role of ethnic identity on the relationship between social axioms and mental well-being were examined. Thus, the study was designed to provide some evidence for the following questions: Does the belief system of Iranians living in the UK remain unchanged in the new context, or are there changes in their belief system? Is endorsing of particular social beliefs advantageous or disadvantageous for the mental health of Iranians living in the UK? Are there differences between the relationship between social beliefs and mental well-being in Iranians living in Iran and Iranians living in the UK? Does the strength of the subjective sense of belonging to the Iranian culture and identity qualify these relationships?

Group differences in social axioms

Prior empirical research shows that immigrants gradually absorb new values and norms prevalent in their host cultures (Inglehart & Norris, 2009; Inglehart & Welzel, 2005). Inglehart and Norris, for example, found that the values of Muslim immigrants (vs. Muslims living in original nations) were closer to those held by their host European cultures. In fact, they found that Muslim immigrants were located half-way between the Western dominant values and Islamic dominant values. Moreno and Abitia (2005, as cited in Inglehart & Norris, 2009) found that Mexicans who live in the USA (as opposed to those living in Mexico) had values that were closer to those of Americans. Moreover, there is evidence that life evaluations (e.g., happiness scores) of migrants typically lie between those of the people in the host country and those in the country of origin (see Veenhoven, 1994).

There is also evidence that emigrating to a new culture modifies the immigrants' social axioms, such that their social beliefs become more like those of the host culture. This evidence is provided in a study (Safdar et al., 2006) using Iranian, Canadian, and Iranian Canadian samples. This study, which was an exploratory study, found that Iranian Canadians endorsed views that were intermediate between native Iranians in Iran and native Canadians (although some of the differences were not significant). Considering that Canada and England have relatively similar scores on social axioms (Bond et al., 2004), the same prediction is proposed in this study. That is, it is predicted that Iranians in the UK will yield scores which are intermediate between those of the UK student sample and Iranians in Iran.

This prediction is based on the notion that immigrating to a new society may indeed modify social beliefs of the individual. These predictions are summarized in the following hypotheses:

1-   Iranians in the UK will show social cynicism scores which are between those of UK student participants in the UK and Iranians in Iran.

2-   Iranians in the UK will show religiosity scores which are between those of the UK student participants in the UK and Iranians in Iran.

3-   Iranians in the UK will show social complexity scores which are between those of UK student participants in the UK and Iranians in Iran.

4-   Iranians in the UK will show reward for application scores which are between those of UK student participants in the UK and Iranians in Iran.

5-   Iranians in the UK will show fate control scores which are between those of the UK student participants in the UK and Iranians in Iran.

Group differences in mental well-being

Considering that previous research shows that the British score higher than Iranians on subjective well-being (e.g., Inglehart, Foa, Peterson, & Welzel, 2008), it is expected that the UK student sample will score higher than the native Iranians on aspects of mental well-being. Better quality of life and life standards provide more opportunities for basic psychological and physical need satisfaction, which lead to better mental health. Furthermore, given that the Iranians in the UK may have many difficulties in adjusting to a dramatically different culture (for the reasons described above), it is also expected that the UK student sample will score higher on mental well-being than the Iranians in England. These predictions are summarised in the following hypotheses:

6-   The UK student participants in the UK will score higher than Iranians living in Iran and Iranian immigrants in the UK on subjective well-being.

7-   The UK student participants in the UK will score higher than Iranians living in Iran and Iranian immigrants in the UK on psychological well-being.

Contribution of the social axiom dimensions to well-being among immigrants

In the first study of this thesis, it was found that social cynicism was a predictor of both subjective and psychological well-being. However, the second study cast doubt on these

findings, showing that the relationship between social cynicism and well-being is not that robust, and may be non-significant in Iranian samples. I argued that in contexts where the conditions of life pose more challenges to individuals, social cynicism may come to be non-harmful, or even helpful. Given that Iranian immigrants may have certain difficulties in adjusting to the new environment (as described above), I expected to see a non-significant relationship between social cynicism and mental well-being, as was the case in the second study.

Social complexity was one of the predictors of mental well-being in Study 1 and Study 2 of the present thesis. This social belief domain seems to be especially useful in an immigrant sample. Considering that social complexity refers to the belief in multiple ways of achieving outcomes, and agreement that human behaviour is variable across situations, this belief domain is likely to help immigrants embrace new ways of doing things in a new culture and thus may help adjustment. This seems to be true at least about Iranian immigrants. The findings of one study on Iranian immigrants in the USA showed that resisting the host culture leads to negative consequences for mental well-being of Iranian immigrants (Ghaffarian, 1998). Social complexity is inconsistent with resistance to the host culture and is likely to facilitate the integration of the native and host cultures. Therefore, it is expected that social complexity will lead to better mental well-being in the immigrant sample of the present study.

Reward for application refers to a general belief that effort, knowledge, and careful planning will lead to positive results. Reward for application may also be useful for immigrants. For example, this belief set is likely to lead to active coping. This social belief domain has been found to relate positively to life satisfaction (Chen, Cheung, Bond, & Leung, 2006). In an Iranian sample, this domain was associated with active coping (Safdar et al., 2006). Active coping with difficulties in the new environment is an instrumental strategy towards better adjustment. Therefore, it is expected that reward for application is associated with better mental well-being.

Fate control may harm adjustment to a new culture. This is the belief that life events are predetermined. It is likely that the belief that things are fated will lead to less active involvement in a new culture. Immigrants need to actively participate in the new culture to not be isolated and abandoned. Fate control is positively associated with external locus of control, spiritual beliefs, supernatural beliefs (Singelis et al., 2003), and general death anxiety (Hui, Bond, & Ng, 2007). Given these considerations, it is predicted that fate control will negatively predict mental well-being.

Finally, regarding religiosity, I predicted a positive relationship with mental well-being. Religiosity was found to correlate positively with multiple aspects of mental well-being in the Iranian sample used in the first study of the present thesis. This belief domain has also been found to correlate positively with empathy and gratitude in an Iranian sample (Joshanloo et al., 2010). These predictions are summarised in the following hypotheses:

8- Social cynicism is not significantly related to indicators of well-being in Iranian immigrants.

9- Reward for application is positively related to indicators of well-being in Iranian immigrants.

10- Social complexity is positively related to indicators of well-being in Iranian immigrants.

11- Fate control is negatively related to indicators of well-being in Iranian immigrants.

12- Religiosity is positively related to indicators of well-being in Iranian immigrants.

Ethnic identity

Ethnic identity, as used in this study, is defined as the strength of the subjective sense of belonging to one's original ethnic group in immigrants living in a host country. Prior research has found that attachment to one's original culture can be helpful for immigrants (e.g., Bankston & Zhou, 1995; Ebaugh & Chafetz, 2000). Muslim immigrants' attachment to their original religious culture can contribute to "acculturative adjustment both as a marker of group identity and belonging and as a source of self-esteem, social support, and cultural continuity across generations" (Güngör, Fleischmann, & Phalet, 2011, p. 1357). Based on these findings, it is expected that ethnic identity (an indicator of one's sense of attachment to one's native culture) is positively correlated with mental well-being.

Finally, as explained in the introduction, immigrants' ethnic identity may moderate the relationship between social beliefs and mental well-being. Considering that, in this study, there are two mental well-being indicators (subjective and psychological well-being) and five social axioms, testing this hypothesis required testing 10 moderation analyses. These predictions are summarised in the following hypotheses:

13- Attachment to Iranian identity is positively associated with mental well-being.

14- Ethnic identity will moderate the relationship between social axioms and mental well-being.

In sum, this study expanded on the findings of the previous chapters in this thesis through testing a set of hypotheses related to an Iranian immigrant sample in a cross-sectional study. The findings will speak more directly to the interaction between social axioms and cultural contexts in their effect on mental well-being.

Method

Participants

The participants in this study were 66 Iranians living in the England. A period of at least three years since leaving the country was considered as a criterion for Iranian immigrants with no maximum limit, whereby there are differences in the sample.

Snowball sampling was chosen because the Iranian immigrants formed a small minority in England, and there was thus no easy access to a larger sample for any other sampling methods. The procedure was that in the beginning, the first sampling unit (person) was used for identifying and selecting the second unit. The researcher then contacted the second unit and obtained his/her written consent to participate in the survey after introducing himself and explaining the purpose of the research. The second unit was also used to identify the third unit and the sampling continued similarly. In this chain where someone was not willing to participate in research, they or the previous sampling unit were asked to introduce someone else. Not many people were willing; hence it was difficult to increase the size of the sample.

Thirty-five of the participants were female and 31 were male. Ages ranged from 21 to 63, with a mean of 39.52 (SD = 11.035). The respondents were contacted through Iranian clubs and social groups, and snowball sampling. Fourteen participants reported that they had no partner, 15 reported that they were "in a relationship but not living with partner", one participant reported that they were "single and living with a partner", 26 participants were married, eight participants were separated, and two participants chose "other". Fifty-one, one, five, and five reported their ethnicity to be Fars, Kurd, Turk, and Lor, respectively, and four participants mentioned other ethnicities. Fifty-one participants reported being Muslims, one Christian, and 14 participants did not report their religion.

Five of the students reported that their fathers were illiterate. Eight participants reported their fathers' highest educational qualification to be an elementary school diploma, seven a secondary school diploma, 21 a high school diploma, nine a junior college diploma, 11 a

bachelor's degrees, and five a PhD. Eight of the participants reported that their mothers were illiterate. Twelve of the participants reported their mothers' highest educational qualification to be an elementary school diploma, 13 a secondary school diploma, 19 a high school diploma, four a junior college diploma, five a bachelor's degrees, one a master's degree, three a PhD degree, and one participant did not know about their mother's highest education qualification.

Ten participants had a temporary visa, two had a student visa, 12 an indefinite visa, and 40 were British citizens. Two participants mentioned other visa statuses. Sixty-four of the participants were born in Iran and two of them in other parts of the world.

Measures

In addition to the social axiom survey and well-being scales used in the previous two studies, an Ethnic Identity scale was used.

Multigroup Ethnic Identity Measure - Revised. The Multigroup Ethnic Identity Measure - Revised (MEIM-R; Phinney & Ong, 2007) is a 6-item measure assessing the strengths of the sense of belonging to one's ethnic group (e.g. "I understand pretty well what my ethnic group membership means to me"). The items are rated on a 5-point scale ranging from 1= *strongly disagree* to 5= *strongly agree*. Higher scores indicate more attachment to Iranian ethnic identity. Cronbach's alpha for the six items was .81 as reported in the scale development study (Phinney & Ong, 2007). MEIM-R items were adapted from its original lengthier version, the Multigroup Ethnic Identity Measure (MEIM; Phinney, 1992). MEIM has been used with diverse groups including Muslim girls (Abu-Ali & Reisen, 1999).

Results

Analytical strategy

In this study, Iranian immigrants living in England were recruited to respond to a survey including the focal variables of the thesis (i.e., social axioms and well-being) together with an ethnic identity measure. Data from the Iranian students group who were living in Iran and the UK student sample group were also included (coming from Study 1). Thus, the study had three groups. Analysis of covariance (ANCOVA) was used to examine mean differences among these groups. This test was applied to Hypotheses 1 to 7, where an independent categorical variable with three levels (group membership) predicted differences on a continuous dependent variable (i.e., mental well-being or social axioms). The first five

hypotheses predicted the existence of a linear trend for dependent variables across the three groups. Trend tests were used to test whether a group of means form a single pattern (i.e., trend) (Clark-Carter, 2009). In the first five hypotheses, I predicted that the level of any social axioms would show a linear trend. That is, the Iranians in the UK group would fall in between the two other groups. In other words, I predicted that there would be a linear trend for social axioms to increase (or decrease) across the three groups from the Iranian group (=1), to the Iranian immigrant group (=2), to the UK students group (=3).

For testing the rest of the hypotheses, where the purpose was to examine the relationship between variables (i.e., social axioms, well-being, and ethnic identity), multiple correlation and regression analyses were used. Moreover, for hypothesis 14, moderation analyses were conducted. Moderation concerns the effect of a third variable (moderator) on the strength or direction of a predictor-outcome relationship. For testing this hypothesis, regression analysis was used (Baron & Kenny, 1986). For this purpose, the predictor and the moderator as well as the interaction term of the predictor and moderator are entered in a regression analysis to predict the outcome. It is necessary to centre the scores on the predictor and moderator before forming the interaction term. The aim of centring is to decrease the correlation between the interaction term and the predictor and moderator, to reduce the chance of multicollinearity among the variables (Warner, 2012). To centre a variable, the sample mean is subtracted from a variable's scores. A significant interaction term indicates a significant moderating effect (Warner, 2012).

The percentage of missing values for psychological well-being and subjective well-being in the present study were 9.1 and 18.2 respectively. Unlike the two previous studies, the amount of missing values is greater than 5%, and thus not to be ignored (Meyers, Gamst, & Guarino, 2006; Tabachnick & Fidell, 2001). Given that traditional methods of handling missing data (e.g., listwise and casewise deletion, mean substitution, etc.) are now widely considered inadequate (Allison, 2003; Tabachnick & Fidell, 2001), with missing value rates > 5%, multiple imputation was used in this study to deal with missing values. Multiple imputation is developed and expanded by Rubin (1978; 1987). The idea of

> "Data analysis with multiple imputation is to create a small number, m, of copies of the data, each of which has the missing values suitably imputed. Traditionally, m = 3 or 5. Then, each complete dataset is analysed independently. Estimates of parameters of interest are averaged across the m copies to give a single estimate." (Royston, 2004)

Multiple imputation is considered one of the strongest methods for dealing with missing values. In Tabachnick and Fidell's (2006) words, multiple imputation is currently considered "the most respectable method of dealing with missing data" (p. 72). Tabachnick and Fidell particularly suggest this method for regression. One of the advantages of this method is that it makes no assumption about whether data are randomly missing (Tabachnick & Fidell, 2006). Three to five imputations are adequate in many situations (Rubin, 1996), and this criterion is widely considered sufficient. However, given Allison's (2003) recommendation that a slightly larger number of imputations may be beneficial, in this study, 10 imputed data sets were created. Throughout the Results section, the results calculated based on the original data set with listwise deletion, and the results calculated based on multiple imputation are presented in parallel.

Preliminary Analyses

Table 5.1 show means and standard deviations for all variables included in the study. Prior to analysis, all variables were examined for accuracy of data entry, missing values, outliers, and normality.

Table 5.1. Descriptive statistics for the variables for the immigrant sample

	No. items	N	M	SD	α	Skewness	Kurtosis
Psychological well-being							
Autonomy	9	65	43.10	6.52	.50	.570	-.053
Environmental mastery	9	64	44.04	8.17	.65	.320	-1.153
Personal growth	9	66	42.28	8.36	.67	.320	-.937
Positive relations	9	64	41.76	9.45	.75	.148	-.647
Self-acceptance	9	63	41.52	9.20	.76	.254	-.851
Purpose in life	9	59	40.86	10.87	.82	.269	-.676
Subjective well-being							
Life satisfaction	5	66	21.69	5.53	.71	-.263	-.918
Positive affect	6	62	19.04	3.55	.78	-.251	-.204
Negative affect	6	61	13.80	4.64	.78	.478	-.328
Social axioms							
Social cynicism	18	63	55.71	10.43	.82	-.432	-.253
Reward for application [a]	11	63	40.92	5.08	.63	-.172	-.832
Social complexity [a]	9	63	33.25	3.81	.49	.501	.516
Fate control [a]	6	64	17.32	3.46	.51	-.059	.216
Religiosity	8	64	26.87	5.55	.70	-.312	.051
Other							
Ethnic Identity	6	61	21.37	5.29	.87	-.607	.152

[a] scores with items excluded to improve reliability.

Missing data. Analyses showed that all variables contained missing data on 4.5% or fewer of the cases except the two dependent variables. The percentage of missing values for psychological well-being and subjective well-being were 9.1 and 18.2 respectively. Considering that the amount of missing values is substantial and not to be ignored (Meyers, Gamst, & Guarino, 2006), multiple imputation was used to generate 10 possible complete datasets, replacing the missing values. The two outcome variables and social axioms were included in the multiple imputation. The analysis was conducted using SPSS 19. The pooled dataset was analysed in parallel to the original data set for regression and correlation analyses focusing on the relationships between the variables. For examining outliers, normality, internal reliability, *t* tests, and ANCOVAs, the original data file was used.

Outliers. To identify the univariate outliers, the variables were examined. No univariate outlier was detected in the sample, as indicated by *z* scores falling between -3.29 and +3.29 (Tabachnick & Fidell, 2001). No multivariate outlier was identified in the sample by means of inspection of Mahalanobis distances with *p*< .001 (Tabachnick & Fidell, 2001).

Normality. A further step was to examine the normality of the variables. For this purpose, the skewness and kurtosis of the variables were calculated. Skewness and kurtosis of all variables are shown in Table 5.1. As shown in the table, results revealed that the skewness and kurtosis of all variables were well within the generally accepted range of -2 to +2, indicating that deviation from normality was not substantial. Therefore, no extra corrective measure was taken.

Internal consistency. To examine the internal consistency of the scales, Cronbach's alpha values were calculated for all scales. Initial analyses showed that three of the social axioms yielded very low alpha values. The analyses showed that the Cronbach's alpha of the reward for application scale could be improved from .49 to .63 by eliminating three of the items (i.e., item 13, 30, and 38). The analyses also showed that the Cronbach's alpha of the social complexity scale could be improved from .31 to .49 by eliminating three of the items (i.e., item 14, 31, and 36). Finally, the analyses showed that the Cronbach's alpha of the fate control scale could be improved from .45 to .51 by eliminating two of the items (i.e., item 32 and 56). Shortening has been used in previous research on social axioms to improve the alphas of the scales (e.g., Kurman & Ronen-Eilon, 2004). I also adopted this strategy in this study. After these modifications, the alpha values of these three scales were within the alpha range of the scales reported in past studies (e.g., Chen et al., 2006a; Singelis, Hubbard, & Her, 2003; Leung et al., 2007). Low alphas should be interpreted with caution given the small

size of the samples in this study. In all the analyses of the current study, the scores with items excluded were used. Internal consistencies of all scales are presented in Table 5.1.

Gender differences. Gender differences in all variables of the study were examined using an independent *t* test. An alpha level of .05 was used. The results showed that there was only one significant gender difference: female students ($M = 25.54$, $SD = 4.90$) scored significantly lower than male students ($M = 28.48$, $SD = 5.93$) on religiosity, t (62) = 2.17, p = .03.

Groups differences on demographic variables. The present study used three samples: an immigrant sample collected for the present study, an Iranian sample collected in the first study, and the UK student sample collected in the first study. The three samples were compared in terms of age, gender, and relationship status (see Table 5.2). The results of an ANOVA showed that there was a significant difference in age across the three groups (F (2, 201) = 142.791, $p< 0.01$). Post-hoc comparisons using the Tukey HSD test indicated that the immigrant group scores significantly higher than the Iranian (p < .001) and the UK student group (p < .001). The three samples were also significantly different in terms of relationship status [χ^2 (14) = 97.89, $p<0.05$], but not significantly different in gender ratio [χ^2 (2) = 4.98, $p=0.08$].

Table 5.2. Descriptive statistics of the samples and inferential tests

	M(SD)				
	Iranians, Study 1	Iranians in England, current study	UK sample, Study1	Test	
Age	21.97(1.958)	21.08 (4.919)	39.52(11.34)	ANOVA	.00
Sex				χ^2	0.08
Female	37	45	35		
Male	36	21	31		
Relationship				χ^2	0.00
No partner	41	34	14		
Not living with partner	17	18	15		
Single and living with partner	2	0	1		
Married	9	6	24		
Separated	1	2	2		
Widowed	0	1	0		
divorced	0	0	8		
Other	3	0	0		
Missing	0	5	0		

Bivariate correlation analysis. Table 5.3 demonstrates the bivariate correlations between all variables of the study using the original data. Table 5.4 shows the intercorrelations using the pooled data resulting from multiple imputation. The correlation matrices for Iranians living in Iran and the UK student sample are shown in Tables 5.5 and 5.6 respectively. The magnitude

of the correlation coefficients is largely similar across the original and the pooled data sets. Examples of slight differences were: the correlation between total psychological well-being and ethnic identity was significant in the original data but was not significant in the pooled data. The correlation between social cynicism and religiosity was not significant in the pooled data but was significant in the original data. A final example is the correlation between reward for application and religiosity that was not significant in the original data but was significant in the pooled data.

Table 5.3. Intercorrelations of the scales in the original data file, immigrant sample

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1.Total psychological well-being	1																
2.Autonomy	.68**	1															
3.Environmental mastery	.88**	.62**	1														
4.Personal growth	.87**	.60**	.72**	1													
5.Positive relations	.85**	.56**	.65**	.70**	1												
6.Self-acceptance	.86**	.62**	.72**	.73**	.71**	1											
7.Purpose in life	.86**	.39**	.76**	.70**	.72**	.58**	1										
8.Total subjective well-being	.56**	.56**	.50**	.48**	.53**	.51**	.51**	1									
9.Life satisfaction	.40**	.43**	.40**	.33**	.31*	.41**	.46**	.82**	1								
10.Positive affect	.59**	.52**	.49**	.47**	.57**	.52**	.45**	.82**	.49**	1							
11.Negative affect	-.43**	-.47**	-.42**	-.44**	-.48**	-.39**	-.33*	-.81**	-.40**	-.62**	1						
12.Social cynicism	-.03	-.10	.07	-.20	-.23	-.04	.030	-.19	-.02	-.17	.28*	1					
13.Reward for application	.36**	.17	.22	.26*	.30*	.31*	.35**	.17	.24	.15	-.02	.18	1				
14.Social complexity	.47**	.24	.35**	.36**	.42**	.37**	.40**	.25*	.24	.33**	-.11	-.06	.39**	1			
15.Fate control	-.36**	-.25*	-.28*	-.36**	-.33**	-.29*	-.48**	-.26*	.32*	-.15	.15	.30*	.04	.24	1		
16.Religiosity	.12	.13	.00	.04	.36**	.21	.04	.22	.06	.36**	-.21	-.16	.24	-.05	.07	1	
17.Ethnic Identity	.34*	.15	.28*	.39**	.43**	.27*	.30*	.12	-.05	.11	-.21	.00	.15	-.07	-.02	.33**	1

* $p < 0.05$
** $p < 0.01$

Table 5.4. Intercorrelations of the scales in the pooled data, the immigrant sample

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1.Total psychological well-being	1																
2.Autonomy	.60**	1															
3.Environmental mastery	.80**	.62**	1														
4.Personal growth	.77**	.60**	.72**	1													
5.Positive relations	.76**	.56**	.65**	.70**	1												
6.Self-acceptance	.79**	.62**	.72**	.73**	.71*	1											
7.Purpose in life	.83**	.39*	.76**	.70**	.72**	.58*	1										
8.Total subjective well-being	.54**	.56**	.49**	.47**	.51**	.50**	.51**	1									
9.Life satisfaction	.43**	.43**	.40**	.33*	.31*	.41**	.46**	.77*	1								
10.Positive affect	.51**	.52**	.49**	.47**	.57**	.52**	.45**	.79**	.49*	1							
11.Negative affect	-.40**	-.47**	-.42**	-.44**	-.48**	-.39**	-.33*	-.80**	-.40**	-.62**	1						
12.Social cynicism	-.01	-.09	.07	-.20	-.22	-.04	.02	-.17	-.02	-.16	.27*	1					
13.Reward for application	.35**	.17	.22	.26*	.29*	.31*	.35**	.16	.23	.15	-.02	.17	1				
14.Social complexity	.44**	.26*	.36**	.38**	.42**	.39**	.41**	.26*	.25*	.33**	-.11	-.09	.35*	1			
15.Fate control	-.31*	-.22	-.24	-.31*	-.30*	-.25	-.47**	-.22	-.29*	-.13	.12	.25	.03	-.23	1		
16.Religiosity	.12	.11	.04	.07	.35**	.21	.08	.15	.02	.25	-.18	-.16	.28*	-.08	.06	1	
17.Ethnic Identity	.26	.15	.28*	.39**	.43**	.27*	.30*	.10	-.05	.11	-.21	.00	.14	-.07	-.00	.38**	1

* *p* < 0.05
** *p* < 0.01

Table 5.5. Intercorrelations of the scales in Iranians living in Iran (from Study 1)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1.Total psychological well-being	1															
2.Autonomy	.68**	1														
3.Environmental mastery	.88**	.44**	1													
4.Personal growth	.80*	.46**	.64**	1												
5.Positive relations	.85**	.52**	.71**	.52**	1											
6.Self-acceptance	.84**	.44**	.72**	.58**	.67**	1										
7.Purpose in life	.83**	.45**	.72**	.76**	.60**	.57*	1									
8.Total subjective well-being	.61**	.24**	.62**	.40**	.57**	.73**	.34**	1								
9.Life satisfaction	.56**	.12	.65**	.40**	.49**	.69**	.33**	.90**	1							
10.Positive affect	.53**	.27*	.48**	.33**	.56**	.65**	.25*	.87**	.67**	1						
11.Negative affect	-.48**	-.30*	-.45**	-.30*	-.45**	-.53**	-.30*	-.83**	-.57**	-.68**	1					
12.Social cynicism	-.45**	-.23*	-.44**	-.32*	-.45**	-.44**	-.27*	-.60**	-.44**	-.57**	.61**	1				
13.Reward for application	.20	.05	.24*	.24*	.03	.20	.25*	.15	.14	.12	-.12	-.06	1			
14.Social complexity	.24*	.18	.21	.25*	.08	.13	.35**	-.05	-.05	-.09	-.01	.14	.52**	1		
15.Fate control	-.13	-.29*	-.00	-.16	-.15	-.14	.05	-.13	-.04	-.19	.15	.40**	-.00	.15	1	
16.Religiosity	.28*	.16	.24*	.34**	.14	.24*	.29*	.22	.09	.21	-.33**	-.36**	.55**	.27*	-.33**	1

Table 5.6. Intercorrelations of the scales in the UK student sample (from Study 1)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1.Total psychological well-being	1															
2.Autonomy	.62**	1														
3.Environmental mastery	.75**	.32**	1													
4.Personal growth	.75**	.39**	.48**	1												
5.Positive relations	.78**	.31*	.57**	.40**	1											
6.Self-acceptance	.80**	.47**	.56**	.62**	.60**	1										
7.Purpose in life	.71**	.16	.55**	.54**	.58**	.42**	1									
8.Total subjective well-being	.41**	.16	.52**	.08	.54**	.46**	.19	1								
9.Life satisfaction	.34**	-.02	.55**	.10	.39**	.36**	.24	.72**	1							
10.Positive affect	.18	.10	.25*	-.16	.37**	.24*	-.01	.83**	.36**	1						
11.Negative affect	-.48**	-.33*	-.41*	-.32*	-.51*	-.49*	-.22	-.74*	-.27*	-.50*	1					
12.Social cynicism	-.23	.00	-.30*	-.05	-.38**	.06	-.29*	-.02	-.10	.01	.00	1				
13.Reward for application	.18	.09	.06	.20	-.04	.06	.20	-.00	-.13	.10	.02	.23	1			
14.Social complexity	.10	-.01	-.04	.08	.01	.11	.16	-.05	-.10	-.01	.00	.00	.27*	1		
15.Fate control	-.34**	-.27*	-.31*	-.23	-.32*	-.18	-.36**	-.16	.02	-.11	.31*	.53*	.05	.05	1	
16.Religiosity	-.12	-.22	-.10	-.17	.06	-.19	-.04	.06	.03	.11	.03	.04	.25*	-.09	.13	1

Main Analyses

The social axioms and subjective and psychological well-being scores were compared among the three groups of Iranian immigrants in the UK (the sample of the current study), Iranians in Iran (the sample used in Study 1), and the UK student sample in the UK (the sample used in Study 1) using a series of ANCOVAs. Considering that shortened versions of social complexity, fate control, and reward for application were being used in the current study, the same items were selected from the data from Study 1 to make the comparison possible. Considering that the samples from Study 1 mainly consisted of young adults, and the sample of the current study was more heterogeneous in terms of age, age was added as a covariate in all the ANCOVAs. Age did not interact significantly with group membership in any of the analyses. Therefore, the interaction is excluded in the results. Means and *SD*s for all variables across groups are shown in Table 5.7.
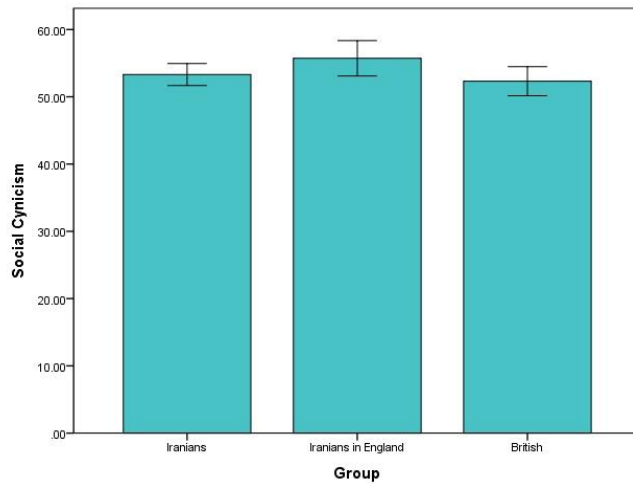
Table 5.7. Means and SDs

	Iranians in Iran			Iranians in the UK			UK student in the UK		
	N	*M*	*SD*	N	M	SD	*N*	*M*	*SD*
Social Cynicism	71	53.30	6.94	63	55.71	10.43	64	52.31	8.66
Religiosity	73	29.82	5.15	64	26.87	5.55	65	24.26	7.19
Social complexity	73	33.32	3.35	63	33.25	3.81	64	34.68	3.65
Reward for application	73	42.06	5.60	63	40.92	5.08	64	40.90	5.30
Fate Control	73	17.47	3.05	64	17.32	3.46	64	16.54	3.54
Subjective well-being	73	26.04	14.18	60	27.05	11.23	65	31.92	10.72
Psychological well-being	70	252.70	41.63	54	253.40	43.77	60	265.93	31.74
Age	73	21.97	1.95	65	39.52	11.35	66	21.08	4.91

Hypothesis 1

The first hypothesis predicted that Iranians in the UK would yield social cynicism scores which are intermediate between those of the UK students and Iranians in Iran. A between-subjects ANCOVA was conducted to compare the effect of group membership on social cynicism in the three groups, controlling for age.

There was a significant effect of group membership on social cynicism (F (2, 193) = 2.898, p = 0.05, η^2 = .029). Age did not significantly contribute to the prediction of social cynicism (F (1, 193) = 1.605, p = 0.20, η^2 = .008). Group differences in social cynicism are displayed in Figure 5.1. Post-hoc comparisons using the Tukey HSD test indicated no significant differences between the groups. The results of trend analyses showed that there was no linear trend (p = .472). Instead, the pattern of group differences was consistent with a quadratic trend (p =.021). Therefore, the first hypothesis of the study was not supported by the data.

Figure 5.1. Social cynicism across groups

Note: British means the UK student sample

Hypothesis 2

The second hypothesis predicted that Iranians in the UK would yield religiosity scores which are intermediate between those of the UK students in the UK and Iranians in Iran. A between-subject ANCOVA was conducted to compare the effect of group membership on religiosity in the three groups, controlling for age.

There was a significant effect of group membership on religiosity (F (2, 197) = 15.174, $p<$ 0.001, η^2 = .133). Age did not significantly contribute to the prediction of religiosity (F (1, 197) = 1.014, p = 0.315, η^2 = .005). Post-hoc comparisons using the Tukey HSD test indicated that the difference between Iranians in Iran and Iranians in the UK (p = .013), the difference between Iranians in Iran and the UK students in the UK ($p<$ .001), and the difference between Iranians in the UK and the UK students in the UK (p = .038) were statistically significant. Iranians in Iran scored significantly higher than the other two groups on religiosity. Group differences in religiosity are displayed in Figure 5.2. Given that Iranians in the UK fell in between the other two groups, the second hypothesis of the present study was supported. The results of a trend analysis confirmed that there was a significant linear trend ($p<$ .001).
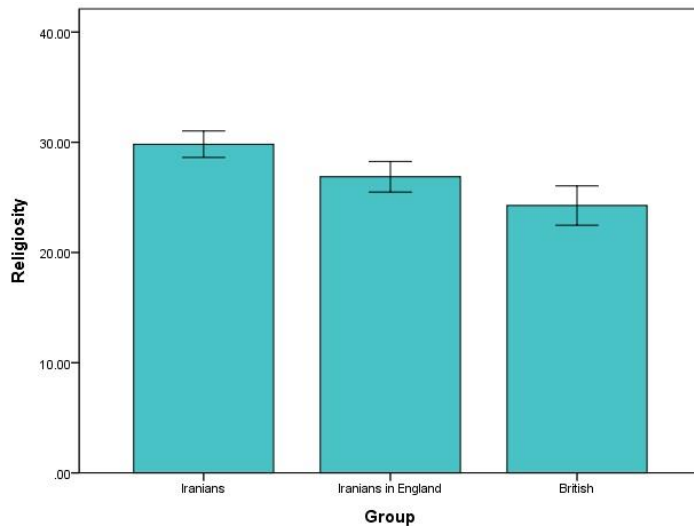
121

Figure 5.2. Religiosity across groups
Note: British means the UK student sample

Hypothesis 3

The third hypothesis predicted that Iranians in the UK would show social complexity scores which are intermediate between those of the UK students in the UK and Iranians in Iran. A between- subjects ANCOVA was conducted to compare the effect of group membership on social complexity in the three groups, controlling for age.

There was a significant effect of group membership on social complexity (F (2, 195) = 4.942, $p < 0.01$, $\eta^2 = .048$). Age did not significantly contribute to the prediction of social complexity (F (1, 195) = 3.005, $p = .085$, $\eta^2 = .015$). Post-hoc comparisons using the Tukey HSD test indicated that the UK students in the UK scored higher than Iranians in Iran ($p = .07$) and Iranians in England ($p = .06$). These differences were only marginally significant. The results of a trend analysis showed that there was a significant linear trend ($p = .023$). However, the descriptive statistics (see Table 5.7) show that the scores of Iranians in England did not actually fall between the two other groups, despite this significant linear trend. Thus, this hypothesis is not supported by the data. Group differences in social complexity are displayed in Figure 5.3.
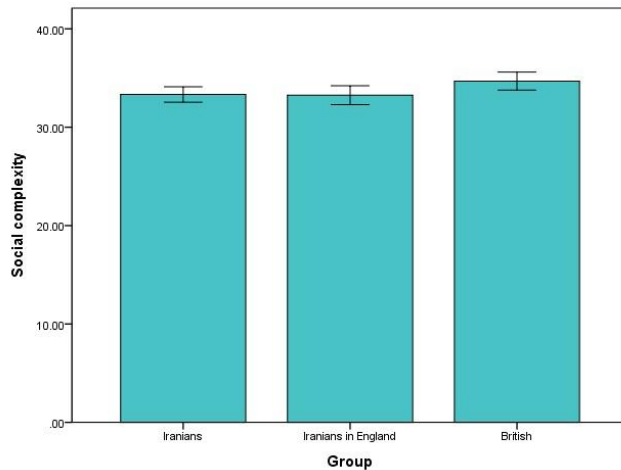
Figure 5.3. Social complexity across groups

Note: British means the UK student sample

Hypothesis 4

The fourth hypothesis predicted that Iranians in the UK would show reward for application scores which are intermediate between those of the UK students in the UK and Iranians in Iran. A between- subjects ANCOVA was conducted to compare the effect of group membership on reward for application in the three groups, controlling for age.

The main effect of group membership on reward for application was not significant (F (2, 195) = 1.26, p = .284, η^2 = .013). Age did not significantly contribute to the prediction of reward for application (F (1, 195) = .366, p = .54, η^2 = .002). Moreover, the group differences were not consistent with a linear trend (p = .22). Therefore, this hypothesis was not supported by the results. Group differences in social complexity are displayed in Figure 5.4.
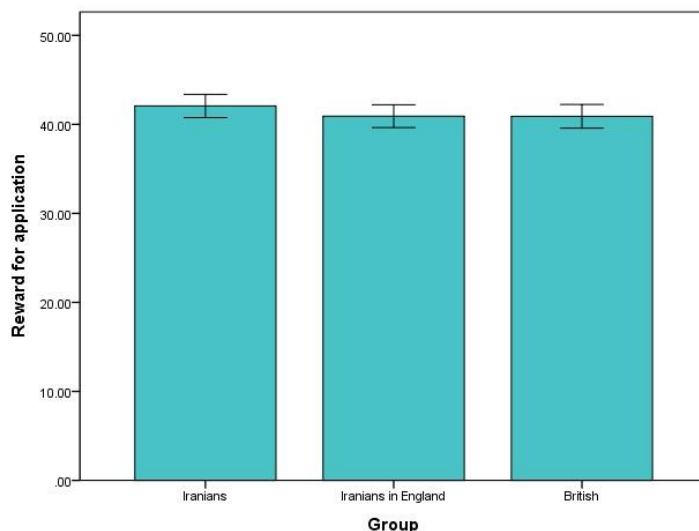

Figure 5.4. Reward for application across groups

Note: British means the UK student sample

Hypothesis 5

The fifth hypothesis predicted that Iranians in the UK would show fate control scores which are intermediate between those of the UK students in the UK and Iranians in Iran. A between-subjects ANCOVA was conducted to compare the effect of group membership on fate control in the three groups, controlling for age. The effect of group membership on fate control was not significant (F (2, 196) = 2.776, p = .06, η^2 = .028). Age did not significantly contribute to the prediction of fate control (F (1, 196) = 3.115, p = .08, η^2 = .016). There was no significant linear trend (p = 0.087). Given these results, the fifth hypothesis of the study was not supported. Group differences in fate control are displayed in Figure 5.5.
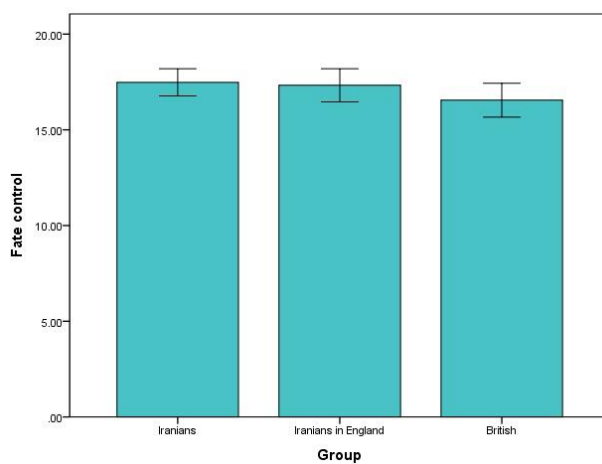

Figure 5.5. Fate control across groups

Note: British means the UK student sample

Hypothesis 6

This hypothesis predicted that the UK students in the UK would score higher than native Iranians and Iranian immigrants in the UK on subjective well-being. A between-subjects ANCOVA was conducted to compare the effect of group membership on subjective well-being, controlling for age. There was a significant effect of group membership on subjective well-being (F (2, 193) = 3.901, p = 0.022, η^2 = .04). Age did not significantly contribute to the prediction of subjective well-being (F (1, 193) = .069, p = .792, η^2<.001). These results supported the hypothesis. Post-hoc comparisons using the Tukey HSD test indicated that the difference between Iranians in Iran and the UK students in the UK (p = .015) was statistically significant. Group differences in subjective well-being are displayed in Figure 5.6.
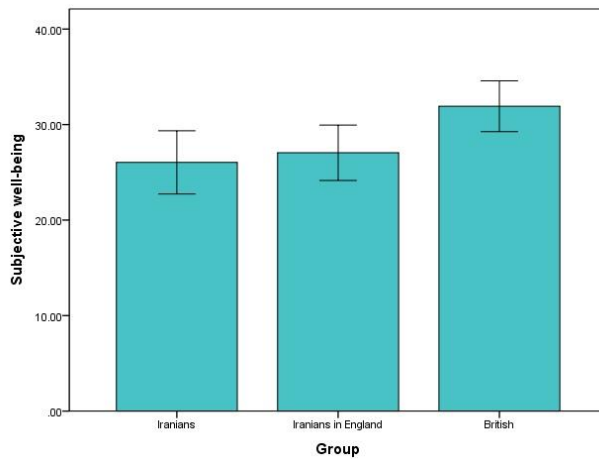
Figure 5.6. Subjective well-being across groups

Note: British means the UK student sample

Hypothesis 7

This hypothesis predicted that the UK students in the UK would score higher than native Iranians and Iranian immigrants in the UK on psychological well-being. A between-subjects ANCOVA was conducted to compare the effect of group membership on psychological well-being, controlling for age. Group membership did not have a significant effect on psychological well-being (F (2, 179) = 2.866, p = .060, η^2 = .031). Age did not significantly contribute to the prediction of psychological well-being (F (1, 179) = 1.292, p = .257, η^2 = .007). These results are not consistent with hypothesis 5.7.
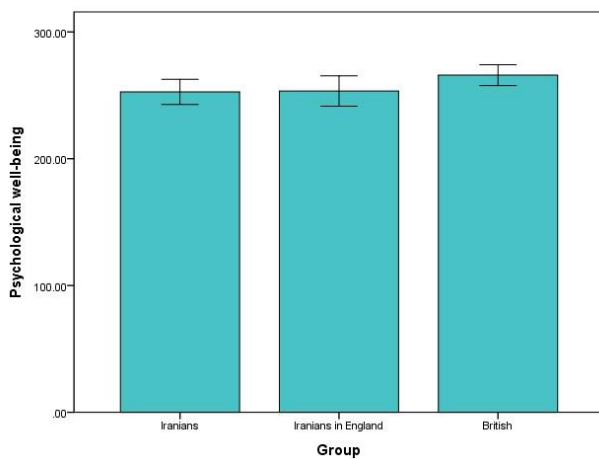

Figure 5.7. Psychological well-being across groups

Note: British means the UK student sample

Hypotheses 8 to 12

For this set of hypotheses, only data relating to Iranians in the UK was used. Both original data with listwise deletion and the pooled data set produced by multiple imputation were

analysed. In most of cases, the original and pooled results were consistent. Zero-order correlations reported in tables 5.3 and 5.4 indicate that social cynicism was not significantly related to both aspects of well-being. There was only a single significant correlation between social cynicism and one component of subjective well-being (negative affect). Therefore, hypothesis 8, which predicted that social cynicism would be unrelated to mental well-being, was largely supported.

Reward for application was significantly and positively correlated with psychological well-being, and unrelated to subjective well-being. Therefore, hypothesis 9, which predicted a positive correlation between reward for application and mental well-being, was partially supported.

Social complexity was also significantly and positively associated with aspects of both psychological and subjective well-being. These results indicate that hypothesis 10, which posited a positive correlation between social complexity and mental well-being was supported.

Fate control was negatively associated with psychological and subjective well-being. Hence, the results supported hypothesis 11, which predicted a negative relationship between fate control and mental well-being.

Finally, there were significant correlations between religiosity and life satisfaction and positive relationships with others (see Table 5.3). The results using the pooled data indicated that there was a significant positive correlation between religiosity and positive relations ($r =$ 0.36, $p < .01$), but not between religiosity and life satisfaction ($r = 0.06$, $p = .59$). Given these results, hypothesis 12, which posited a positive relationship between religiosity and mental well-being, is weakly supported.

To investigate these relationships more thoroughly, two separate regression analyses were conducted for each dimension of well-being. Subjective well-being was regressed on all five social axiom dimensions. The results indicated that 21.1% (adjusted 12.8%) of the total variance in subjective well-being was explained by the overall model comprising all social axioms, $R^2 = .211$, adjusted $R^2 = .128$, $F (5, 47) = 2.521$, $p = .04$. However, inspection of regression coefficients indicated that none of the social beliefs significantly predicted subjective well-being in this sample. The results are shown in 5.8. These findings were matched by the analysis of the pooled data

Given the small sample size, I decided to rerun the analysis excluding predictors with low regression weights. Social cynicism and reward for application were removed. Results indicated that 19.4% (adjusted 14.7%) of the total variance in subjective well-being was explained by the overall model comprising all three social axioms, $R^2 = .1941$, adjusted $R^2 =$

.147, F (3, 52) = 4.169, p = .010. This time, fate control was a significant negative predictor, and the contribution of religiosity was a marginally significant positive predictor (p = .054). However, in the pooled data none of the contributions were significant. All in all, one can conclude that social axioms were not strong predictors of subjective well-being among this group of Iranian immigrants.

Table 5.8. Regression models predicting aspects of well-being in immigrants

Dependent variable	Predictors	Original data			Pooled data	
		b	β	t	b	t
Subjective well-being	social cynicism	-.09	-.09	-.63	-.12	-.79
	religiosity	.33	.17	1.23	.26	.89
	reward for application	.24	.10	.64	.18	.56
	social complexity	.56	.19	1.19	.57	1.33
	fate control	-.78	-.25	-1.77	-.53	-1.22
Subjective well-being	religiosity	.47	.24	1.97	.35	1.38
	social complexity	.63	.21	1.69	.68	1.83
	fate control	-.85	-.27	-2.14*	-.59	-1.44
Psychological well-being	social cynicism	.67	.15	1.23	.30	.54
	religiosity	1.19	.16	1.15	.94	1.01
	reward for application	-.45	-.04	-.27	1.75	1.40
	social complexity	5.95	.53	3.24**	3.69	2.48*
	fate control	-3.6	-.27	-2.17*	-3.33	-1.99*

* $p< .05$; ** $p<.01$
Note: In the original data set, listwise deletion is used to handle missing values. The pooled data set is produced by multiple imputation. Number of imputations = 10.

Another regression analysis was conducted to examine if social axioms would predict psychological well-being. Results indicated that 39.1% of the total variance in psychological well-being was explained by the overall model comprising all social axioms, R^2= .211, adjusted R^2 = .317, F (5, 41) = 5.265, p = .001. Inspection of the regression coefficients indicated that fate control negatively (β = -.278) and social complexity positively (β = .533) significantly predicted psychological well-being in this sample. The pooled results also showed that fate control and social complexity significantly predicted psychological well-being. The results are shown in Table 5.8.

Hypothesis 13

For the hypotheses related to ethnic identity, only data related to Iranians in the UK were used. Both original data with listwise deletion and the pooled data set produced through multiple imputation were analysed. As expected the MEIM-R was significantly positively correlated with psychological well-being ($r = .34$, $p< .05$). However, the pooled results indicated that the correlation between the MEIM-R and psychological well-being was not significant ($r = .269$, $p> .05$). The MEIM-R was not significantly correlated with subjective well-being ($r = .125$, $p = .349$). The pooled results also confirmed that the MEIM-R was not significantly correlated with subjective well-being ($r = .101$, $p = .453$). However, the pooled results confirmed that MEIM-R was positively correlated with environmental mastery (.28, p <.05), personal growth (.39, p <.01), positive relationships (.44, p <.001), self-acceptance (.27, p <.05), and purpose in life (.30, p <.05). Overall, there was a moderate relationship between MEIM-R and aspects of psychological well-being. The relationship between MEIM-R and subjective well-being, however, was not significant in this sample.

Hypothesis 14

Using several regression analyses, it was tested whether the MEIM-R would interact with any of the social axioms in their effect on subjective and psychological well-being. For this purpose, 10 regression analyses were conducted. The predictor and moderator were centred in any moderation analysis before forming the interaction term. To centre a variable, the sample mean is subtracted from a variable's scores. In the present set of analyses, the MEIM-R and social axioms were all mean-centred for testing moderation hypotheses. The results of the 10 moderation analyses are reported in Table 5.9.

The only significant moderation effect was that between fate control and the MEIM-R predicting subjective well-being. The results related to this significant moderation effect are presented in Table 5.9. Mean-centred fate control, mean-centred MEIM-R, and the interaction between the two variables were entered in the model as predictors of subjective well-being. The results indicated that 15.5% of the total variance in subjective well-being was explained by the overall model, $R^2= .155$, adjusted $R^2 = .107$, $F (3, 52) = 3.191$, $p< .05$. The inspection of regression coefficients indicated that MEIM-R and the interaction term significantly predicted subjective well-being in this sample. Considering that the interaction term between fate control and the MEIM-R was significant, there was a significant moderation effect. The pooled results confirmed this conclusion. The results are shown in Table 4.9, and schematically presented in Figure 4.8. Inspection of the results suggest that for

those scoring low on the MEIM-R, the relationship between fate control and subjective well-being was nonsignificant, but for those scoring high, there was a strong negative relationship between the two variables.

Table 5.9. Moderation analyses

No.	Dependent variable	Predictors	Original data			Pooled data	
			b	β	t	b	t
1	Subjective well-being	MEIM-R	.88	.41	.78	.59	.52
		Social cynicism	.01	.01	.03	-.03	-.09
		MEIM-R × Social cynicism	-.01	-.39	-.58	-.01	-.38
2	Subjective well-being	MEIM-R	-1.02	-.48	-.53	-1.05	-.59
		Reward for application	-.04	-.01	-.05	-.05	-.07
		MEIM-R × Reward for application	.03	.64	.64	.03	.70
3	Subjective well-being	MEIM-R	2.41	1.12	1.10	1.85	.84
		Social complexity	1.83	.62	1.67	1.62	1.49
		MEIM-R × Social complexity	-.06	-1.03	-.97	-.05	-.74
4	Subjective well-being	MEIM-R	2.07	.94	2.29*	2.0	2.18*
		Fate control	1.25	.40	1.21	1.23	1.17
		MEIM-R × Fate control	-.13	-1.1	-2.16*	-.13	-2.12*
5	Subjective well-being	MEIM-R	.15	.07	.12	.21	.17
		Religiosity	.23	.12	.29	.30	.37
		MEIM-R × Religiosity	.00	.11	.14	.00	.05
6	Psychological well-being	MEIM-R	-3.67	-.43	-.77	-3.16	-.71
		Social cynicism	-2.68	-.62	-1.56	-2.07	-1.23
		MEIM-R × Social cynicism	.15	1.04	1.43	.12	1.24
7	Psychological well-being	MEIM-R	5.05	.59	.65	1.84	.26
		Reward for application	3.60	.40	1.29	2.85	1.03
		MEIM-R × Reward for application	-.07	-.35	-.34	.00	.00
8	Psychological well-being	MEIM-R	9.82	1.15	1.30	6.73	.85
		Social complexity	8.33	.76	2.26*	7.21	1.86
		MEIM-R × Social complexity	-.21	-.84	-.90	-.13	-.55
9	Psychological well-being	MEIM-R	4.51	.53	1.30	2.68	.77
		Fate control	-3.40	-.26	-.88	-3.60	-.89
		MEIM-R × Fate control	-.10	-.21	-.43	-.02	-.11
10	Psychological well-being	MEIM-R	1.35	.15	.27	1.69	.34
		Religiosity	-.94	-.12	-.29	-.18	-.05
		MEIM-R × Religiosity	.06	.24	.32	.01	.07

Note. The MEIM-R and fate control were mean-centred.
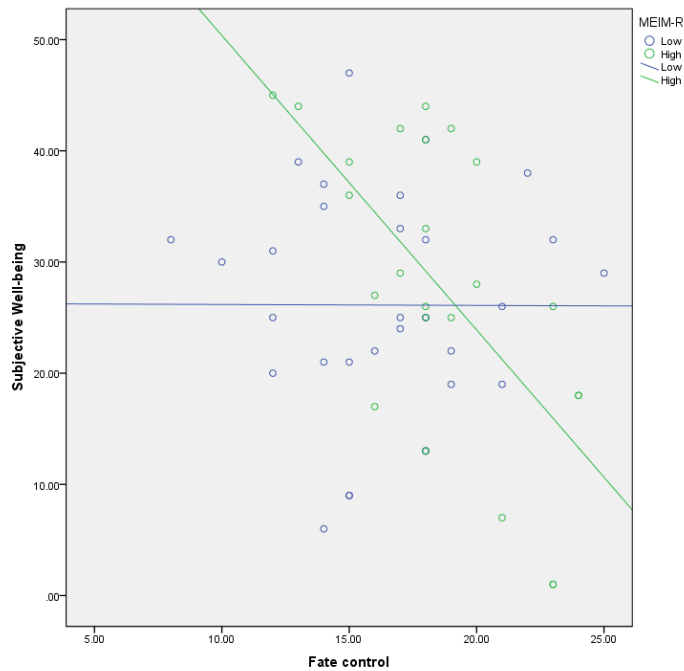* $p < .05$

Figure 5.8. The relationship between fate control and subjective well-being as moderated by ethnic identity

Discussion
Hypotheses 1

The first hypothesis predicted that Iranians in the UK would show social cynicism scores which are intermediate between those of the UK students in the UK and Iranians in Iran. This hypothesis was not supported by the data. Instead, I found that Iranian immigrants scored the highest among the three groups, although this difference was not statistically significant. The finding that social cynicism is fairly high in Iranian immigrants compared to the other groups should be interpreted in view of the fact that social cynicism is not a robust negative predictor of mental well-being in Iranian immigrants (see Table 5.3). Therefore, a strong endorsement of social cynicism beliefs does not seem dysfunctional in this group. This is inconsistent with the finding of Study 1 that social cynicism was a significant negative predictor of both dimensions of well-being in the Iranian and the UK students in the UK samples of Study 1. This finding is however consistent with the finding of Study 2 that social cynicism was not significantly negatively correlated with mental well-being in a group of Iranian students living in Iran. I argued that a significant drop in quality of life of Iranians at the time of data collection for Study 2 may have contributed to this change in the function of social cynicism.

That is, in some challenging contexts, being a cynic may turn out not to be dysfunctional. For example, a cynic may not fall prey to many social and financial traps in a challenging social situation.

This may apply to Iranian immigrants as well. In the introduction of this study, I described the difficulties that Iranian and other Muslim immigrants face in Western countries. It can be suggested that given these challenges, being a cynic may not have its negative effects on mental well-being that it may have in a better social situation. In sum, these findings show that social cynicism is not significantly negatively associated with mental well-being, and that Iranian immigrants do not score lower than the other groups on social cynicism. This, nevertheless, does not seem to be harmful for this group in adjusting to a relatively threatening environment. These speculations should be empirically tested in future studies though. Using larger samples may result in significant differences between the groups on social cynicism. Also, longitudinal studies should be conducted to examine if immigrants' initial levels of social axioms would help or harm their adjustment to the host culture.

Hypothesis 2

The second hypothesis predicted that Iranians in the UK would show religiosity scores which are intermediate between those of the UK students in the UK and Iranians in Iran. This hypothesis was supported by the results of the linear trend analysis. I found that Iranians living in Iran scored the highest, the UK students in the UK scored the lowest, and Iranian immigrants fell in between the two other groups. This finding is in line with theoretical and empirical work assuming that immigrants gradually absorb new values and norms prevalent in their host cultures (Inglehart & Norris, 2009; Inglehart & Welzel, 2005), but this is not the only possible interpretation of this finding as discussed below.

It turned out that the largest difference in social axioms between Iranians living in Iran and the UK students in the UK was in the levels of religiosity (as indicated by a large η^2 found for religiosity relative to other social beliefs). Based on these data, one could speculate that when individuals of an original culture emigrate to a new culture, it is possible that they absorb the values and beliefs prevalent in the host culture, even in the most critical aspects that capture the core differences between the two cultures. If this speculation turns out to be true in future longitudinal studies, these findings can be taken to provide evidence for the malleability of social beliefs.

When faced with a secular culture ruled by democratic (rather than theocratic) regulations, Muslim immigrants may reconsider their core belief that religion is the most important source of optimal functioning for individuals and societies. However, one cannot rule out the

possibility that Iranian immigrants are actually a group of less religious Iranians who have emigrated to the UK to live in a more secular environment. In other words, it is possible that immigration has not produced lower levels of religiosity in the immigrant group relative to the non-immigrant Iranian group. Future longitudinal studies could help to unravel these complexities.

Hypothesis 3

The third hypothesis predicted that Iranians in the UK would show social complexity scores which are intermediate between those of the UK students in the UK and Iranians in Iran. I found no evidence in support of this hypothesis. The immigrants' social complexity scores were almost identical to that of the non-immigrant Iranians. This means that emigration to the UK may have no effect on Iranian immigrants' endorsement of social complexity beliefs. Of course, given the small sample size, this interpretation remains too speculative. This at the same time may indicate that Iranians who choose to emigrate are not necessarily those who show a stronger endorsement of social complexity beliefs, as some may expect.

I argued that social complexity may be an important category of beliefs that is useful in new environments (such as in the context of immigration), because it facilitates exploring new ways of doing things, which may be a central prerequisite to successful acculturation. The findings of the regression analyses are consistent with this speculation. Social complexity was positively associated with psychological well-being in Iranian immigrants (see Table 5.8). That Iranians in the UK show no evidence of stronger endorsement of social complexity beliefs is perhaps one of the reasons why they are not happier than non-immigrant Iranians, and they are less happy than the UK sample (see findings related to hypothesis 6).

Hypothesis 4

The fourth hypothesis predicted that Iranians in the UK would show reward for application scores which are intermediate between those of the UK students in the UK and Iranians in Iran. This hypothesis was not supported. I found no significant difference between the three groups, which suggests that the two cultures do not differ largely on this social belief, and immigration does not result in any remarkable change in the belief regarding reward for application in Iranian immigrants.

It can be considered unfortunate that social complexity and reward for application, which are among the most important aspects of social beliefs when dealing with new environments and new challenges, were not strongly endorsed by Iranian immigrants compared to Iranians living in Iran. Reward for application has been previously found to contribute to the mental

well-being and successful coping of immigrants (Saftdar et al., 2006). Therefore, these findings may help us partly explain why Iranian immigrants were not found to be happier than non-immigrant Iranians, and they are less happy than the UK sample (see findings related to hypothesis 6). These findings can form a platform for future educational programmes for Muslim immigrants in Western countries. The development of social complexity (which facilitates exploring and trying new ways of doing things) and reward for application beliefs (which facilitates active coping) may help immigrants not to end up in a state of hopelessness in the face of the challenges posed by immigration.

Hypothesis 5

The fifth hypothesis predicted that Iranians in the UK would yield fate control scores which are intermediate between those of the UK students in the UK and Iranians in Iran. The findings did not support this hypothesis. No significant difference was found between the three groups, which may suggest that the two cultures do not differ largely on this social belief domain, and immigration does not result in any remarkable changes in the level of fate control in Iranian immigrants. I previously found that lower fate control contributes to both dimensions of mental well-being (i.e., subjective and psychological) in Iranian immigrants. Therefore, Iranian immigrants may greatly benefit from lower levels of fate control.

It is also noteworthy that although the present UK sample's score on fate control was not significantly different from those of the Iranian groups, prior research shows that the British are quite low on this social belief dimension compared with other nations including Iran (Leung & Bond, 2004). This is also consistent with prior research showing that non-Westerners score higher on scales of external locus of control compared to Westerners (e.g., Smith, Trompenaars, & Dugan, 1995). These findings indicate that in the British cultural environment, fate control beliefs are not strongly endorsed. This may indicate that Iranian immigrants have not been largely influenced by this aspect of the British culture.

These findings can be compared with findings on religiosity. Iranian immigrants' religiosity beliefs are statistically different from Iranians living in Iran. That is, their religiosity level lies in between that of non-immigrant Iranians and the UK sample. However, Iranian immigrants' fate control beliefs do not show the same pattern. If we accept that Iranian immigrants have come to endorse religiosity beliefs less strongly under the influence of the British culture, we may conclude that fate control beliefs are possible to be less changeable in immigrants than religiosity beliefs.

If we agree with this line of arguing, why is that so? What does drive this difference between religiosity beliefs and fate control beliefs? One reason for this might be that it is quite easy

for immigrants to notice non-religious or alternative religious practices (e.g., Christian religious behaviours and symbols) in the host culture, as religious beliefs are generally explicitly demonstrated in religious practice (or the lack of religiosity is explicit in many aspects of individuals' behaviour and society). Therefore, it would be easier for immigrants to notice and reflect on these aspects of the host culture, and accordingly absorb some non-Islamic aspects of the new culture. However, fate control beliefs may be less explicitly expressed by people, or if expressed may be difficult to interpret by lay observers.

For example, when a Muslim immigrant gets involved in simple everyday practices in the host culture (e.g., shopping, or just walking along a street), it is easily possible for him or her to notice many behaviours which are not consistent with Islam (e.g., women dancing, non-Islamic dress codes, non-Islamic patterns of male-female relationships, etc.) in every corner of the city. However, it is difficult for them to figure out the motives behind the others' behaviours, let alone to judge if these behaviours are externally or internally driven. Therefore, immigrants have less access to the locus of control or fate beliefs held by people in the host environment than their religious beliefs. This accessibility may lead to more awareness that may produce a higher chance of change with regard to religious beliefs, in comparison to fate control beliefs. These suggestions are all too speculative for the time being without further empirical studies and should be investigated in future.

Hypothesis 6 and 7

Hypotheses 6 and 7 predicted that the UK students in the UK would score higher than native Iranians and Iranian immigrants in the UK on aspects of well-being. This hypothesis was supported for subjective well-being, but not for psychological well-being. With regards to subjective well-being, the general pattern showed that the UK sample scored higher than the other two groups, although only the difference between the UK students in the UK and Iranians inside Iran was significant. This finding is consistent with past studies showing that Iran scores lower than the UK on subjective well-being (e.g., Inglehart, Foa, Peterson, & Welzel, 2008).

However, with regards to psychological well-being, no significant difference was observed among the three groups. We do not have prior research comparing Iranians and the British on psychological well-being, and thus these findings are a novel contribution to well-being studies in Iran. It turns out that although Iranians are less happy (that is they experience less positive affect, more negative affect, and less satisfaction with life), they are not necessarily lower on psychological well-being and optimal functioning than the UK samples (based on the self-reports). This is an interesting finding confirming the importance of including both

subjective and psychological well-being scales in well-being studies, as the results for subjective well-being only may draw a less accurate picture of the standing of nations and groups on mental well-being.

The fact that Iranian immigrants were not happier or higher on psychological well-being than Iranians in Iran may reflect that migration to a wealthier country (at least to the UK) does not make an Iranian happier. If it is the case that many Iranians migrate to achieve more financial resources (which may be the case given Iran's weak economic status compared to Western countries), these findings are in line with the findings of Bartram (2011, p. 56), who showed that "migration as a means of increasing one's income might be no more effective in raising happiness", using data from a large sample of nations. Overall, these findings indicate that migration does not necessarily lead to better mental well-being.

Of course, it might be the case that migration has some benefits for mental well-being, but that challenges posed to Muslim immigrants may neutralize these benefits. For example, discrimination is an important factor. Muslims in Western societies are the target of discrimination, such as being perceived as terrorists, which leads to worries and mental disorders (Ali, Liu, & Humedian, 2004; Moradi & Hasan, 2004; Segal, 1998). The negative and biased media coverage of Muslims and Islam is another challenge for immigrants from Iran and other Muslim nations in the West (Verkuyten & Slooter, 2007).

The phenomenon of Islamophobia (i.e., fear and hatred of Islam and Muslims) has led to discrimination and prevalence of prejudices against Muslims in secular Western countries, which can lead to social segregation of Muslim minorities (Ghaffari & Ciftci, 2010; Marshall & Ghazal Read, 2003). It is well documented in the literature that perceived discrimination (i.e., a sense of "being treated unfairly or negatively or being teased, threatened, or feeling unaccepted because of one's ethnicity", Berry, Phinney, Sam, & Vedder, 2006, p. 311) is associated with smaller frequency of participation in the host culture and sometimes less successful adjustment (Berry eta l., 2006; Jasinskaja-Lahti, Liebkind, Horenczyk, & Schmitz, 2003). Therefore, many socio-cultural factors may collectively undermine Iranian immigrants' mental well-being, neutralising the benefits of living in a more democratic and wealthy environment.

Iranian immigrants may be characterised by a tendency to hold on to their original culture's value system. This is reflected in a fairly high ethnic identity score for Iranian immigrants in the present sample (see discussion for hypothesis 13). Although attachment to one's ethnic culture seems to be beneficial for the mental health of Iranians in some ways, if accompanied by sticking to some ineffective traditional norms and values, this tendency may be harmful in

a modern context. That is, reluctance to sacrifice traditional norms for the sake of one's personal well-being may at times harm Iranian immigrants' sense of well-being.

For example, research shows that south Asian Muslims in the USA are reluctant to forgo family loyalty for the sake of their personal sense of well-being (Das & Kemp, 1997). This is also reflected in conflicts between parents and children over various modern and traditional norms. For example, Sayegh, Kellough, Otilingam, and Poon's (2013) review indicates that intergenerational disagreement on family norms contributes to mental disorders among Asian Muslims in the USA. The same traditional beliefs prevent many Muslims from seeking professional help when dealing with serious mental problems. For example, Middle Eastern Muslims "are more accustomed to seeking advice about personal problems within their family support network than outside of it, as doing so may indicate disloyalty to one's family and may be considered shameful…" (Sayegh, Kellough, Otilingam, & Poon, 2013, p. 226). Therefore, a collection of societal, psychological, and cultural characteristics in Iranian immigrants may come to neutralise the benefit they may get from immigrating to a wealthy democratic country.

Hypotheses 8 to 12

The results of the correlational analyses showed that social cynicism was largely unrelated to mental well-being. This finding is consistent with the findings of Study 2, which showed that social cynicism was unrelated to mental well-being among Iranian university students. As discussed in Study 2 (Chapter 4), this finding is, however, inconsistent with the majority of prior studies. In Study 2, I argued that this nonsignificant association might be a result of major economic-social problems of Iranian society, which may come to make social cynicism not so harmful. The same argument can be made for this sample of Iranian immigrants living in the UK. Prior research indicates that immigrants (especially Muslim immigrants) may face countless challenges in secular Western countries. In such a context, social cynicism may have less negative effects than it may have in more stabilised contexts (see Study 2 for more arguments).

Reward for application was found to be significantly positively correlated with psychological well-being, and unrelated to subjective well-being. But these relationships seemed to be weak as in the regression analyses, when other variables were controlled for, reward for application did not explain a significant amount of variance. However, this positive relationship is still interesting. Reward for application may help an immigrant to use active coping strategies in the context of the new country, which is helpful to adjustment and achievement. These findings support the importance of reward for application for immigrants. Moreover, reward

for application was only associated with psychological well-being and not subjective well-being. This might be because trying to actively deal with problems in everyday life may in fact decrease the frequency of positive affect and increase the frequency of negative affect in the short term. However, the long-term outcome of holding reward for application beliefs can be acquisition of more psychological strengths.

Through practising problem-solving skills in this process, a person can grow more psychologically, and build more psychological strengths internally and in relationship with others. This is reflected in the present findings, as reward for application was associated with better psychological functioning. Altogether, the finding that reward for application has differential relationships with subjective and psychological well-being confirms the importance of including both aspects of well-being in psychological research and is in line with prior research showing that these two aspects of well-being have various sets of correlates (e.g., Joshanloo, Rastegar, & Bakhshi, 2012), at least when the current well-being scales are used.

Social complexity was found to be one of the most robust predictors of mental well-being in the present study. The results of correlation analyses revealed that social complexity predicted various aspects of psychological and subjective well-being in Iranian immigrants. The results of the regression analyses showed that social complexity was a significant predictor of psychological well-being (but not subjective well-being) when other aspects of social axioms were controlled for. This finding is in keeping with the findings of Study 1 in a non-immigrant Iranian sample. Therefore, it can be concluded that social complexity is a better predictor of psychological well-being than subjective well-being. This may be explained by the fact that an open mind-set and the tendency to try new ways of doing things, which prompts the person to constantly try new things and explore new possibilities, may turn out to have some affective costs in the short term. This is consistent with a past study by Brown et al. (2013). They found that, in the UK, bicultural children with a tendency to integrate their heritage and host culture identities showed more negative emotional symptoms. In fact, more exploration and facing more challenges may be accompanied by short-term negative emotions; however, in the long run, these explorations may help the individual build more psychological strengths. The present findings indicate that social complexity beliefs are in general beneficial to hold for immigrants, as they may facilitate better acculturation and integration to the new culture.

Furthermore, according to the results of Study 2, one of the mechanisms through which social complexity contributes to better mental well-being is that it facilitates perspective taking. Perspective taking is defined as a tendency or ability of the respondent to adopt the

perspective, or point of view, of other people (Davis, 1980), which is generally a beneficial ability to have. However, it also seems to be helpful particularly in a new environment (such as the host culture), as perspective taking helps the person to better understand new people's thoughts and feelings. This may lead to empathy and reduce possible clashes between the immigrants and the people of the new culture as well as culture shock. This may also facilitate successful acculturation, as it is easier to integrate into a new culture if one knows enough about how people in the new culture see the world, than if one feels alienated and finds the mind-set of the new people strange and unintelligible.

Fate control was significantly negatively correlated with psychological and subjective well-being, and this finding held when all other social axioms were controlled for in regression analyses. It can therefore be concluded that fate control was a robust and consistent predictor of mental well-being in this immigrant sample. This is not surprising as fate control has been found to be positively associated with external locus of control (Singelis et al., 2003). Among immigrants living in a new country, an internal locus of control and taking responsibility for one's life seems more beneficial than attributing the causes of various events to supernatural and external sources.

The review in the introduction of the thesis showed that prior findings on the relationship between fate control and well-being are non-conclusive. For example, Chen et al. (2009) found that fate control was positively correlated with suicidal ideation among the Hong Kong Chinese. In the first study of the present thesis, I found that fate control was associated with low autonomy. Other studies, however, have generally shown that fate control is unrelated to life satisfaction and indicators of interpersonal and social functioning (e.g., Joshanloo, Afshari, & Rastegar, 2010).

The fact that fate control was a robust predictor of lowered well-being in the present immigrant sample is an interesting finding which suggests that the relationship between fate control and well-being depends largely on the situation. As I speculated above, an internal locus of control seems to be more adaptive in a new context, where a person benefits from using his or her agency to find new opportunities and solve new problems.

Finally, religiosity was significantly positively correlated with positive relationships with others. Therefore, one can conclude that religiosity has slight benefits for Iranian immigrants in the context of Western cultures, whereas, the results of Study 1 showed that religiosity was correlated with multiple well-being indicators for Iranians living in Iran. These findings collectively suggest that the value of holding religiosity beliefs for an individual depends on the context in which he or she lives. In a highly religious context (such as Iran), religiosity may have more to offer than in a secular context (such as the UK).

However, it should not be ignored that religiosity did correlate positively with positive relations with others. This finding is consistent with a large body of prior research in the literature. In fact, it has been recognised (e.g., Ferraro & Koch, 1994; Hill & Butter, 1995; Seybold & Hill, 2001) that one of the greatest benefits of religiosity is the social connections that it offers:

> "Religious and spiritual communities provide opportunities for fellowship, involvement in formal social programs (e.g., visiting shut-ins, providing meals to the poor), and companionship. This kind of support can have beneficial effects by reducing both psychological and physical stressors." (Seybold & Hill, 2001, p. 23)

Hypothesis 13

Participants in the immigrant sample scored high on the MEIM-R (3.56 on a scale ranging from 1 to 6), which means the participants of the sample used in this study seemed to have a fairly strong rather than weak attachment to its ethnic root (Iran). This mean score is larger than the mean of a large and diverse multi-national sample of immigrants (N = 1,463; Mean age = 32.5 years, SD age = 4.9), which was 3.41 (Brown, et al., 2014). This finding is consistent with the findings reported by Saroglou and Mathijsen (2007) in a group of Muslims in Belgium. Saroglou and Mathijsen found that a sample of mostly young Muslims in Belgium showed a strong attachment to their country of origin, and this attachment was stronger than that they felt for the host culture they were living in (i.e., Belgium).

I also found that attachment to Iranian culture had a positive effect on immigrants' psychological well-being. This finding is inconsistent with some past studies in certain cultures which show that a strong tendency to maintain one's original culture may be a barrier in the way of adopting a new culture and thereby leads to lowered well-being. This line of research suggests that this negative effect happens because a strong ethnic identity contributes to factors such as isolation and loneliness in Muslim immigrants (Abu-Bader, Tirmazib, & Ross-Sheriffa, 2011; Ahmed, Kaufman, & Naim, 1996). Moreover, the widespread perspective of European host societies is that holding to traditional and religious identities is a drawback in successful adjustment of Muslims to host cultures (Güngör, Fleischmann, & Phalet, 2011). The present study found no negative psychological effects for attachment to one's ethnic identity. Indeed, the strength of ethnic identity was positively correlated with some aspects of psychological well-being. Therefore, the present results are consistent with the view that Muslim immigrants' attachment to their original religious culture "contributes to acculturative adjustment both as a marker of group identity and

belonging and as a source of self-esteem, social support, and cultural continuity across generations" (Güngör, Fleischmann, & Phalet, 2011, p. 1357).

It is also important to observe that ethnic identity in the present sample was most strongly correlated with positive relationships, which indicates that for Iranian immigrants in the context of the UK, one of the most important benefits of attachment to one's Iranian identity may be the establishment of social connections with compatriots as well as high perceived social support from the Iranian community and Iranian friends, which in turn reduces the sense of loneliness for Iranian immigrants high on ethnic identity.

Hypothesis 14

This hypothesis predicted that there would be significant interactions between ethnic identity and certain social axioms in their effects on well-being. Only one significant interaction was found: that between ethnic identity and fate control. The results showed that for those scoring low on ethnic identity, the relationship between fate control and subjective well-being was nonsignificant, but for those scoring high on ethnic identity, there was a strong negative relationship between fate control and subjective well-being. In other words, having a strong attachment to one's Iranian ethnicity exacerbated the negative relationship between fate control and subjective well-being in this Iranian immigrant sample. Stated the other way around, for those who have a strong attachment to the Iranian identity, endorsing fate control beliefs had a more negative effect than for those who did not identify strongly with their Iranian origin.

Making sense of the results of the moderation analysis is not easy given the dearth of prior empirical studies on this topic. However, one can speculate that this effect of ethnic identity may be based on the association of strength of ethnic identity with religiosity. Stronger ethnic identity is correlated with stronger pro-religion attitudes (see Table 5.3). These data implicitly suggest that for more religious people, stronger endorsement of fate control beliefs has more adverse effects. This might be because pairing religious beliefs and fate control beliefs may result in some dysfunctional coping strategies.

A part of fate control beliefs is that one can change fate by involvement in certain rituals. If high pro-religion attitudes as well as fate control beliefs are salient for an individual, it is quite likely that he or she gets involved in certain dysfunctional problem-solving behaviours that backfire. For example, an Iranian with these characteristics may rely on Iranian *do'anevisi* (prayer-writing) to solve their problems. For this, the person needs to visit a *do'anevis* (prayer-writer). A *do'anevis* charges others to provide certain *do'as* (prayers) and instruction for certain rituals and magical practices to change fate and avoid bad luck.

Visiting a *do'anevis* is a common cultural practice in Iran, done by religious people from various socio-economic backgrounds. In sum, it makes sense to speculate that stronger ethnic identity goes with higher religiosity and when higher religiosity is accompanied by higher fate control beliefs, an individual may rely on dysfunctional problem-solving and coping strategies, and this may lead to lower subjective well-being

Final thoughts

Including an Iranian immigrant sample in this study enabled me to examine differences on social axioms between Iranians living in Iran and Iranian immigrants. The results showed that immigration might results in some changes in some aspects of social axioms but might have no effect on other aspects. However, given the lack of longitudinal data in the present study, the findings are preliminary and should be complemented by longitudinal analyses to be conducted in future immigration studies.

Since the data of study 1 has been used in this study, the question may be raised why the samples of these two studies (1 and 3) were not combined and reported within one single chapter. The data of Chapter 1 were collected in 2008 and that of Chapter 5 (Study 3) a few years later. Clearly, the 2008 student sample may not be representative of current students in Iran owing to inevitable political and socio-economic changes in these years. Also, Study 1 focused on Iranians living in Iran and Study 3 on Iranian immigrants.

In this area of study and in Iranian-Muslim samples, there is not a body of prior empirical research to draw on. Social axioms have been rarely studied in the context of immigration, and the field of social axioms research is itself nascent. Psychological studies with Iranian samples, in particular Iranian immigrant samples, are scant. Lack of empirical evidence and theorizing in this field of inquiry adds to the significance of the present study. At the same time, it makes explaining the findings challenging. To partially redress these gaps, Study 4 of the present thesis seeks to provide qualitative data in some complex areas arising largely from the findings of Study 3 in this thesis. In Study 4, a group of Iranians living in the UK will be interviewed about their thoughts on new influences and experiences with regard to social beliefs in the context of a new country. The study aimed at providing more insights from people's own perspective on the central variables of the present thesis.

Chapter 6

Study 4

Social Axioms and Mental Well-Being in Iranian Immigrants in

England: A Grounded Theory Study

Introduction

Study 3 suggested that the way life experiences are interpreted by Iranians in England can be influenced by new cultural beliefs that they come to face in England. The empirical studies do not help to fully interpret some of the findings of Study 3. Therefore, in Study 4, a qualitative study was designed to shed more light on some of these findings. Specifically, the purpose of Study 4 is to investigate what Iranians living in the UK think of these influences and new experiences in the context of a new country. The qualitative technique used for this study was an in-depth interview using open-ended questions. The responses of the participants were subject to a qualitative analysis based on the well-established methodology of grounded theory (Glaser, 1978).

Introduction to Grounded Theory

Grounded theory is a popular approach in psychology, sociology, anthropology, and many other fields. The theory dates back to a 1967 book, *The Discovery of Grounded Theory*, by Barney Glaser and Anselm Strauss. In this book, the authors argue that researchers need a method allowing them to "move from data to theory". These authors developed a research methodology that enables researchers to derive theories to explain human behaviour from empirical data. These data-driven theories are tightly related to the specific data used to develop them. In other words, these theories are "grounded" in the data from which they emerge. As such, these theories do not hinge on constructs, categories, or variables from earlier theories.

Roberts and Taylor (1998, p. 102) define grounded theory as a method that "starts from the ground and works up in an inductive fashion, to make sense of what people say about their experiences, and then to convert those statements into theoretical propositions". Grounded theory is therefore a process of inductive analysis that leads to discovering a new theory (Glaser, 1992; Strauss & Corbin, 1990). The aim of this approach is to develop an "integrated theory based on conceptual, hypothetical relationships" (Glaser, 2002, p. 4) in the context of each individual research. It is important to note that grounded theory aims to conceptualise rather than describe. Data production, data analysis, and theory development are all tightly intertwined in this research methodology.

Grounded theory is rooted in symbolic interactionism (Park & Burgess, 1921; Hughes, 1971), which is identified as "a social-psychological theory of social action" (Bowers, 1988, p. 36). Symbolic interactionism sees an individual as a socially constructed being, and focuses on social interaction processes that help individuals to make sense of the world they live in. Building on these principles of symbolic interactionism, grounded theory posits that people constantly try to make sense of the world. It is also posited that reality is a social construct. In grounded theory, the processes that are occurring in social situations are studied to derive a theory that explicates human actions in the particular social context under study (Stern, 1980). Grounded theory is particularly useful where researchers do not know much about the phenomenon under study, or where established theories to explain certain individual or group behaviours are lacking (Stanley & Cheek, 2003). These situations include those where there are scant empirical verifications of existing perspectives, where existing perspectives diverge on important issues, or where a novel viewpoint is looked for (Eisenhardt, 1989; Hitt et al. 1998; Lichtenstein & Brush, 2001). In such occasions, grounded theory provides a unique means to facilitate a deeper understanding of the phenomenon. Given that grounded theory does not rely specifically on pre-existing empirical evidence, it may be useful in the aforementioned situations (Eisenhardt 1989).

 The fundamental difference between Glaser and Strauss seems to be their approach to data analysis. Glaser is viewed as remaining more faithful to the original version of grounded theory in his approach to data analysis, while Strauss with Corbin incorporated modifications. It seems that; 1) they finally came to an abductive reasoning in which there is a preliminary study and then a close examination. In this regard, all possible explanations for the observed data will be considered in the formulation of theory and the researcher will then provide a favourable interpretation. 2) They argue that there may be different explanations for what emerges from the data. 3) They also confirmed the importance of contextual factors that may affect a situation (Cooney, 2010). 4) Although there is an idea discovery process in both the

Glaser and Strauss approaches, Glaser seemingly argued that preunderstanding in the process is useful for developing sensitivity to a wide range of possibilities while Strauss argued that scattered preunderstandings not only provide sensitivity, but they also might be used to develop new theory (Heath & Cowley, 2004). In general, the difference between Glaser and Strauss in data analysis can be summarized as indicated in Table 6.1.

Table 6.1. The differences between Strauss and Glaser approach to grounded theory

	Strauss and Corbin	Glaser
Initial coding	Open coding	Substantive coding
	Use of analytic technique	Data dependent
Intermediate phase	Axial coding	Continuous with previous phase
	Reduction and clustering of categories (paradigm model)	Comparisons, with focus on data, become more abstract, categories refitted, emerging frameworks
Final development	Selected coding	Theoretical
	Detailed development of categories, selection of core, integration of categories	Refitting and refinement of categories which integrate around emerging core
Theory	Detailed and dense process fully described	Parsimony, scope and modifiability

Source: Heath & Cowley (2004, p. 146) The method employed in the present study is more like Strauss and Corbin (1998b).

1. Glaser (1998) and Strauss (1987) both agree that a researcher does not begin a project without a preconceived theory in mind, although they consider the role of this theory differently.

For Glaser, the previous understanding based on the general context of the problem and wide reading are what make a researcher sensitive to a wide variety of hypotheses and probabilities. But for Strauss, the previous understanding has early effects and provides special understanding based on past experience.

The traditional approach (Glaserian) is ontologically viewed as post-positivist where the researcher is viewed as independent, a neutral observer of what is being viewed and they discover data in an objective and neutral way (Blaikie, 2007).

However, the researcher has not been like this in the present study. The researcher himself is an Iranian immigrant and undertook the study with background knowledge about the main questions in this study.

The researcher looks at human nature from an Islamic perspective. He believes in humans' right to determine their own destiny. Like many Muslims in Iran, he also believes that he is

inherently free to choose or reject, and that he has the complete freedom to act or not to act. Moreover, he believes that the destiny of humans is shaped by God in such a manner that any human being can freely choose his path toward prosperity or misery. The background knowledge has not only developed sensitivity for the researcher, but it might also be used to develop the assumptions and to formulate the final theory in this study.

2. On the other hand, a researcher begins a study with a series of questions and a predetermined theoretical framework from Glaser's point of view. But from Strauss's point of view, the researcher may begin with a preconceived theory, the development of which depends on the participants' responses to a semi-structured interview (Howard-Payne, 2015)

In this study, the researcher was guided by the data as they were collected and analysed, rather than by predetermined theoretical frameworks. Grounded theory analysis gradually led to further conceptual levels of analysis. According to Howard-Payne (2015), these are signs of a Straussian grounded theory approach.

3. Procedural differences are also apparent between the two approaches.

During the analysis, the researcher pursued the guidelines and phases, including open coding, axial coding, and selective coding, which are more compatible with Strauss's approach.

In open coding, categories and subcategories were selected according to the interview. In axial coding, one of the open coding categories was centred as the core category, and the other categories were linked with it. The focus was on developing a theory on the relationship between the categories in selective coding. The three types of coding were a point of disagreement between Strauss and Glaser. Accordingly, Strauss's approach was adopted in the present study, the main reason for which was a very limited number of studies available in this field. The present study was the first research on immigrant Iranians using such a method. Due to the lack of previous research, there was a need for a systematic, purely exploratory method. To meet the need, Strauss's approach was more effective.

Processes and Procedures

Concepts, categories, and propositions are key elements of grounded theory. Concepts are very important because theory is developed from a conceptualisation of the data, not the raw data (i.e., actual incidents and activities) per se (Corbin & Strauss, 1990). The actual events are seen as potential indicators of concepts. Concepts are given labels and are constantly used in the context of each research for the respective incidents. Categories are more abstract than the respective concepts. They are generated by examining similarities and differences between lower level concepts. Categories are described as the cornerstones of the developing theory (Corbin & Strauss, 1990, p. 7). Finally, propositions show general conceptual relations

between a category and its concepts, and between separate categories (Strauss & Corbin, 1998; Whetten, 1989). Through refining and elaborating propositions, the final theory is formulated.

The key elements of concepts, categories, and propositions emerge through analysing the data. Data analysis in grounded theory is often referred to as coding. Three stages of coding involve open coding, axial coding, and selective coding (Strauss & Corbin, 1990), as described below.

Open coding

This is the first step in data analysis. Open coding is the process of extracting and naming concepts and categories from the available data. In this stage of coding, the researcher aims to describe general features of the phenomenon under study. In other words, it is "a way of identifying important words, or groups of words, in the data and then labelling them accordingly" (Charmaz, 2006, p. 9). Open coding results in sub-categories, and core categories, with their properties and dimensions (Jones & Alony, 2011, p. 101). The properties of a category are described in this stage.

Axial coding

The next step is axial coding. In axial coding, the researcher seeks to identify possible causal relationships between the categories resulting from open coding. That is, the main purpose of this stage is to make sense of possible connections between categories to gain an understanding of the phenomenon to which they relate (Kendall, 1999). This is carried out through the process of choosing one core category and relating all other categories to it (Strauss & Corbin, 1990). In this stage, the researcher examines the relationships between the core phenomenon of interest, and other categories. Categories other than the core category can serve as causes, outcomes, or contextual categories (Crook & Kumar, 1998).

Selective coding

After tentatively establishing links between the categories, theory building starts. This stage involves the creation of a theory to make sense of the data (Strauss & Corbin, 1990). Finding a core category helps develop a single storyline around which all categories and connection are explained. In a sense, all other categories are integrated through this category, and thus "an explanatory whole" emerges (Strauss & Corbin, 1998, p. 146). The result is a core story, "which is a brief narrative of the most important aspects of the data, subsuming all of the other categories and articulating their relationships to the core story" (Fassinger, 2005, p. 161).

The Present Research and Rationale for Research Method

Explaining some of the findings of Study 3 is challenging given the lack of empirical and conceptual work on the sample under study. Although I explained many relationships that existed between various variables in Study 3 based on previous theory and empirical studies in various cultures, many of the explanations provided seemed to be speculative at this point. Therefore, much remains to be investigated to gain a full understanding of the ways Iranians in England understand and experience mental well-being and its relationship to social axioms. Given the dearth of prior studies in this area of research, producing more data would help to understand the themes of the present thesis more thoroughly. The purpose of the present study was to describe and explain Iranian immigrants' understanding of mental well-being and ill-being, and the role of holding certain social beliefs in achieving mental well-being.

The present study took advantage of a well-established qualitative technique (i.e., grounded theory methodology) to shed more light on the relationship between variables studied in the chapters previous in an Iranian immigrant sample living in the UK. In the present study, in-depth interviews were used to produce raw data to be subjected to grounded theory analysis. In-depth interviewing is a widely used and popular method of data collection for grounded theory research (Lofland & Lofland, 1995). A researcher needs to determine major issues to be covered during the interview. However, the interview structure is not fixed, and the process is flexible enough to allow topics to come up in the context of specific interactions between the interviewer and the interviewee. This allows responses to be fully explored and keeps the researcher responsive to relevant issues raised by the interviewee at any given moment in the process (Hollway & Jefferson, 1997; Legard, Keegan, & Ward, 2003).

In in-depth interviewing, the interviewer tries to encourage the interviewee to talk freely and interviewers' interventions are dependent on the participant's responses to prior questions. Given that participant's initial responses are generally superficial, the interviewer brings up deeper and more informed questions to direct the interaction towards a fuller understanding of the interviewee's ideas.

It is evident that, in the UK, Iranian immigrants' social beliefs and views of ethnic identity and mental well-being have not been explicitly studied to date. Relevant empirical and conceptual studies on this topic are non-existent. It is also evident that psychologists and psychotherapists do not have a clear and widely accepted view of the relationship between social beliefs, ethnic identity, and well-being for this group. Given the lack of empirical evidence and conceptual consensus, grounded theory serves as a useful and appropriate methodology. As explained before, grounded theory is mostly beneficial where there are scant

empirical verifications of existing perspectives, or where existing perspectives diverge on important issues (Eisenhardt, 1989; Hitt et al. 1998; Lichtenstein & Brush, 2001). These factors collectively make grounded theory an appropriate method for this study.

It is also noteworthy that for the purposes of the present study, grounded theory seems more appropriate than many other qualitative methods. For example, another widely used qualitative method is thematic analysis. Thematic analysis is "is a method for identifying, analysing and reporting patterns (themes) within data" (Braun & Clarke, 2006, p. 79), which does not lead to a theory. Given the lack of theories regarding my research questions in this specific sample, in the present study I was interested in summarising all the findings in a theory grounded in the data, and such a theory cannot result from thematic analysis. In addition, in this study, I was interested in the effects of beliefs, ethnic identity, and other factors on mental well-being. Therefore, grounded theory methodology seems a better fit.

Interpretative Phenomenological Analysis (IPA) is another widely used qualitative methodology. IPA is concerned with inner or phenomenological experiences of the participant (Larkin, Watts, & Clifton, 2006; Smith, 2004; Smith, Flowers, & Larkin, 2009; Smith &Osborn, 2003). The main difference between this method and grounded theory is that IPA is generally used for an in-depth examination of the lived experiences of a single case. When more than one case is included in an IPA analysis, the purpose would be to thoroughly describe a single case and compare this case with other participants. In the present study, I am not interested in how each individual participant internally experiences mental well-being. Instead, I am interested in understanding the processes leading to mental well-being and ill-being, and the influences of social beliefs and other factors. Moreover, in this study, I am interested in the interaction of various factors (e.g., beliefs and ethnic identity) in influencing mental well-being. In other words, this study aims at describing and explaining the relationships among a relatively large number of variables, rather than trying to understand how people internally experience mental well-being, and thus grounded theory seems a better fit. Finally, I was interested in summarising all the findings in a theory, which cannot result from IPA.

Method

Participants

A convenience sample of Iranians was interviewed. The participants were 14 Iranians living in the UK for at least 3 years. A period of at least three years since leaving the country was considered as a criterion for Iranian immigrants with no maximum limit, whereby there

are differences in the sample. The range of residence was 3-21 years in the Iranian immigrants group, with an average of about 11 years.

Of the sample, 10 were female (71.4%) and 4 were male. Age ranged from 18 to 53, with a mean of 30.64 (SD = 10.32). Four participants reported that they were students; three reported that they were workers; two reported that they were both working and studying, and five reported they were neither worker nor student. One participant reported their degree to be General Certificate of Secondary Education or equivalent, one reported A-levels or equivalent, four reported bachelor's degrees, two reported PhDs, and four reported being undergraduates. Two participants did not report their education. Two, five, two, and five participants reported their ethnicity to be Lur, Fars, Turk, and "other" respectively. Thirteen participants reported being Muslims and one did not self-report their religion.

Procedure

Potential participants were contacted in person, or via phone or email, and were told about the purpose and procedure of the study and the ethical issues involved.

The snowball sampling method was also employed in this study. As previously mentioned, the reason why this method was adopted was that the Iranian immigrants formed a very small minority of the population, which made it difficult to select subjects using other methods. The methodology was as follows: a member of the Iranian Association in the UK was the first person interested in participating in the study. After the interview, he was asked to introduce another Iranian resident in England. Whether or not the next person was willing to participate in the study, he or she was asked to introduce another person. This continued until the last person.

Extra information was provided via email if requested by participants. After they agreed to take part in the interview, a time and place were agreed upon that would suit the participant. Interviews were conducted privately in comfortable and quiet places (e.g., a room in the participant's house). The interviews took 45 minutes on average and were recorded. Before the interview started, the participants read the information sheet and signed the consent form. They were also given the option of using voice filter to make their voice unidentifiable, but none of the participants took this option, and all preferred to move on using normal voice recording.

A number of major questions (as listed in the following section) were asked in the interview with each participant. When a participant's response was irrelevant or not clear, clarifications were provided by the interviewer, and additional questions were asked. Moreover, follow-up questions were asked after each main question when needed, to encourage the interviewees to

provide more information on the central foci of the study. After the interviews, the participants were debriefed and were given the opportunity to ask questions.

All the interviews were in Farsi as the participants had sufficient proficiency in their native language, and there was no need to translate. However, after interview and translation into English a bilingual person checked the translation and confirmed the accuracy of it. I coded all the transcripts. A number of interview audio files were also sent to a second person, an academic colleague in Tehran, who acted as second coder. The code sets were largely similar with minor differences resolved after discussion.

Interview Questions

The interview questions were developed based on the observations and findings from the previous three studies in this thesis, especially the third study. Some of the questions focused on social cynicism, because in Study 3, I found that Iranians living in the UK scored higher on social cynicism than the UK student sample and Iranians living in Iran. Several questions focused on fate control and social complexity as these two social axioms were found in Study 3 to predict aspects of well-being among Iranian immigrants. Also, one question concerned the relationship between ethnic identity and mental well-being in participants' views since Study 3 indicated that ethnic identity had a moderate positive effect on mental well-being of Iranians living in the UK. A few questions focused on the participants' views of the determinants of mental well-being in the Iranian immigrant community in England, and they were encouraged to think about possible differences that may exist between these determinants for Iranian immigrants and members of other ethnicities. This was done with the aim of eliciting more general ideas surrounding the variables of the study to facilitate the process of theory building when analysing the data. The questions are listed below. Each question was followed by a couple of follow-up questions which were occasionally asked to encourage the interviewees to provide more information about their views. These follow-up questions are provided in parentheses.

Social cynicism

A1. In your opinion, how do Iranians in England generally view human nature, other people, society, and social institutions in this country? (1-What are your personal attitudes towards the people living in this society? 2-Do you trust the institutions and organisations in this society?)

A2. In your opinion, what are the reasons for the prevalence of this viewpoint among Iranians living in England? (Do you think this viewpoint can in any ways help or harm an individual who is living in this society?)

A3. Do you think developing such views on human nature, other people, society, and social institutions is good or bad for the mental health of Iranians living in England? (1-Why do you think that this is harmful or beneficial for mental health?2-Can you give me an example of a problem you had with someone, and explain how holding this viewpoint affected the way you dealt with it? 2-Can you give me an example of a problem you had with an institution, and explain how holding this viewpoint affected the way you dealt with it?)

Social flexibility

B1. Some people may believe in rigid rules for doing things. In contrast, others have a more complex view and believe that there are multiple ways of achieving a given outcome. The latter group also may believe that the context in which human beings live is very complex and people may have opposite behaviours on different occasions. Therefore, they may believe to deal with things in a flexible way leads to success. In your view, which viewpoint is generally taken about the world and human behaviour by Iranians living in England, the flexible or the rigid view? (Is your personal view consistent with the dominant Iranian view?)

B2. In your opinion, what are the reasons for the dominance of the above viewpoint among Iranians living in England? (1- Do you think some aspects of British society prompt Iranians to hold such an attitude? 2- Do you think this viewpoint can in any ways help or harm an individual who is living in this society?)

B3. Do you think developing such views is good or bad for the mental health of Iranians living in England? (Can you give me an example of a problem you had in society, and explain how holding this viewpoint affected the way you dealt with it?)

Fate control

C1. In your view, do Iranians living in England believe in fate? (1- What about yourself? 2- How would you define fate and fatalism?)

C2. In your opinion, do Iranians living in England believe that there are some ways for us to alter and control our fates? (1- What about yourself? 2- Can you give me an example of a time you tried to alter fate or submit to it? 3- Do you think this Iranian viewpoint can in any ways help or harm an individual who is living in this society?)

C3. Do you think the above-mentioned views are helpful or harmful for the mental health of these people? (Can you give me an example of a problem you had in society and explain how holding this viewpoint affected the way you dealt with it?)

Mental health and Iranian identity

D1. What factors do you think contribute to the mental health of Iranians living in England? (1- Besides social and financial factors, what else would contribute to mental health of Iranians?)

D2. In your view, what are the main factors harming the mental health of Iranians living in England?

D3. Are the factors harming or helping the mental health of Iranians different from the factors harming or helping the mental health of other nationalities in England? (What cultural or psychological differences between Iranian and non-Iranian cultures do you think are causing these differences in determinants of mental well-being?)

D4. Do you think a strong attachment to Iranian identity can or cannot help the mental health of Iranians living in England? (In your view, why does this attachment have the effect you mentioned?)

Analysis and Results

Once the data were collected the following steps were taken to analyse the content of the interviews and data.

Step 1: Open coding

At this stage, categories and subcategories are identified, concepts are developed, and their properties and dimensions are determined (Strauss & Corbin, 1998; Lee, 2001). In the current study, like all other studies that use the grounded theory method, the categories are the basis for the creation of a theory. This basis provides an effective channel to make the growing theory coherent (Corbin & Strauss, 1990; Pandit, 1996). The properties provide more details about each category. The researcher places the properties on a continuum and finds examples that show the two ends of the continuum in the data (Creswell, 2005).

Table 6.1 shows the categories and subcategories, their properties and dimensions, which were generated based on the data obtained from the in-depth interviews with 14 Iranians living in the UK. The data obtained from the interviews were divided into six categories as follows:

1.   Human nature in general and the nature of the institutions and organizations in the UK.

2.   Flexibility and rigidity of Iranians living in the UK

3.   Belief in fate among Iranians living in the UK.

4.   Factors helping and harming the mental health of Iranians living in the UK.

5.   Similarities or differences between these factors and the factors related to the mental health of people with other nationalities living in the UK.

6.   The effects of dependence on Iranian national identity on the mental health of Iranians living in the UK.

Two subcategories for each of the six categories (i.e., 12 subcategories in total) were defined. The subcategories and their properties for the six categories are the following:

1.   Focusing on positive aspects (e.g., self-improvement, peace of mind, and confidence) vs. focusing on negative aspects (e.g., preventing others from causing harm)

2.   Being flexible (e.g., calmness in face of hardship) vs. being rigid (e.g., not asking for help from others)

3.   Believing in fate but also believing that one can control fate (e.g., attribution of unpleasant events to fate and pleasant events to self) vs. not believing in fate (e.g., attribution of unpleasant events to self)

4.   Factors helping the psychological well-being of Iranians living in the UK (e.g., high financial and social status, strong social relations, and contentment/non-greediness) vs. harmful factors (e.g., loneliness, jealousy, and lack of self-confidence)

5.   The similarities between these factors and the factors related to the mental health of people with other nationalities living in the UK (e.g., financial and social status) vs. differences between these factors and the factors related to the mental health of people with other nationalities (e.g., strong emotional bonds with family members who are living back in Iran)

6.   The positive effect of dependence on Iranian national identity on the mental health of Iranians living in England vs. the negative effect of dependence on Iranian national identity on the mental health of Iranians living in England.

Similar answers were classified to determine the properties of the subcategories as shown in Table 6.1. Sample quotes are also included in the Table. In this classification, those answers

that conveyed the same meaning were categorised as one of the properties of the subcategories. For instance, if the participants in the interview said that their belief in humans' good nature could help them show positive reactions in their dealings with other people, facilitate the achievement of their goals, change themselves, improve their personalities, and other similar answers, the responses were classified as the property of "self-improvement". Answers such as a particular belief can help one have peace of mind and release tension, stop feeling homesick and feel calm, and transcend the problems, were used to define the property of "peace of mind".

Table 6.2. The results of the open coding of the interview data

Question	Sample responses	Properties	Category	Dimension
Human nature	• The existing discipline among humans and in the institutions contributes to humans' self-improvement. • A positive perspective helps human beings to improve themselves.	Helping one's personality to develop, changing one's behaviour, facilitating the achievement of goals	Self-Improvement	
Human nature	• A good view helps us to release mental stress and be able to relax. • If you have a good view of human nature, you will try to have good relations with other people. • If you have a good view of institutes and humans, even though they do not help you with your works, you will not consider that as malignance. Instead, you will think that it is the law of that country and you will then feel relaxed.	Releasing tension, absence of the feeling of homesickness, and not feeling hopeless in the face of problems.	Peace of mind	Good
Human nature	• It is good to see people positively because as trust between people increases life will get better. • Increasing trust and facilitating daily life routines • If you know that institutes are required and obliged to do something that is legal, you can trust them and feel relaxed.	Increased trust	Trust	
Human	• Since Iranians here are a	Preventing others	Conservatism	Evil

Table 6.2. The results of the open coding of the interview data				
Question	Sample responses	Properties	Category	Dimension
nature	minority, they will be hurt if they are not conservative and cautious. • I do not like to be intimate with anyone. Most Iranians here have no good relations with each other. Therefore, it is possible to be hurt. • They try not to trust anyone immediately lest their social position is hurt.	from causing harm		
Human nature	• If one thinks that other people are bad, he will be hindered from any progress. • Everyone interferes with another one's life instead of doing his own work. Therefore, they put into trouble both themselves and others.	Delay in making progress	Hindered progress	
Flexibility	• If he is not flexible, he will fail in his business and in obtaining academic qualifications and he will then have to deal with jobs which are not related to his educational field and specialty. Doing irrelevant works will result in sadness in a foreign country. They should therefore be flexible. • Flexibility will provide the individuals with increased possibility of using the facilities. • Flexibility is accompanied with new experiences resulting in life excitement and less sadness in a foreign country	Personal success, job progress, educational progress, effectively using available resources. absence of the feeling of homesickness	Success	Flexible
Flexibility	• There is no need for flexibility in so far as an individual's prestige and life is not under risk. • One should comply with the rules so that there will be no need for begging for permission or mercy. • One cannot behave flexibly with many people. Instead, it would be better to do as one wishes.	Self-reliance, not needing help from other people	Independence	Rigid
Fate	• Some things can be controlled, but some other things such as mortality are beyond the	Coping with the problems well, belief that there is	Attribution of unpleasant events to fate	Believing in fate

Table 6.2. *The results of the open coding of the interview data*				
Question	Sample responses	Properties	Category	Dimension
	control of humankind. • Belief in fate is useful and it results in relaxation. • Belief in fate helps with coming to terms with problems. • If you attribute some of the failures to someone or something, you can deal with them more easily.	external help		
Fate	• God has not already planned everything. He has granted us wisdom to decide freely about our lives. • If you make your utmost effort, he will provide you with a good fate. He can provide you with hope.	Taking responsibility	Attributions of pleasant events to self	
Fate	• Fate means having no control and making no effort. • If one thinks that everything depends on fate, there will be no reason for taking any actions. • The new generation considers fate as superstition. • Belief in fate is followed by a false relaxation and credulity. • Fate cannot necessarily provide any help. One should try to control his life. • God helps us, but I do not think he plans anything for us.	Believing in personal effort, control over fate based on the individual's awareness, effort and capability	Effort	Disbelieving in fate
Iranians' psychological well-being	• Life conditions are good here. If you have a good job and a good academic qualification plus physical health, you will generally have access to all preliminary needs. They serve like an umbrella. • Facilities, money, insurance are things that if provided by UK government, Iranians will have a good mental health.	Good life conditions, good social position, proper foods, no language problem, adherence to law, understanding and adaptation to English culture	Good financial and social status	Helpful
Iranians' psychological well-being	• Keeping high quality relations and mutual understanding in the family can boost mental health. • Being mixed with the society, participation in team	Maintaining contact with family, having a good relationship with other people	Social and family relations	

Table 6.2. The results of the open coding of the interview data				
Question	Sample responses	Properties	Category	Dimension
	sports and avoiding competition with other people can be useful. • Helping others and communication with each other can promote mental health.			
Iranians' psychological well-being	• If people's expectations of life are reasonable and if they do not have any unreasonable demand, they will have a good mental health. • If one is content and uses what he has, he can certainly enjoy his life. • Taking the life easy and thinking about the objectives you have can better your mental health.	No greed, no financial envy, being content with what we have	Contentment	
Iranians' psychological well-being	• Iranians here have no complete mental health because there is almost no one who can live without concerns about his family who is living in another country • Concerns including economic, social and political conditions of my family in Iran do not let me feel relaxed. • Some of the Iranians do not introduce themselves as Iranians, but I have not seen any individual of any different country to conceal his true national identity. • Lack of understanding of the society they live in is harmful. • Lack of understanding the system and failure to communicate threatens Iranian's mental health. • Distance from family, home country, and Iranian-style shops is detrimental to mental health. In addition, the British weather, small houses, and unfamiliar foods are detrimental. We are all dependent on family and relatives, whereas British people aren`t like us.	Keeping away from the society and feeling lonely, being away from family, not having English friends, being away from one's home country, being away from relatives	Family and social relations	Harmful
Iranians'	• Greed, jealousy, non-	Competitiveness,	Envy	

Table 6.2. The results of the open coding of the interview data				
Question	Sample responses	Properties	Category	Dimension
psychological well-being	contentment and lack of any personal goal are harmful. Irrespective of whether you live in Iran or another country.	greed, envy		
Iranians' psychological well-being	• Since there is insufficient understanding about this society, language problems and inability in making communications which can result in distrust. • One feels that other Iranians will cheat him.	Suspicion of other people	Distrust	
Psychological well-being of other nationalities	• Everybody wants the same things, housing, amusement, good life and lawfulness, irrespective of where you live. • Naturally, everyone wants to have a good life, irrespective of whether he is Iranian or British.	Good standards of living, suitable housing, good job, sufficient income, good social position, unfamiliar food, language problems, respect for the law, familiarity with and adaptability to English culture	Socioeconomic factors	Similarities
Psychological well-being of other nationalities	• It is quite different for the Europeans. We Iranians are dependent on family. I think that is not the same in other countries. • Because other nations are more like British people than Iranians, their problems are fewer. • Since the countries of other nations are law-centered, they adjust more easily to the British culture. • We are highly dependent on family, but they are not. So, it differs. • English people are indifferent to family but not all of them. I think we are more emotional than other foreigners.	Family atmosphere, emotional issues, similarity of societies with Britain	Emotional factors	Differences
Iranian identity	• Holding to Iranian identity is very helpful and contributes to happiness. • It gives me a sense of homeland.	Contacts with compatriots, common customs	Helpful in relation to Iranians	Useful

Table 6.2. The results of the open coding of the interview data				
Question	Sample responses	Properties	Category	Dimension
	• Our history and ancestry help me understand myself and my country better. • It is useful for me to live here with Iranian heritage and cultural symbols. • It is helpful to use good things of our culture.			
Iranian identity	• If an Iranian want to live here as he lives in Iran, but he fails to do so, he will have difficulties. • This identity is harmful in relation to non-Iranians because they cannot respond appropriately. • This identity is harmful because an English person cannot give a good feedback to our hospitality. • It would be better if we did not have these customs.	Different customs from foreigners, lack of understanding Iranian identity by foreigners	Harmful in relation to foreigners	Harmful

Step 2: Axial coding

Axial coding is the process of relating codes (categories and properties) to each other or the process of relating categories. This step is called "axial" coding because the analysing occurs around the "axis" of a category. The researcher picks one of the categories in the open coding and defines it as the core of the study and relates the rest of the categories to it. In this research, "belief in fate" has been chosen as the core category to form the basis for the creation of a theory. This category was chosen due to its important relationships with the rest of the categories, and its centrality in participants' responses. In their responses to the interview questions, the interviewees made plenty of reference to this variable (see the next section for more discussion on centrality of fate beliefs and see Table 5.2 for sample quotes). For example, in their strategies to achieve mental well-being, their responses were focused on various positions towards fate.

It seems that the two categories of human nature and flexibility influence the core category of "belief in fate". In other words, whether a person believes in fate or free will is partly determined by his or her standing on these two categories. As shown in Table 6.1, respondents indicated that a belief in good human nature may motivate the individual to try to actively improve various aspects of their self. This active engagement in self-improvement is

consistent with discounting the importance of fate in one's life. As another example, if one sees potential for greatness in human nature, he or she is likely to be ready to allocate positive life outcomes to oneself. With regards to flexibility, respondents emphasized the importance of flexibility in pursuit of individual success. Emphasizing flexibility is in nature inconsistent with believing in a fixed fate. In a way, showing flexibility in various life domains is a strategy for battling one's predetermined fate, as perceived by some participants. Or, if one believes that one can choose to show various behaviours depending on the context, at one's discretion, he or she may be ready to see the importance of one's own role in bringing about various effects and outcomes. In sum, one's view on human nature and the utility of flexibility is an important factor in determining one's readiness to put in enough effort to achieve important goals in life, rather than passively receive predetermined life outcomes.

The core category of fate is, thus, determined partly by individuals' endorsement of various beliefs related to human nature and flexibility. Individuals' beliefs about fate on the other hand partly affect people's levels of mental well-being. The relationship between fate beliefs and well-being will be the focus of the next section. It is important to bear in mind that the relationship between human nature, flexibility, fate, and well-being should be contextualized within participants' lives as immigrants living in a foreign country. Thus, the categories of Iranian well-being, well-being of other nationalities, and Iranian identity serve as contextual categories that influence the relationships between human nature, flexibility, fate, and well-being. For an immigrant, achieving optimal mental well-being depends on solving the everyday problems and hassles that he or she faces in a new environment as a member of the minority.

For example, an immigrant who endorses free will and values personal effort in achieving success and well-being may invest more time and energy in expanding his or her social network in the new country, which in turn will contribute to greater mental well-being. On the other hand, it is possible that for some immigrants who are living under terrible conditions in the host country, deterministic beliefs are helpful. For example, this may help the immigrant to find meaning in the hardship she is going through. But for others with better objective conditions (e.g., better grasp of English, and better financial status), deterministic beliefs may turn out to be harmful for one's mental well-being, because these beliefs may impede grasping of opportunities that present themselves.

Iranian identity also serves as a contextual factor that affects the categories of human nature, flexibility, fate, and well-being, and their relationships. For example, Iranian cultural heritage affects the strategies that Iranian immigrants choose to achieve well-being. Iranian immigrants' emphasis on their emotional bonds with their families is evident in their

responses. This strong bond with one's family may serve as a source of comfort for some immigrants. However, for others, this may turn out to be a barrier in the process of integration into the host country. Spending so much time with one's family members can come to reduce the amount of time that a person spends outside with members of the host country. Hence, the relationship between fate beliefs and well-being should be viewed in the context of Iranian identity and life conditions associated with immigration.

Step 3: Selective coding and the created theory

At this stage, the researcher develops a theory based on the relationship between the categories that were generated in the axial coding process. In other words, the researcher creates a grounded theory considering the relationship between the categories and drawing on field notes and observations. It seems that many of the Iranians believe that God created human beings and has a great deal of control over our lives. Iranians also believe that human beings have a lot of control over their own lives. In other words, Iranians believe that one can believe in fate and control one's own fate at the same time. The participants believed that humans are free but at the same time they believe that God has absolute power over the world and anything in it including humans.

Table 6.3. Sample quotes related to fate and free will

Attribution of unpleasant events to fate	Importance of free will
• Since human nature is good, the Lord intends good for us and therefore, anything which seems bad to us can have a positive consequence in the future. One should not become sad for bad happenings because we have no control over them and they are related to our fate. • Not everything in life is the result of our efforts because there are so many things which are beyond our control such as birth and death, political and economical problems, war and peace, etc. So, we leave many things to the Lord and we are satisfied with his satisfaction. • Everyone who believes in fate believes in God as well. He tries to be good and sees good consequences as well. If we do good things and we see bad consequences, it must have a reason that we do not know about that. However, the kind Lord is just and compensates all good works but in a special way that no one knows but him. • Whenever something bad happens, I know that it ought to happen. Sometimes we know the reason and sometimes we do not. However, I know that it is advisable for me. • It was our fate to be here. For several years I suffered from living in a foreign country far from all my belongings, but now I see that God liked me and made me come here. So, as he promises in the Holy Quran, after difficulties it comes the turn to peace. • If we do not believe in fate and we do not relate our defeats to that, we always ask ourselves if we have done anything wrong and we are now experiencing its negative consequence. We always blame ourselves and this may result in depression. • Even those who claim that they strongly believe in science and do not care for non-scientific issues, as soon as they face a problem and cannot do anything, they say, "God knows everything better" or "Let's see what our fate is."	• We can change fate direction (e.g.; by changing the objectives or people around us or by praying and helping other people). • In some cases, man determines his fate. By observance of many rules and regulations governing the society and by using modern sciences, we can prevent several problems of life which are related to our ignorance. Our success in doing this depends on trusting in God and our good conducts; otherwise, God will deprive us from enjoying these facilities. • Fate means negative consequences. Nothing is bad for good people, and they can determine their successes in life. • The more we are useful for humans and society, the more the impediments in our life will be removed by God or life. • Human determines his fate himself. This is of course true for the things which are within the scope of our powers. • God tells us that if we do good things, we will receive rewards in this world and the other world. In many cases, we can gain more material and spiritual rewards by increasing our knowledge and good things.

Two important points arise from the interviewees' responses.

> 1. The participants found it possible (as indicated in their responses) that when the individual faces unpleasant events in life such as death of relatives, disease, etc. they accept such unpleasant events more easily and consequently attain peace of mind by attributing such events to God's power. In other words, one can deal with hardship more easily if one believes in a larger plan of existence as predesigned by God.
>
> 2. But the participants also believed that one does not need to attribute the cause of all good things and achievements to God. They believed that individuals also have a lot of freedom in their life and can make things happen. Attributing one's achievements to one's free will not only propels one to work hard towards achieving their goals, but also paves the way for achieving higher self-esteem and mental well-being.

Sample quotes in support of these two major points are provided in Table 5.2.

As explained in the past section, it was evident in the participants' responses that the belief in fate and the ability to control it can be the result of particular characteristic properties such as flexibility versus rigidity. Alternating between belief and disbelief in fate (i.e. having control over one's behaviour) is a characteristic of flexible people rather than rigid people, and it is probable that rigid people tend to adopt only one approach (either belief or disbelief in fate) and follow and act based on this belief.

Such strategies can be influenced by contextual conditions which are specific to Iranians, as well as some conditions which are general and true about other nationalities too. For instance, Iranians believe that they are emotionally dependent on their families more than other nationalities, and it is hard for them to be away from their families, whereas some other factors such as economic status, appropriate income, accommodation, social position, job, and education are equally important for other nationalities, and influence mental health.

In sum, belief in fate and in the ability to control fate is rooted in beliefs in the goodness vs. badness of human nature as well as flexibility vs. rigidity. On the one hand, advocating free will prompts people to work hard to achieve their goals and the achievement of goals leads to a feeling of satisfaction. On the other hand, Iranians may choose to attribute their failure in achieving goals and unpleasant events in life to an external factor and divine power, and this attribution gives them peace of mind in some situations. In the interviewees' opinion, the path from belief in fate to mental well-being in Iranians living in the UK is influenced by some

nation-specific contextual conditions (e.g., dependence of Iranians on family) and some universal contextual conditions (e.g. social and financial status).

Discussion

The participants in general had positive attitudes toward the nature of humankind. This general consensus seems to stem from the tenets of an Islamic worldview. According to the principles of Islam, which is the religion of most Iranians, humankind is born with a decent nature. According to Islam

> "No one has been born sinful, wicked or with malicious intentions. All impurity and indecency arise from contingent factors, being the result of extraneous elements combined with the exercise of free will. Moreover, even negative tendencies acquired through heredity can be overcome by the power of the human will together with the right motivation. Thus, the Christian conception of 'original sin' in respect of the children of Adam is utterly alien to Islam." (Subhānī & Shah-Kazemi, 2001, pp. 9-10)

Therefore, a positive attitude towards the nature of humankind is in line with Islamic-Iranian culture. A question that arises at this point is why then Iranians in general and Iranians living in the UK in particular, score slightly higher than the UK student sample on social cynicism (as shown in Study 3). This might be due to Iranians' negative views of social institutions, which is an important component of social cynicism. In fact, prior research shows that Iran scores rather low compared to the world average on societal collectivism, which "reflects the degree to which organizational and societal institutional practices encourage and reward collective distribution of resources and collective action" (House, Javidan, Hanges, & Dorfman, 2002, p. 5). This cultural aspect indicates a lack of trust in organisations within society (House, Javidan, & Dorfman, 2001; Javidan & Dastmalchian, 2003). Therefore, the rather high score of the Iranians in comparison to the UK student sample on social cynicism may be largely explained by their negative views of social institutions, rather than by their negative views of human nature. Although these notions are speculative at this stage, they may have significant implications for research on social cynicism. It seems that a distinction between the social institutions vs. human nature components of social cynicism is useful to be made in future studies as these components may turn out to have differential sets of predictors

and outcomes. For example, an Islamic worldview may more strongly affect the human nature component than the institution component of social cynicism.

In the case of Iranian immigrants in the UK, their general distrust in social institutions may be justifiable. As discussed in Chapter 5, there is evidence of public hostility against Islam and Muslims, particularly after September 11 (Allen & Nielsen, 2002; Raiya, Pargament, Mahoney, & Trevino, 2008). Direct and institutional discrimination against Muslims, and the negative images of Islam and Muslims shown in the media, prompt Muslims in the UK to sometimes perceive themselves as discriminated against and threatened (Sartawi & Sammut, 2012). This may partly explain the finding that Iranians in the UK scored slightly higher than Iranians in Iran on social cynicism (see Study 3). However, an alternative explanation cannot be ruled out: It can well be that Iranians who are high on social cynicism are more likely to emigrate, and they bring with them the tendency to be cynical (for discussions see Study 3).

With regards to fate control, Iranians' beliefs, as expressed in the interviews, again resonate closely with Islamic ideas. Iranians believed that God has power over humans' lives, but humans are endowed by God with free will and the intellectual faculty needed for making independent decisions (Subhānī & Shah-Kazemi, 2001). Human life also "falls under the guardianship of Allah…Whatever Allah wills to occur will happen, and whatever he wills not to occur does not" (Morgan, 2010, p.6). The notion of an all-powerful, all-knowing, and all-controlling God, for Muslims, however, does not obliterate human free will. Muslims resolve this paradox in the following way:

> "Despite the power of Allah in all things, Muslims believe humans have important choices to make. Although Allah retains control, we have free will… Although Allah wills everything that happens, the instant before a human being performs an action, the responsibility for how it is performed is switched to the person, so that he or she will be held accountable for it on Judgment Day." (Morgan, 2010, pp. 6-7).

In sum, for Muslims, human free will does not contradict God's absolute dominion over everything in the world. This notion helps Muslims to resolve the paradox of human free will and all-controlling God. This is reflected in the participants' ideas expressed in the interviews in the present study. They viewed God as all-controlling and human beings as having free will. Interestingly, the participants report that these notions may come to help individuals in maintaining mental well-being. They believe that humans should not stop trying to achieve more due to the fact that life is predestined by God. Given that God has bestowed us with free

will we are responsible to exercise our free will towards better mental well-being and achievements.

However, when bad things happen to a person, they should accept that this is predestined by God and a trial of the person's faith in God. Thus, it should be tolerated with patience. In other words, the participants believed that by attributing the cause of various life events sometimes to oneself and sometimes to God (in a flexible way), one can cope with difficulties more successfully. Active pursuit of happiness and acceptance of disasters, difficulties, and calamities as God's will are important strategies the participants deemed useful. Interestingly, Morgan (2010) observes that Muslims can solve the paradox of God's dominion and human free will in such a way that it contributes to their mental health:

> "At any rate, humans do not know their ultimate fate until they have made every possible effort to live a good life. Making such an effort enables them to see the rewards that come in the midst of sorrow and the peace that comes from knowing they are doing Allah's will. This attitude does not resolve the inherent logical problems of trying to combine responsibility and divine predestination, but it does have solid psychological benefits." (p. 7)

These findings can be interpreted in the context of attribution theory, which tries to explain how people make causal explanations (Heider, 1958; Kelly 1973). It has been shown in ample research that people tend to be biased in their causal attributions. Evidence indicates that people are motivated to distort the process of causal attribution in the service of the self (Campbell & Sedikides, 1999; Miller & Ross, 1975). This phenomenon is called self-serving bias, which describes the propensity of individuals to discount their own faults when explaining failures, whereas emphasizing their own characteristics in explaining successes (Bradley, 1978). In order to discount one's involvement in failures, people usually attribute the cause to external factors on which they have no control. This is generally done to maintain a positive sense of self-esteem (Campbell & Sedikides, 1999). It seems that this indigenous strategy of flexibly switching between endorsing free will and fate sometimes paves the way for biased attributions in the service of the self. For example, when facing failure and difficulty, Iranians may attribute the cause to fate and discount their own role in bringing about the difficult situation. This attribution style may be unrealistic. However, it may help people to find solace in difficult moments.

Whether or not this strategy is beneficial for the mental health of Iranians is not clear now. At this point, what the data suggest is that a belief in fate control contributes to lower mental

health of Iranian immigrants (see Study 3), and that a belief in fate control has more negative consequences in the British sample than among Iranians (see Study 1). A question that arises is whether the available data help us in any way to validate or invalidate this Iranian lay strategy for obtaining peace of mind. Fate control as measured by the social axioms survey does capture some important aspect of the Iranian lay strategy (i.e., that life is in some ways predestined, and one can control fate in some ways). If we accept that the fate control scale measures endorsement of the Iranian lay strategy emerging in the interviews, we would have to conclude that this strategy is not actually helpful as fate control was found to be a negative predictor of mental well-being in Study 1 and Study 3.

However, one can also argue that the fate control scale fails to capture the core of the lay strategy emerging in the present study. This lay strategy suggests that one should allocate the cause of negative events to God and see them as God's trial of a Muslim's faith, which is entirely absent in the fate control scale. Future studies should investigate these speculations by developing and using fate control scales which capture the subtleties of the concept of fate control in the Iranian-Islamic culture. These considerations also suggest that futures studies on fate control would benefit from distinguishing between a fate component and a control component, which are currently lumped together in a single scale.

Another idea emerging from the interviews was that being flexible rather than rigid can positively contribute to mental well-being. To the participants, one of the mechanisms of this influence is the effect of flexibility on the way people take advantage of the lay strategy mentioned above. That is, Iranians believed that taking the position that life is both predestined and one has control over it needs the person to be flexible. In other words, the ability to recognise multiple ways of doing things and consider multiple perspectives (which characterize social complexity) provides the individual with the possibility of flexible attribution of certain events to oneself or to God to cope better given the situation.

The idea that social complexity contributes to mental well-being is consistent with the findings of Study 3, which showed that social complexity positively predicted mental well-being in Iranian immigrants. Moreover, the idea that social complexity contributes to mental health through promoting certain attribution styles (i.e., attributing causes to oneself or God in certain situations) is a novel contribution to the literature. Based on the previous studies reported in this thesis and prior empirical research done by other researchers, I speculated about other mechanisms of this influence in Study 3. This lay idea emerging from the interviews with Iranian immigrants seems to be another plausible mechanism which warrants empirical attention. This idea can be empirically tested provided that a more sensitive scale for the assessment of various components of fate control in Iranian samples is available.

Another interesting point emerging from the interviews was that, for many participants, mental well-being was understood as a peaceful state of mind, which is accompanied by contentment. This understanding of mental well-being is consistent with the Islamic understanding of mental well-being. In Islam, well-being is defined as an internal balance which leads to peace of mind and contentment (Abu-Raiya, 2012; Ashy, 1999). According to Joshanloo (2013), for Muslims, happiness is a tranquil and content state of mind that is bestowed by God to a Muslim. This state results when one reaches balance.

> "The concept of balance has a significant role to play in the Islamic conceptualization of happiness. The balance between the selves (as introduced above), between body and soul, individual and social should be maintained. A Muslim ideal is to let the godly part of the soul (i.e., the heart, the inner centre where faith in God resides) rule over other aspects of our personality." (Joshanloo, 2013, p. 1865)

Thus, the Islamic understanding of mental well-being centres on contentment, tranquillity, and balance. However, this version of mental well-being does not seem to be the dominant one in Western cultures (Joshanloo, 2013). In fact, prior research indicates that while in many non-Western cultures (such as Islamic ones), low-arousal emotional states (such as tranquillity and contentment) are favoured, in many Western cultures, high-arousal states, such as euphoria and ecstasy, are more favoured (Tsai, 2007; Tsai, Knutson, & Fung, 2006; Tsai, Louie, Chen, & Uchida, 2007). For example, Tsai, Knutson, and Fung (2006) showed that European Americans valued high-arousal positive emotions significantly more and low-arousal positive emotions significantly less than East Asians. These cultural differences may stem from greater cultural factors. For example, western culture is believed to strongly value influencing others and the environment, while non-western culture is believed to value adjustment more strongly. Research shows that influencing others is more associated with expressing high-arousal emotions and adjusting to others is more associated with expressing low-arousal emotions (Tsai, 2007; Tsai, Miao, Seppala, Fung, & Yeung, 2007). At any rate, it seems that in conceptualising mental well-being, the current sample is strongly influenced by their original culture, rather than the host culture.

The participants believed that one factor undermining mental well-being that is largely specific to the Iranian immigrant community is Iranians' strong emotional attachment to their families. The participants mentioned that people from other nationalities do not show this strong attachment and thus can more easily enjoy new experiences and new people in the new

culture. However, Iranians stay emotionally attached to their families who are living in Iran to a large extent, which does not let them get fully involved in new experiences and relationships.

In fact, the results of a large-scale survey across the world shows that Iranians are highly attached to their families and Iran's score on this dimension is actually among the highest in the world (House, Javidan, Hanges, & Dorfman, 2002). In-group collectivism or family collectivism is defined as "the degree to which individuals express pride, loyalty, and cohesiveness in their organizations or families" (House et al., 2002, p. 5). The findings show that Iran has a score on this dimension which is considerably higher than the world average, indicating Iranians' rather strong attachment to their families (House, Javidan, & Dorfman, 2001; Javidan & Dastmalchian, 2003). Therefore, there is some element of truth in the lay understanding expressed by the interviewees that Iranians are more emotionally attached to their families than many other nationalities.

Finally, the participants were rather accurate in their idea that socio-economic factors are related to mental well-being. Prior research shows that employment, economic status, and education level do influence well-being across nations (e.g., Pinquart & Sörensen, 2000; Zimmerman & Katon, 2005). Steptoe, Tsuda, Tanaka, and Wardle (2007) compared depressive symptoms in 17348 university students with high, average, and low income from 23 countries using the Beck Depression Inventory. They found that poor socio-economic background was associated with depressive symptoms within all the countries.

In sum, this study revealed interesting lay ideas of Iranian immigrants about their experiences of well-being and the role of culture and social axioms in their daily life. In some cases, these lay understandings are consistent with the empirical evidence provided in the prior chapters of this thesis, for example, that social complexity can positively contribute to mental well-being. In some cases, the interviews provided novel insights about the relationship between the variables which are ignored in prior empirical studies. An example is the way fate control beliefs can be used to obtain mental well-being. All in all, these findings help us gain a fuller understanding of the way mental well-being and social axioms are understood by this immigrant group. However, many aspects of the lay theory produced and reported in the present qualitative study should be empirically tested in future studies, to draw safer conclusions.

Finally, another issue that must be considered is the risk and protective factors in acculturation that affect immigrants' mental health. This is particularly important in cultures that are not similar in nature, such as Iranian and British cultures. Acculturation is the process of cultural and individual change that results from the contact between a minority group

(immigrants) and the majority of a society. It results in change in the minority group members' original cultural behaviour, values, and beliefs to adapt to a new culture (Baltas & Steptoe, 2000).

At the culture level, the change involves social structures, institutions, and cultural practices and it involves behavioural repertoires at the individual level. The cultural and psychological change emerges over time, from a few years to several generations (Berry, 2005).

 A literature review showed a complex relationship between acculturation, mental health, and well-being. Although some studies indicated a positive relationship between acculturation and mental health (See also Koneru, Weisman de Mamani et al., 2007), the other studies did not confirm such results (e.g. Aprahamian, Kaplan, Windham, Sutter, and Visser, 2011). The diverse results can be explained as that although acculturation can facilitate daily social interactions (Balls Organista et al., 2003) and improve readiness for treatment options (Rodriguez-Reimann, Nicassio, Reimann, Gallegos, and Olmedo, 2004), it can increase the stress or conflict between two cultures (Nguyen & Peterson, 1993) and reduce family support (Gil, Wagner, and Vega, 2000), resulting in negative effects on well-being and mental health (See also Koneru, Weismande de Mamani, Flynn, and Betancourt, 2007).

Furthermore, certain factors, such as length of stay in the host country and level of education (Zlobina, Basabe, Paez, & Furnham, 2006) or the worthiness of the original culture (Ward & Kennedy, 1993) may influence acculturation and, therefore, the relationship. Safdar, Struthers, and Oudenhoven (2009) examined acculturation among Iranian immigrants in the USA, UK and Netherlands. With slight modifications, the Multidimensional Individual Differences Acculturation Model (Safdar, Lay, & Struthers, 2003) was confirmed. The model provided a positive relationship between psychosocial resource and out group contact, including personal resilience, cultural competence, and social support from the larger society as sociopsychological resources. Based on the results of the qualitative study, Iranian immigrants mainly had a positive attitude toward human nature and institutions in the UK (social support from large society), most of them believed that attachment to their Iranian identity provided mental health support (cultural competency), and most of them again considered self-improvement, calmness and confidence (personal resilience) to be the positive outcomes of the positive view of institutions. Accordingly, it seems that such a process can be interpreted as contributing to the well-being of Iranians living in England, although it needs further investigations.

Chapter 7

General Discussion

In the discussion section of each of the four studies, the findings were extensively discussed and put into the context of relevant theories and findings. In this general discussion, a summary of the findings of the present thesis is presented first. Secondly, the major contributions of the present studies to the fields of social axioms and mental well-being are discussed. Finally, the limitations of the research and suggestions for future studies are discussed.

Summary of the findings

Study 1 examined the basic relationship between social axiom dimensions and aspects of subjective and psychological well-being across two nations. Country and personality were controlled in the analyses to examine unique contributions of social axioms beyond these variables. The study showed that social axioms predicted aspects of mental well-being beyond personality and country. Moreover, I found that social cynicism and social complexity were the strongest predictors of subjective and psychological well-being, respectively.

These findings were followed up in Study 2. Study 2 focused on the mechanisms of the relationship between social cynicism and social complexity and subjective and psychological well-being, respectively. This study predicted that two possible psychological variables would mediate the relationship between these social axioms and mental well-being, namely mindfulness and perspective taking. The sample of this study consisted of Iranian university students. I found that perspective taking partially mediated the relationship between social complexity and psychological well-being, but mindful acceptance did not mediate the relationship between social cynicism and subjective well-being. A surprising finding in this study was that social cynicism was not significantly correlated with the aspects of mental well-being.

To follow up the findings of Study 1, in Study 3, a sample of Iranian immigrants living in England was used. The study compared the immigrant sample with the Iranian and UK student sample on the major variables of the thesis, i.e., social axioms and mental well-being. The study also examined the role of ethnic identity on the relationship between social axioms and well-being in the immigrant group. I found that the immigrant sample's scores on social cynicism, social complexity, reward for application, and fate control were largely similar to those of the Iranians living in Iran and the UK student sample. However, the immigrant group scored lower than the Iranian group and higher than the UK student group on religiosity. With regards to mental well-being, the immigrant group scored similarly to the other groups on subjective and psychological well-being. I found that fate control (negatively) and social complexity (positively) predicted mental well-being in the immigrant group. Finally, I found that attachment to Iranian ethnic identity had moderate positive consequences for the immigrants' mental well-being.

Study 4 was a qualitative study which aimed at building a theory based on Iranian immigrants' beliefs about mental well-being and the importance of culture and social axioms. One of the main contributions of Study 4 was to unravel one of the coping styles prevalent among Iranians. This study indicated that Iranians tend to use an indigenous strategy to achieve mental well-being and peace of mind, and deal with life difficulties. Iranian immigrants reported that they believe that humans must not discontinue pursuing more achievements and successes due to the fact that life is predestined by an all-knowing, all-powerful God. However, when bad things occur, humans should accept that these bad things are predestined by God and a test of the person's faith. Thus, disasters should be tolerated with serenity and tolerance. As elaborated in Study 4, this indigenous strategy stems from Iranian-Islamic culture and enables Iranians to use a flexible way of utilizing their knowledge of fate to find solace in times of hardship. Moreover, Iranian immigrants tend to find social flexibility beliefs useful in the process of using this strategy. They believe switching between believing in a predestined life and in free will require a fair amount of flexibility.

The findings of the three quantitative studies conducted (Chapters 3, 4, and 5) were largely consistent and confirmed the qualitative study.

On the one hand, Study 3(Chapter 5) revealed that the Iranian immigrants have a relatively high level of religiosity (more than the UK student sample) and Study 1 (Chapter 3) indicated a positive relationship between religiosity and personal growth and purpose in life.

On the other hand, the qualitative study showed that the Iranians used an indigenous approach, which is influenced by their religious identity, to deal with the difficulties of life and attain peace. In the qualitative study, the researcher claimed that the Iranians interpret

difficulties of life as divine tests while they believe in free will and that the important matters in their life are predetermined. Such an interpretation apparently requires having a relatively high level of religiosity (as was confirmed in Study 3) and the application of knowledge and religious attitude in everyday life (as was confirmed in Study 1, i.e. the relationship between religiosity and well-being). The link between quantitative and qualitative studies can be summarized in Figure 6-1.

Figure 6-1. Link between quantitative and qualitative studies.

A religious attitude (as demonstrated in Study 3) may make a person fearless and free from sadness in the face of adversity, as indicated in Study 1 and the qualitative study, so that there is a relationship between religiosity, purpose in life, and personal growth;

According to the holy Quran, Surah (chapter) Al-Anfal, Ayah (verse) 65: if there would be twenty of you who were truly patient in the face of adversity, you might overcome two hundred of those who are determined to deny the truth, and one thousand if one hundred of you;

Surah (chapter) Yunus, Ayah (verse) 2 and 62: Unquestionably, there will be no fear for the allies of Allah (God), nor will they grieve.

And Surah (chapter) Yunus, Ayah (verse) 84: And Moses said: "My people! If you have (really) believed in Allah, then put trust in Him (alone)."

In all of the three verses, God implicitly wants to tell Muslims that faith in God and strong belief in him can be a source of strength to face challenges and threats, so that if there are a small number of them who truly believe in God and have patience, they should not be afraid even in wars as they can defeat the enemy with the power of true faith in God.

It is important to consider that when the effect of ethnic identity was controlled, the positive relationship between religiosity and well-being became non-significant (Study 3), and the current findings of the qualitative study would indeed be in serious doubt if it was significant.

In other words, the link between qualitative and quantitative studies is clear from this perspective as well.

Main Contributions of the Present Thesis

This thesis had some limitations which will be discussed below. However, the findings presented in the thesis contribute to the fields of social axioms and mental well-being in important ways. Below, some of these contributions are discussed.

Contributions to the field of well-being.

Previous studies have thoroughly studied diverse predictors of mental well-being. In particular, the relationships between personality factors and socio-economic status as predictors of mental well-being have received extensive attention (for reviews see Dasgupta & Mäler, 2000; Diener & Diener, 1995; Diener, Oishi, & Lucas, 2003; Diener, Suh, Lucas, & Smith, 1999). For example, there is ample research on the relationship between the big five and self-esteem and aspects of well-being (DeNeve & Cooper, 1998). But, surprisingly, the relationship between beliefs and aspects of well-being has not received enough attention so far. Piecemeal evidence is available on the relationship between some belief domains (e.g., external control beliefs) and well-being. However, most of these studies have focused on religious beliefs (e.g., Ellison, 1991; Krause, 2003), and very little is known about the effects of non-religious domains of belief on aspects of well-being.

In my view, an important question for the field of mental well-being is whether the beliefs that individuals endorse have any influence on their subjective and psychological well-being. But previous research does not offer much about this important question, largely because beliefs have not received enough empirical attention as predictors of mental well-being. One of the reasons for this may be that there are not many conceptual frameworks for a systematic and comprehensive study of belief domains in psychology. Previous studies have often focused on single domains of beliefs, such as meritocracy beliefs (Foster, & Tsarfati, 2005) and external control beliefs (Ferreira, & Sherman, 2006). Fortunately, the empirical study of social axioms, which was initiated in the last decade, offers a robust framework for a systematic incorporation of beliefs in psychological research.

To examine if beliefs are important when it comes to predicting mental well-being, the present thesis used social axioms to predict the aspects of mental well-being. The findings are interesting and informative. It turns out that the five social axioms contribute about 13% and 21% over and above country in the prediction of subjective and psychological well-being

(Table 3.9). Does the influence of social beliefs in predicting mental well-being hold when the contribution of personality traits is controlled for? In other words, can social axioms contribute to mental well-being over and above the role of personality traits? It would be impressive for any predictor to contribute a significant amount of variance over personality to mental well-being, given that the Big Five have been found to be among the strongest predictors of mental well-being (Diener, Oishi, & Lucas, 2003; Diener, Suh, Lucas, & Smith, 1999). It turns out that social axioms do contribute beyond personality (and country) to the prediction of mental well-being. They explained 6% and 13% of the variance in subjective and psychological well-being, respectively, over country and the Big Five (see Table 3.10 and Table 3.11). These findings are impressive and indicate that beliefs that people endorse do play an important role in determining their levels of subjective and psychological well-being. The findings also contribute to an ongoing debate in the field of well-being. One of the debated topics in well-being studies is whether eudaimonic and hedonic well-being should be seen as distinct aspects of well-being (Delle Fave, & Bassi, 2009; Kashdan, Biswas-Diener, & King, 2008; Keyes & Annas, 2009; Ryan & Huta, 2009). Some researchers such as Kashdan et al. (2008) argue that these two aspects of well-being are not conceptually and empirically distinguishable and should be merged. They also indicate the superiority of subjective well-being over eudaimonic well-being, due to its inherent pleasantness. However, other researchers provide evidence that the two aspects of well-being are structurally and functionally distinguishable (for short reviews see Joshanloo, Rastegar, & Bakhshi, 2012; Keyes & Annas, 2009). For example, Joshanloo et al. (2012) review evidence that the relationship between the Big Five personality traits and hedonic and eudaimonic aspects of well-being are somewhat different. Most notably, openness to experience has been found to be associated with psychological well-being, whereas it has been found to be mostly unrelated to hedonic well-being.

What does the present thesis have to contribute to this debate? The present thesis provides some evidence that indicates functional differences of these aspects of well-being. For example, as mentioned above, the current findings indicate that the predictive power of social axioms is higher in predicting psychological well-being than subjective well-being. This preliminary finding seems to be of great conceptual importance. The outcome that beliefs may influence our functioning (psychological well-being) more strongly than our subjective/emotional well-being provides useful insights regarding the nature of the beliefs/well-being relationship, which should be thoroughly studied in future research. Briefly, this finding indicates that individuals' life satisfaction judgments and emotional appraisals of their lives are less influenced by their general social beliefs (e.g., their beliefs

about fate) than their actual functioning in important domains of their life (such as their relationships with others). This may be because it is less likely that our social beliefs (such as beliefs about fate) get involved when we are evaluating our lives and our experienced emotions. However, it seems that these beliefs have stronger effects on the way we live our lives and function in daily life. Future studies are needed to further explain and expand these findings.

The first three studies of the present thesis provide some evidence affirming the notion that hedonic and eudaimonic well-being have differential sets of correlates and show differential patterns of relationship with other variables (such as social axioms and personality traits). Thus, these findings not only lend support to my choice in including both aspects of well-being in the present thesis, but also contribute to the current debate in the field about functional distinguishability of these aspects of well-being.

In addition to this contribution, the present studies also provide some evidence underlining the important point that inclusion of both aspects of well-being is necessary when comparing nations on mental well-being. For example, I found that although Iranians are lower on subjective well-being than the UK student sample, they do not necessarily score lower on some aspects of psychological well-being and optimal functioning than the UK student sample. These findings show that neglecting one of the aspects of mental well-being in cross-national research may result in biased comparisons and a less accurate picture of the standing of nations and groups on mental well-being.

Besides these major contributions to the field of mental well-being, the present set of studies contributed to the nascent field of well-being studies in Iran in some other ways. For example, in Study 2, I found that the scales of mental well-being used in the study are unrelated to social desirability in Iran, which is promising for well-being studies in Iran, given that the scales used in the present thesis are among the most widely used well-being scales used by researchers worldwide and by Iranian researchers.Study 4 revealed that unlike Westerners, for Iranian Immigrants, mental well-being seems to mainly involve low arousal emotions such as contentment rather than high arousal emotions such as enjoyment and ecstasy (Joshanloo, 2013; Tsai, 2007). Study 4 also provided fresh insights about an indigenous coping style used by Iranians in difficult moments, which deserves more research attentions in future studies. Notwithstanding these strengths and contributions, and fresh insights about how mental well-being is experienced in Iran, it should be pointed out that the present studies provide only preliminary evidence and should be followed up by multiple follow-up studies before we can regard the findings as reliable. The findings should be integrated with the findings of future studies in Iran to gain a clearer picture of the experience of mental well-being in Iran.

Contributions to the field of social axioms

It has been argued that social beliefs have important roles to play in our survival as social beings (Leung et al. 2002). The functionalist approach to beliefs maintains that beliefs have instrumental, ego-defensive, value-expressive, and knowledge-related roles to play in our lives (Leung & Bond, 2004). We need to have a rather accurate understanding of the social world we live in, or else we will face some difficulties in making effective choices. Although perfectly realistic and unbiased beliefs are hard to achieve and hold to give the complexity of social life and inherent proneness of human mind to cognitive biases (Haselton & Nettle, 2006), certain beliefs in certain contexts can be more functional than others (Leung et al. 2002).

Previous research has empirically investigated the functionalist view of beliefs by correlating social axioms with various important aspects of functioning such as coping styles (Bond, Leung, Au, Tong, & Chemonges-Nielson, 2004) and suicide attitudes (Lam et al., 2010; Chen et al. 2009). The previous research provides enough evidence to suggest that social axioms do play important roles in our functioning. Certain belief domains (such as social cynicism) tend to harm our functioning in various life domains and contexts. And certain belief domains (such as social complexity) serve us well in many contexts.

I believe the best way to evaluate the functional perspective of social beliefs is to investigate these beliefs' implications for individuals' mental well-being. However, the previous research has rarely focused on mental well-being as the outcome of social beliefs. One could conclude that the previous research has investigated the consequences of social axioms for mental well-being rather indirectly. As far as the direct study of mental well-being is left out in this line of research, our understanding of the contribution of social beliefs to mental well-being will stay limited. The present study sought to fill this gap by studying the direct link between social beliefs and aspects of mental well-being.

The present study drew on the comprehensive model of social beliefs provided by the research on social axioms to provide a more inclusive picture of this relationship. On the other hand, by including a wide-ranging set of three hedonic (life satisfaction, positive affect, and negative affect) and six eudaimonic (autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance) aspects of mental well-being, the study sought to offer a broad and detailed understanding of the relationship between social beliefs and aspects of mental well-being.

The present thesis provides evidence about the relationship between social axioms and nine aspects of mental well-being, which makes the present thesis one of the most comprehensive investigations of this sort. In general, the findings are in line with the functionalist view of

beliefs and support the proposition that different beliefs lead to different emotional experiences, and different life experiences, and life outcomes. Moreover, by including samples from two countries, the studies provide evidence about possible national differences in the functions of social beliefs. Thus, the social beliefs may function differently in different cultures. For example, fate control has no effect on life satisfaction and suicidal ideation of Chinese (Lam et al., 2010), has some negative influences on the mental well-being of Iranians, and has more pronounced negative effects on the mental well-being of the UK student sample (see the findings related to Hypothesis 4, Study 1).

The findings related to the basic relationship between social axioms and aspects of well-being presented in Study 1 showed that the relationship between social axioms and aspects of well-being were generally stronger in Iran than in the UK. Why is this so? Prior findings may help us understand why this is the case. This pattern of results can be explained in view of findings that have emerged in prior research where societal level dimensions of social axioms (i.e., dynamic externality and societal cynicism) were used. In brief, Bond et al. (2004) analysed the dimensionality of social axioms at the culture level, using item means from 41 cultural groups. Factor analysis of these culture averages (rather than individual scores) revealed a 2-dimensional structure. Factor 1 contained items from four of the individual-level axiom dimensions: reward for application, religiosity, fate control, and social complexity and therefore was labelled dynamic externality. "The items in this factor tapping religiosity and fate control involve the assertion of outside forces at play and give rise to the label externality, but the emphasis on effort and cognitive engagement gives a dynamic quality to this construct" (Leung & Bond, 2008, p. 205). Factor 2 was labelled societal cynicism, "because all the items are from the individual-level factor of social cynicism, but derived from a cultural group's average scores, thus representing "citizen" endorsements. The adjective societal is used to signal that this factor is derived from these culture-level inputs" (Leung & Bond, 2008, p. 205).

Bond et al. (2004) found that dynamic externality was negatively associated with national wealth. That is, dynamic externality was associated with lower quality of life, lower life expectancy, higher adult illiteracy rate and lower level of human development, to name a few. Leung and Bond (2008) argue that "this conflation of items from different individual-level dimensions are primarily a response to poverty and arises from the cultural press channelled through socialization agencies to overcome difficulties in survival" (p. 210). According to Leung and Bond, these aversive conditions result in cultural socialisation of citizens for "average belief profiles" high in reward for application and religiosity, both orientations encouraging "entrepreneurialism and prosociality". That is, Leung and Bond (2008) assume

that dynamic externality beliefs would be developed as a consequence of the need to cope with such difficulties. These beliefs are likely to play adaptive roles in the face of such miseries and hardship.

Bond et al. (2004) also found that although societal cynicism is negatively correlated with nations' wealth, its relation is weaker than that between wealth and dynamic externality. Instead, social cynicism is more driven by disruptive social, political, and economic changes that impinge on institutions and the lives of individuals (Leung & Bond, 2008). Clearly, unlike England, Iran is a third world poor country with low GDP per capita indicating the country's low standards of living. The functionalist view of social axioms suggests that in face of such hardship, social axioms tend to be more relevant to adjustment and functioning. That is, when the objective conditions are not desirable (e.g., in the presence of poverty and injustice), people may try to consciously or unconsciously make use of certain beliefs and ideologies to buffer the negative effects of unpleasant life conditions (Diener, Tay, & Myers, 2011; Gebauer, Nehrlich, Sedikides, &Neberich, 2012; Inglehart, 2010). And these belief systems tend to play more pronounced roles in the life of people. This can partially explain why social axioms have stronger relationships with positive affect balance and functioning in Iran than in England. However, these are mere speculations, which should be empirically investigated in future studies.

Studies on social axioms among immigrants are almost non-existent. Thus, another important contribution of the present thesis was including samples from Iranians living in Iran and Iranians living in England. Moreover, one of the purposes of this thesis was to examine differences between the levels and functions of social axioms between Iranians who are living in Iran and Iranians who are living in a largely different cultural context. Although longitudinal studies are needed to answer such questions conclusively, the present thesis provided useful initial insights to form a platform for future studies on the topic. One of the findings that stands out is that I found that the levels of social axiom scores are largely similar (except for religiosity) between Iranians living in Iran and Iranians living in England.

This finding is very important as it indicates a fair amount of stability in social beliefs even when people go through the life-changing experience of emigration. This may indicate that radically different beliefs sets are not needed to prompt an individual to migrate, or that immigration does not lead to radical belief changes in immigrants. Interestingly, the patterns of relationship between social axioms and well-being in immigrants too were found to be largely like those found in Iran. Altogether, these findings contribute the insight that it should not come as a big surprise if social beliefs are found to be more stable than changeable in future longitudinal research. In fact, evidence is currently accumulating that some beliefs are

considerably heritable. For example, research has shown that genetic influences account for a great proportion of individual differences in political and social attitudes (e.g., Eaves, Eysenck, & Martin, 1989; Hatemi et al., 2010; Martin, Eaves, Heath, Jardine, Feingold, & Eysenck, 1986).

Studies on social axioms are scant in Iran and England. Therefore, the present thesis provides important initial insights for future research on social axioms in the context of these two nations. Again, it should be noted that given the small sample sizes, and exploratory nature of the studies, more research is needed in both nations.

Limitations

To summarize, the limitations of the present study were related to the sample and scales.

The first limitation that could affect the results is the small sample size. In Study 1 (Chapter 3) a sample of more than 100 people could lead to stable correlation coefficients with high power given the fact that hypotheses 1-5 were generally expressed, regardless of segmentation variables such as gender and country, and that the mentioned hypotheses were examined through the bivariate correlation coefficient analysis (Tabachnick & Fidell, 2010; Pallant, 2011). Since hypotheses 6-9 were also generally expressed and the sample was not to be categorized based on any of the other variables, the sample size was appropriate for hierarchical regression analysis according to Stevens (1996, p. 72), Tabachnick & Fidell (2007, p. 123), and Pallant (2011, p. 150). According to Stevens (1996) the required sample size for regression analysis with a high power is 15 per predictor variable. Accordingly, a sample size of 90 is appropriate if the analyses are carried out based on up to 6 variables. However, the study sample size is 139. According to Tabachnick & Fidell (2007) and Pallant (2011), minimum sample size is obtained through the formula $n = 50 + 8m$ whereby the appropriate size is 98. In this formula, m is the number of predictor variables. Hence the analyses carried out were acceptable in terms of sample size. In addition, the sample size is appropriate for a stepwise regression method whereas a smaller size may also be appropriate for hierarchical regression analysis (Pallant, 2011, p. 152). Hence, although the sample size for this study is enough, a larger sample size than this could change the significance of relationships (according to Hoyle, 1995), Therefore, generalization of the results should be done with caution.

The data of Chapter 3 (study 1) were collected in 2008 and that of Chapter 5 (Study 3) a few years later. It is obvious that the 2008 student sample may not be representative of current students in Iran owing to political and socio-economic changes over these years. This means

that there should be further caution in the generalization of the results. Here, the sampling method should also be considered. Administrative considerations (such as distribution of Iranian immigrant across the UK) and unwillingness to participate limited the number of Iranian immigrants who were potential participants. This was the reason why non-random methods were used for sampling, again highlighting the caution necessary in generalizing the results to a wider population.

Regarding the sample, another issue that can be considered as a limitation is the subcultural differences between the students in the UK and even between the Iranian students, again indicating the need for caution in generalizing and drawing conclusions from the findings of the study. The University of Tehran, from which the Iranian sample group was selected in Study 1, is one of the largest central universities in Iran, with thousands of students from different subcultures. Such diversity clearly affects the results. Each of these sub-cultures has their own particular social beliefs, attitudes, music, dances, customs, and views on health that may influence well-being. For example, Xia & Qian (2001), in their study on two Chinese subcultural groups, revealed that mental health status among the participants was rather different. In the final qualitative study, the members of the immigrant group have different backgrounds, including family, education, and employment, and different motives for immigration with different number of years since the immigration. Again, the generalization of the results requires caution.

Moreover, a small number of Iranian immigrants were willing to participate in study 3; the results may thus be biased towards high-level SES (Social Economical Status) participants and not representative of different socio-economic levels.

The second limitation in the study was that certain measures had poor technical characteristics. Some of the measures showed an internal consistency of less than 0.70. However, a 0.70 cut off point for acceptable internal consistency is not always regarded as a gold standard as internal consistency is dependent on the number of points in the range of Likert scales, the number of items for each sub measure, the common covariance of the items, and the ratio of reverse-scored items to the total number of items (Nunnally & Bernstein, 1994). It seems that where the number of items or the number of points on the Likert scale is low, the internal consistency related to subscales is low as well. However, this may be considered as a methodological limitation which influences the generalization of the findings. Also, the participants were not asked about their motivations for immigration. I also think motivations and experience of immigrant during the migration period effects on their responses. For example, Jalili (1982) categorized the Iranian immigrants in the USA into three groups. The first was those who had emigrated during 1950-1970. They had mostly

higher education with favourable economic situation in the middle class. The second group included those who emigrated during 1970-1980. They were not originally in the same social class but later they became members of the upper class due to the economic boom and rapid growth in those years. The third group members who had emigrated during 1978-1980 were heterogeneous in terms of economy and education. Such a categorization can be considered true for Iranian immigrants in the UK, and such variables obviously can affect well-being. In sum not asking for their motivation can be considered in the study as a limitation.

Future Directions

Despite these limitations, the findings are important and promising and need to be expanded in future studies. There are many avenues for future studies. Study 3 revealed that immigration may not have a large effect on the degree to which social axioms are endorsed by individuals. This finding raises an important question: Are social axioms more stable or changeable? Although the present cross-sectional findings are more along the line of stability of social beliefs, it should be noted that this very question can best be answered using longitudinal designs rather than cross-sectional designs. Future studies should explore this issue by assessing the levels of social axioms in individuals over long periods of time (e.g., years or decades). Moreover, the behavioural genetics study of heritability of social beliefs could feed well into this line of research.

It is important not to forget that the levels of social axioms and their functions should be separately investigated in future studies. The present thesis also indicated that there may be some changes in the function of social beliefs at different time points. For example, I found that social cynicism was strongly correlated with lowered well-being in the first study, but not correlated with well-being in Study 2 and Study 3. Therefore, future longitudinal studies should track changes in the levels of social beliefs as well as changes in the functions of social axioms.

It is also important to consider the role of age in social axiom studies. The functions of social beliefs may change across various ages and life stages. The present study does not speak to this possibility. However, it may be the case that some belief domains are useful at some life stages (e.g., adolescence) and not useful or even harmful in another life stage (e.g., late adulthood). For example, it is possible that in young adulthood low endorsement of fate control beliefs and high endorsement of reward for application beliefs would allow the individual to take initiative in life and pursue ambitions and use active coping and effective problem-solving styles. However, in late adulthood when individuals 'physical strength and

achievement possibilities diminish, relatively higher endorsement of fate control beliefs and lower endorsement of reward for application beliefs might help the individual to come to terms with their current situation more easily.

One of the surprising findings of the present thesis was that social cynicism was not significantly associated with mental well-being in Study 2 (while it was strongly associated with social axioms in Study 1). I pointed to socio-economic changes in Iranian society between the two data collection phases, to speculate about the reasons for this change. My main argument was that normally cynical beliefs and pessimism tend to harm mental well-being (for example see Scheier& Carver, 1992). However, drawing on previous societal studies, I argued that in social and economic hardship, damages caused by social cynicism may be neutralized by certain advantages. In times of financial and social insecurity, cynical individuals may fall prey to social and economic traps less frequently. These speculations may apply both to individuals and societies. Future longitudinal studies, thus, could explore these possibilities both at the individual and societal levels. We can empirically verify these notions by tracking levels and functions of social cynicism over longer periods of time.

In Study 3, I measured the strength of ethnic identity in Iranian immigrants. The measure of ethnic identity used in the study (the MEIM-R; Phinney & Ong, 2007) measures the degree to which immigrants are attached to their original culture (i.e., Iran). However, a related area of research and theorizing has shown that much more can be gained by studying other relevant variables in immigrant studies. Berry (1986; 1988; 1997) argues that immigrants use various acculturation strategies/attitudes that have various implications for their adjustment in the host culture. These strategies are used by the immigrants to manage their heritage and host cultural identities. He categorizes acculturation strategies into four distinct varieties: integration, assimilation, separation, and marginalization (Berry, 1997).

Assimilation is when an individual stop maintaining practices of his or her original culture and embraces the mainstream culture to get integrated into the host culture. Integration is when an individual decides to stick to his or her original culture but also intends to get integrated into the host culture (Berry, 1986; Phinney et al., 2006). Separation is when an immigrant chooses to maintain his or her original culture but refuses to interact with the host culture, which leads to a withdrawal from integration into the host culture. Finally, marginalization refers to when an immigrant forgoes his or her original culture as well as stops attempting to get integrated into the host culture (Berry, 1986; Phinney et al., 2006).

Study 3 measured only attachment to one's heritage culture, and the complexity of people's strategies in managing their multiple identities was not considered. Future studies could draw on Berry's model and use more comprehensive scales to measure the full range of

acculturation attitudes (Berry, Phinney, Sam, & Vedder, 2006) to draw a more elaborate picture of the influence of ethnic identity on mental well-being, and ethnic identity's moderating effects on the relationship between social axioms and mental well-being. For example, measuring attachment to one's ethnic identity alone, Study 3 found that attachment to one's heritage ethnic identity has moderate positive effects on mental well-being of immigrants. However, it has been argued that attachment to their heritage culture and participation and attachment in the host culture interact with each other in their effects on psychological adaptation (Berry, 1986; Phinney et al., 2006). Therefore, future research would benefit from a more comprehensive assessment of various acculturation strategies based on Berry's theoretical model.

Study 4 indicated that some Iranians use an indigenous strategy to achieve contentment and handle hardship. They tend to believe that, in our daily life, we should keep trying to excel as we are bestowed by free will and have our lives to create on our own. However, when disasters occur, we should accept that this is predestined by God and a test of the person's faith. Disasters are considered reminders from God to draw our attention towards Him. This helps tolerating hardship with tolerance and even helps to strengthen one's faith in God in times of hardship. Empirically testing applicability of this indigenous strategy is an interesting avenue for future studies in Iranians (and more generally in Muslims). This may involve developing new psychological measures to capture this indigenous way of coping with hardship in Muslim cultures.

As mentioned in Study 4, there are differences in how cultures define mental well-being. Unlike Westerners, for Muslims, mental well-being seems to consist mainly of peace of mind and contentment rather than high arousal emotions such as excitement and euphoria (Joshanloo, 2013; Tsai, 2007). Therefore, strategies to gain happiness and mental well-being are believed to differ across cultures. Prior research shows that happiness-increasing activities should be designed based on the characteristics of indigenous cultures, and there is no one-size-fits-all strategy to be used across all cultures (Boehm, Lyubomirsky, & Sheldon, 2011; Layous, Lee, Choi, & Lyubomirsky, 2013). Therefore, future research should focus on indigenous strategies used by Muslims to increase their sense of well-being and happiness. Study 4 provided insights about one such strategy in Muslims, but certainly there are other strategies to be studied in future research.

In sum, the present set of studies was designed to provide fresh insights about the experience of mental well-being in Iran and the role of social beliefs in this regard. The studies were largely exploratory, and the findings should be considered as preliminary. However, the thesis makes unique contributions to the fields of mental well-being research and social axioms, as

discussed above. For example, the present studies contribute to the hotly debated issue of conceptualizing hedonic and eudaimonic well-being. The studies necessarily had some limitations, which were also discussed above. For example, some strong methods such as experimental designs and implicit association testing were not utilized in the present thesis. Finally, several avenues for future studies were discussed. For instance, it was suggested that future research could investigate possible positive functions of social cynicism in socially and financially difficult times.

Social axioms might relate differently to well-being under different circumstances, and therefore the results of this study have potential for change in the UK students. For example, on the one hand there is relationship between social axioms and social factors including life satisfaction (Lai, Bond & Hui (2006), lower job satisfaction (Leung, Ip, & Leung, 2010), and lower income (Stavrova & Ehlebracht, 2016), and on the other hand there is a relationship between these social factors and well-being. Accordingly, it can be predicted that when these social factors change over time the relationship between social axioms and well-being may change

Also, the main study aim was to examine the relationship between social axiom and well-being by controlling two variables, country and personality. The researcher believes that this aim was attained by the analyses outlined and all the previously developed hypotheses were tested by the appropriate statistical methods. However, the aim cannot be achieved through the measurement of the mediator-moderator variables.

I suggest to future researchers to consider the role of mediator and moderator variables in the relationship between social axiom and well-being.

References

Abdel-Khalek, A. (2010). Quality of life, subjective well-being, and religiosity in Muslim college students. *Quality of Life Research, 19*(8), 1133-1143. doi: 10.1007/s11136-010-9676-7

Abolhasani, S. R. (2008). components of national identity from research approach. *Journal of Politics*. 38 (4): 1-22. (Farsi).

Abotorabi, A. (2007). *Critical review of normality's criteria based on Islamic resources*. Ghom. Research Institute of Imam Khomeini Press. (Farsi).

Abouguendia, M., & Noels, K. A. (2001). General and acculturation-related daily hassles and psychological adjustment in first-and second-generation South Asian immigrants to Canada. *International Journal of Psychology*, *36*(3), 163-173.

Abu-Ali, A., & Reisen, C.A. (1999). Gender role identity among adolescent Muslim girls living in the US. *Current Psychology: Developmental, Learning, Personality, Social*, *18*(2), 185-192.

Abu-Bader, S. H., Tirmazib, M. T., & Ross-Sheriffa, F. (2011). The impact of acculturation on depression among older Muslim immigrants in the United States.*Journal of Gerontological Social Work*, *54*, 425–448. doi:10.1080/ 01634372.2011.560928

Abu-Raiya, H. (2012). Towards a systematic Quranic theory of personality. *Mental Health, Religion & Culture, 15(3)*, 217–233. doi:10.1080/13674676.2011.640622.

Abu-Rayya, H. M., & Abu-Rayya, M. H. (2009a). Acculturation, religious identity, and psychological well-being among Palestinians in Israel. *International Journal of Intercultural Relations, 33*(4), 325-331.

Abu-Rayya, M. H., & Abu-Rayya, H. M. (2009b). Ethnic identification, religious identity, and psychological well-being among Muslim and Christian Palestinians in Israel. *Mental Health, Religion and Culture, 12*(2), 147-155.

Ahmad, F. (2006). British Muslim Perceptions and Opinions on News Coverage of September 11. [doi: 10.1080/13691830600761479]. *Journal of Ethnic and Migration Studies, 32*(6), 961-982.

Ahmed, N., Kaufman, G., & Naim, S. (1996). South Asian families in the United States: Pakistani, Bangladeshi, and Indian Muslims. In B. C. Aswad & B. Blige (Eds.), Family and gender among American Muslims: *Issues facing Middle Eastern*

immigrants and their descendants (pp. 131–152). Philadelphia, PA: Temple University Press.

Ali, S. R., Liu, W., & Humedian, M. (2004). Islam 101: Understanding the religion and therapy implications. *Professional Psychology: Research and Practice*, *35*, 635–642. doi:10.1037/0735-7028.35.

Allen, C., & Nielsen, J. S. (2002). *Summary report on Islamophobia in the EU after September 11, 2001*. Vienna: EUMC on Racism and Xenophobia.

Allison, P. D. (2003). Missing data techniques for structural equation modeling. *Journal of Abnormal Psychology*, *112*(4), 545.

Alqahtani MM. (2010) Attention-deficit hyperactive disorder in school-aged children in Saudi Arabia. *European Journal of Pediatrics*. 169: 1113–1117.

Ameli, S. R., &*Islamic Human Rights Commission* (Great Britain). (2007). The British media and Muslim representation: Ideology of demonisation. Wembley, UK: Islamic Human Rights Commission.

Ashy, M. A. (1999). Health and illness from an Islamic perspective. *Journal of Religion and Health, 38(3)*, 241–258.

Asvat, Y., & Malcarne, V. L. (2008). Acculturation and depressive symptoms in Muslim university students: Personal–family acculturation match. *International Journal of Psychology*, *43*(2), 114-124.

Atari, M., Barbaro, N., Sela, Y., Shackelford, T. K., & Chegeni, R. (2017). The Big Five personality dimensions and mate retention behaviours in Iran*. Personality and Individual Differences*. 104: 286–290. (Farsi)

Baer, R. A. (2003). Mindfulness training as a clinical intervention: A conceptual and empirical review. *Clinical Psychology: Science and Practice, 10*, 125-143.

Baer, R. A., Smith, G. T., & Allen, K. B. (2004). Assessment of mindfulness by self-report: The Kentucky Inventory of Mindfulness Skills. *Assessment,* 11, 191-206.

Baer, R. A., Smith, G. T., Hopkins, J., Krietemeyer, J., & Toney, L. (2006). Using self-report assessment methods to explore facets of mindfulness. *Assessment*. 13, 27–45.

Bakhshi, A., Daemi, F., & Ajilchi, B. (2009). Psychometric properties of the positive and negative affect scales in an Iranian sample. *Journal of Iranian Psychologists, 20*, 343-350 [in Persian].

Baltas Z. & Steptoe A. (2000). Migration, culture conflict and psychological well-being among Turkish-British married couples. *Ethnicity and Health*, 5, 173-180.

Bankston, C. L., & Zhou, M. (1995). Religious participation, ethnic identification, and adaptation of Vietnamese adolescents in an immigrant community. *Sociological Quarterly*, *36*(3), 523-534.

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173-1182.

Bartram, D. (2011). Economic Migration and Happiness: Comparing Immigrants' and Natives' Happiness Gains From Income. *Social Indicators Research, 103*(1), 57-76. doi: 10.1007/s11205-010-9696-2

Batson, C. D. (1991). *The altruism question: Toward a social-psychological answer*. Hillsdale, NJ: Lawrence Erlbaum Associates.

Batson, C. D. (2010). Empathy-induced altruistic motivation. In M. Mikulincer & P. R. Shaver Batson (Eds.), *Prosocial motives, emotions, and behaviour: The better angels of our nature* (pp. 15-34). Washington, DC: American Psychological Association.

Batson, CD., Polycarpou, M.P., Harmon-Jones, E., Imhoff, H.J., Mitchener, E.C., Bednar, L.L., Klein, T.R., & Highberger, L. (1997). Empathy and attitudes: Can feeling for a member of a stigmatized group improve feelings toward the group? *Journal of Psychology and Social Psychology, 72,* 1, 105-118.

Bayandar, M. (2007). Representation of psychological disorders on media. *Research & Assessment*. 50(14): 32-47.

Bayani, A. A., Koocheky, A. M., & Bayani, A. (2008). Reliability and validity of Ryff's psychological well-being scales. *Iranian Journal of Psychiatry and Clinical Psychology, 14, 146-151* [in Persian].

Beaubien, J. M. (2005). Moderation. In B. Everitt and D. Howell (Eds.), *The encyclopaedia of statistics in behavioural science* (Vol. 3, pp. 1256-1258). New York: Wiley.

Bernardo, A. B. I., & Nalipay, M. J. N (2016). Social axioms as social foundations of locus of hope: a study in three Asian cultural groups. *Personality and individual differences*. 95: 110-113.

Bernardo, A. B. I. (2013). Hope grounded in belief: Direct and indirect influence of social axioms on dispositional hope. *Scandinavian Journal of Psychology*, 54, 522-528.

Berry, J. W., & Annis, R. C. (1974). Acculturative Stress: The Role of Ecology, Culture and Differentiation. *Journal of Cross-Cultural Psychology, 5*(4), 382-406.

Berry, J. W., Phinney, J. S., Sam, D. L., & Vedder, P. (2006). Immigrant youth: Acculturation, identity, and adaptation. *Applied psychology*, 55(3), 303-332.

Berry, J. W., Phinney, J. S., Sam, D. L., & Vedder, P. (2006). Immigrant youth: Acculturation, identity, and adaptation. *Applied psychology*, *55*(3), 303-332.

Berry, J., W. (2005). Acculturation: living successfully in two cultures. *International journal of Intercultural Relations*. 29: 697-712.

Berry, J.W. (1986) The acculturation process and refugee behaviour. In Williams, C.L. & Westinmeyer, J. *Refugee mental health in resettlement countries.* Pp. 25-37. Washington, D.C.: Hemisphere Publishing Corp.

Berry, J.W. (1997). Immigration, acculturation and adaptation. *Applied Psychology,* 46, 5-68.

Berry, J.W., Phinney, J., Sam, D.L. & Vedder, P. (2006). *Immigrant youth in cultural*

Birks, M., & Mills, J. (2011). *Grounded theory: A practical guide*. London: Sage.

Biruski, D. C., Ajdukovic, D., & Stanic, A. L. (2014). When the world collapses: changed worldview and social reconstruction in a traumatized community. *European Journal of Psychotraumatology*. 5:24098. doi.org/10.3402/ejpt.v5.24098.

Bishop, S. R., Lau, M., Shapiro, S., Carlson, L., Anderson, N. D., Carmody, J., et al. (2004). Mindfulness: A proposed operational definition. *Clinical Psychology: Science and Practice, 11*, 230-241.

Bisin, A., Patacchini, E., Verdier, T., & Zenou, Y. (2008). Are Muslim immigrants different in terms of cultural integration? *Journal of the European Economic Association*, *6*(2-3), 445-456.

Biswas-Diener, R. M. (2008). *Material wealth and subjective well-being*. In Eid, M and Larsen, R.J. (Eds.), The science of subjective well-being (307-322). New York: The Guilford Press.

Block, Jack. 1995. A contrarian view of the five-factor approach to personality description. *Psychological Bulletin* 117.2: 187–215.

Boehm, J. K., Lyubomirsky, S., & Sheldon, K. M. (2011). A longitudinal experimental study comparing the effectiveness of happiness-enhancing strategies in Anglo Americans and Asian Americans. *Cognition & Emotion, 25*, 1152-1167.

Bonanno, G. A., Field, N. P., Kovacevic, A., & Kaltman, S. (2002). Self-enhancement as a buffer against extreme adversity: Civil war in Bosnia and traumatic loss in the United States. *Personality and Social Psychology Bulletin, 28*, 184–196.

Bond, M. H., Leung, K., Au, A., Tong, K. K. & Chemonges-Nielson, Z. (2004). Combining social axioms with values in predicting social behaviours. *European Journal of Personality*, 18, 177–191.

Bond, M. H., Leung, K., Au, A., Tong, K. K., De Carrasquel, S. R., Murakami, F., et al. (2004b). Culture-level dimensions of social axioms and their correlates across 41 cultures. *Journal of Cross-Cultural Psychology*, 35, 548–570.

Bond, M.H., Leung, Au, A., Tong, K.K., & Chemonges-Nielson, Z. (2004). Combining social axioms with values in predicting social behaviours. *European Journal of Personality, 18*, 177–191.

Boyle, Gregory J., "Critique of the five-factor model of personality" (2008). *Humanities & Social Sciences papers.* Paper 297. http://epublications.bond.edu.au/hss_pubs/297.

Bowers, B.J. (1988). Grounded theory. In B. Sarter, B. (Ed.), *Paths to knowledge: Innovative research methods for nursing*. New York: National League for Nursing.

Bradburn, N. M. (1969). The structure of psychological well-being. Chicago: Aldine.

Bradley, G. W. (1978). Self-serving biases in the attribution process: A re-examination of the fact or fiction question. *Journal of personality and social psychology*, *36*(1), 56.

Branham, R. B., & Goulet-Caze, M.-O. (1996). *The Cynics: the cynic movement in antiquity and its legacy*. Berkeley: University of California Press.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77-101.

Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology, 84*, 822-848.

Brown, K.W., Ryan, R.M., Creswell, J.D. (2007). Mindfulness: Theoretical Foundations and Evidence for its Salutary Effects. *Psychological Inquiry, 18*, 211-237

Brown, R., Baysu, G., Cameron, L., Nigbur, D., Rutland, A., Watters, C., et al. (2013). Acculturation Attitudes and Social Adjustment in British South Asian Children: A Longitudinal Study. *Personality and Social Psychology Bulletin, 39*(12), 1656-1667.

Brown, S. D., Unger Hu, K. A., Mevi, A. A., Hedderson, M. M., Shan, J., Quesenberry, C. P., & Ferrara, A. (2014). The Multigroup Ethnic Identity Measure—Revised: Measurement invariance across racial and ethnic groups. *Journal of counseling psychology*, *61*(1), 154.

Brown, S. Y., & Landreth, G. L. (1983). A descriptive study of Iranian university student normal personality. *International Journal for the Advancement of Counseling, 6*, 237-248.

Calhoun, L. G., Cann, A., Tedeschi, R. G., & McMillan, J. (1998). Traumatic events and generational differences in assumptions about a just world. *The Journal of Social Psychology*. 138 (6): 789-791.

Campbell, A., Converse, P. & Rodgers, W. (1976). *The Quality of American Life*: Perceptions, Evaluations, and Satisfactions. New York: Russell Sage.

Campbell, W. K., & Sedikides, C. (1999). Self-threat magnifies the self-serving bias: A meta-analytic integration. *Review of general Psychology*, *3*(1), 23.

Caprara, G.V. & Steca, P. (2005). Affective and social self-regulatory efficacy beliefs as determinants of positive thinking and happiness. *European Psychologist*, 4, 275-286.

Cardaciotto, L., Herbert, J. D., Forman, E. M., Moitra, E., & Farrow, V. (2008). The assessment of present moment awareness and acceptance: The Philadelphia Mindfulness Scale. *Assessment, 15(2)*, 204–223.

Carr, D. S. (1997). The fulfillment of career dreams at midlife: Does it matter for women's mental health? *Journal of Health and Social Behavior* 38, 331–344.

Carver, C. S., & Scheier, M. F. (2002). Optimism.In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of positive psychology* (pp. 231-243).

Central Intelligence Agency (2012). World factbook. Langley, VA: CIA.https://www.cia.gov/library/publications/the-world-factbook/

Chang, M. X., Jetten, J., Cruwys, T., & Haslam, C. (2017). Cultural identity and the expression of depression: a social identity perspective. *Journal of Community & Applied Psychology*. 27 (1); 16-34.

Charmaz, C. (2006). *Constructing grounded theory*: A practical guide through qualitative research. London: Sage.

Charmaz, K. (2000). Grounded theory: Objective and constructivist methods. In N. K. Denzin & Y. S. Lincoln (Eds.). *Handbook of Grounded Theory*. Info missing

Chen, L., & Zhang J. (2004). Relation between general social beliefs and interpersonal conflict resolution styles. *Chinese Journal of Clinical Psychology*, 12, 151–153 (in Chinese).

Chen, S. X., Bond, M. H., & Cheung, F. M. (2006a). Personality correlates of social axioms: Are beliefs nested within personality? *Personality and Individual Differences*, 40, 509–519.

Chen, S. X., Cheung, F. M., Bond, M. H., & Leung, J. P. (2006). Going beyond self-esteem to predict life satisfaction: The Chinese case. *Asian Journal of Social Psychology*, 9, 24–35.

Chen, S. X., Fok, H. K., Bond, M. H., & Matsumoto, D. (2006). Personality and beliefs about the world revisited: Expanding the nomological network of social axioms. *Personality and Individual Differences*, *41*, 201-211.

Chen, S. X., Fok, H. K., Bond, M. H., & Matsumoto, D. (2006b). Personality and beliefs about the world revisited: Expanding the nomological network of social axioms. *Personality and Individual Differences*, 41, 201–211.

Chen, S. X., Wu, W. C. H., & Bond, M. H. (2009). Linking family dysfunction to suicidal ideation: Mediating roles of self-views and world-views. *Asian Journal of Social Psychology*, 12, 133-144.

Chen, S.X., Bond, M.H. & Cheung, F.M. (2006). Personality correlates of social axioms: Are beliefs nested within personality? *Personality and Individual Differences,* 40, 509–519.

Cheng, S.-T., & Chan, A. C. M. (2005). Measuring psychological well-being in the Chinese. [doi: DOI: 10.1016/j.paid.2004.08.013]. *Personality and Individual Differences*, 38(6), 1307-1316.

Cheung, F. M., Leung, K., Song, W. Z. & Zhang, J. X. (2001). *The Chinese Personality Assessment Inventory-2 (CPAI-2).* (Available from F. M. Cheung, Department of Psychology. Chinese University of Hong Kong, Hong Kong SAR; http://www.psy.cuhk.edu.hk/∼cpaiweb/publicdocument/PublicFiles.htm).

Chinese Culture Connection (1987). Chinese values and the search for culture-free dimensions of culture. *Journal of Cross-Cultural Psychology*, 18, 143–164.

Chun, C. A., Moos, R. H., & Cronkite, R. C. (2006). *Culture: A fundamental context for the stress and coping paradigm.* In P. T. P. Wong, & L. C. J. Wong (Eds.), Handbook of multicultural perspectives on stress and coping (pp. 29–53). New York, NY: Springer.

Clark, L.A. & Watson, D. (1991). *General affective dispositions in physical and psychological health.* In C.R. Snyder & D.R. Forsyth (Eds.) Handbook of social and clinical psychology: The health perspective. New York: Pergamon.

Clark-Carter, D. (2009). Quantitative psychological research: The complete student's companion (3rd ed.). Philadelphia, PA: Psychology Press.

Clark-Carter, D. (2009). *Quantitative psychological research: the complete student's companion*. New York: Psychology press.

Clarke, P. J., Marshall, V. W., Ryff C. D. & Wheaton, B. (2001). Measuring psychological well-being in the Canadian Study of Health and Aging. *International Psychogeriatrics,* 13(Suppl 1), 79–90.

Clément, R., & Noels, K. A. (1992). Towards a situated approach to ethnolinguistic identity: The effects of status on individuals and groups. *Journal of Language and Social Psychology, 11*, 203-232.

Cohen, A. B., & Hall, D. E. (2009). Existential beliefs, social satisfaction, and well-being among Catholic, Jewish, and Protestant older adults. *The International Journal for the Psychology of Religion.* 19(1), 39 – 54.

Colby, B. N. (2009). *Is a measure of cultural well-being possible or desirable?* In G. Mathews & C. Izquerdo (Eds.), Pursuits of happiness: Well-being in anthropological perspective (pp. 45–64). New York: Berghahn Books.

Cole, P. M., Bruschi, C. J., & Tamang, B. L. (2002). Cultural differences in children's emotional reactions to difficult situations. Child Development, 73(3), 983–996.

Compton, W. C., Smith, M. L., Cornish, K. A., & Qualls, D. L. (1996). Factor structure of mental health measures. *Journal of Personality and Social Psychology*, 76, 406–413.

Comunian, A. L. (2009). *Social Axioms in Italian Culture: Relationships with Locus of Control and Moral Development*. In K. Leung and M.H. Bond (eds.), Psychological Aspects of Social Axioms: understanding global belief system (1st ed., pp. 269-282). New York: Springer.

Cooper M. (2000). Malay culture and personality. *American Behavioural Scientist*. 2000; 44:95–111.

Corbin, J., & Strauss, A. (1990). Grounded theory research: Procedures, canons, and evaluative criteria. *Qualitative Sociology, 13*, 3-21.

Correia, I. & Dalbert, C. (2007). Belief in a just world, justice concerns, and well-being at Portuguese schools. *European Journal of Psychology of Education*, 22, 421-437.

Costa Jr, P. T., & McCrae, R. R. (1992). Neo personality inventory–revised (neo-pi-r) and neo five-factor inventory (neo-ffi) professional manual. *Odessa, FL: Psychological Assessment Resources*.

Costa, P. T. Jr., & McRae, R. R. (1992). *Revised NEO Personality Inventory (NEO-PI-R) and NEO Five-Factor Inventory (NEO-FFI) professional manual*. Odessa, Florida: Psychological Assessment Resources, Inc.

Costa, P. T., & McCrae, R. R. (1980). Influence of extraversion and neuroticism on subjective well-being: Happy and unhappy people. *Journal of Personality and Social Psychology*, 38, 668–678.

Costa, P. T., & McCrae, R. R. (1992). Revised NEO Personality Inventory (NEOPI-R) and NEO Five-Factor Inventory (NEO-FF1*). Odessa, FL: Psychological Assessment Resources.*

Cozzarelli, C., & Karafa, J. A. (1998). Cultural estrangement and terror management theory. *Personality and Social Psychology Bulletin*, 24(3), 253–267.

Creswell, J. W., & Plano Clark, V. L. (2007). *Designing and conducting mixed methods research.* Thousand Oaks, CA: Sage.

Creswell, J.W. (2014) Chapter One: The selection of a research approach. In: Creswell, J.W. Research design: qualitative, quantitative, and mixed methods approach. SAGE. Pp.3-23

Crook, C. W., & Kumar, R. L. (1998). Electronic data interchange: A multi-industry investigation using grounded theory. *Information & Management, 34*(2), 75-89. doi: http://dx.doi.org/10.1016/S0378-7206(98)00040-8

Croswell, J. W. (2005). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. Upper-Saddle River, N. J.: Merrill.

Croswell, J. W., & Brown, M. L., (1992). How chairpersons enhance faculty research: A grounded theory study. *The Review of Higher Education, 16* (1), 41- 62.

Croswell, J. W., & Brown, M. L., (1992). How Chairpersons enhance faculty research: A grounded theory study. *The Review of Higher education, 16* (1): 41- 62.

Das, A. K., & Kemp, S. F. (1997). Between two worlds: Counseling South Asian Americans. *Journal of Multicultural Counseling and Development*, *25*(1), 23–33. doi:10.1002/j.2161-1912. 1997.tb00313.x

Dasgupta, P., & Mäler, K. G. (2000) .Net national product, wealth, and social well-being. *Environment and development economics*, *5*(01), 69-93.

Davidian, H., Shahmohammadi, D., Azardegan, F., Karimi, E & Bagheri Yazdi, S. A. (2001). Common symptoms of mental disorders among Iranian culture. *Hakim*. 4 (1): 1-11. (Farsi).

Davis, M. H. (1980). A multidimensional approach to individual differences in empathy. *JSAS Catalog of Selected Documents in Psychology, 10*, 85.

Davis, M. H., Luce, C., & Kraus, S. J. (1994). The heritability of characteristics associated with dispositional empathy. *Journal of Personality, 62*, 369-391.

De Vos, M. (2012). The unbearable lightness of happiness policy. In P. Booth (Ed.) *... and the Pursuit of Happiness* (pp. 181–204). London: the institute of economic affairs.

Deary, I. J. & Matthews, G. (1993). Personality traits are alive and well. *Psychologist*,77: 299-308.

Deikman, A. J. (1996). "I" = awareness. *Journal of Consciousness Studies, 3*, 350-356.

Delle Fave, A., & Bassi, M. (2009). The contribution of diversity to happiness research. [doi: 10.1080/17439760902844319]. *The Journal of Positive Psychology, 4*(3), 205-207.

DeNeve, K. M., & Cooper, H. (1998). The happy personality: A meta-analysis of 137 personality traits and subjective well-being. *Psychological Bulletin*, 124, 197–229.

Derogatis, L. R. (1977). *SCL-90-R, Administration, Scoring and Procedures Manual-I for the revised version.* Baltimore, MD: Johns Hopkins School of Medicine.

DeYoung, C. G., Hirsh, J. B., Shane, M. S., Papademetris, X., Rajeevan, N., & Gray, J. R. (2010). Testing Predictions from Personality Neuroscience: Brain Structure and the Big Five. *Psychological Science, 21(6)*, 820-828. doi: 10.1177/0956797610370159

Diener, E. (1984). Subjective well-being. *Psychological Bulletin*, 95, 542–575.

Diener, E. (1994). Assessing subjective well-being: Progress and opportunities. *Social Indicators Research*, 31, 103-157.

Diener, E., & Diener, M. (1995). Cross-cultural correlates of life satisfaction and self-esteem. *Journal of personality and social psychology*, *68*(4), 653.

Diener, E., Diener, M., & Diener, C. (2009). Factors predicting the subjective well-being of nations. *Journal of Personality and Social Psychology*. 69 (5): 851-864.

Diener, E., Emmons, R. A., Larsen, R. J., &Griffin, S. (1985). The Satisfaction With Life Scale. *Journal of Personality Assessment*, 49, 71-75.

Diener, E., Gohm, C. L., Suh, E., & Oishi, S. (2000). Similarity of the relations between marital status and subjective well-being across cultures. *Journal of Cross-Cultural Psychology*, 31, 419–436.

Diener, E., Helliwell, J. F., & Kahneman, D. (Eds.). (2010). *International differences in well-being*. New York: Oxford University Press.

Diener, E., Oishi, S., & Lucas, R. E. (2003). Personality, culture, and subjective well-being: Emotional and cognitive evaluations of life. *Annual Review of Psychology*, 54, 403–425.

Diener, E., Sandvik, E., Seidlitz, L., & Diener, M. (1993). The relationship between income and subjective well-being: Relative or absolute? *Social Indicators Research*, 28, 195–223.

Diener, E., Sapyta, J., & Suh, E. (1998). Subjective well-being is essential to well-being. *Psychological Inquiry*, 9, 33–37.

Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin*, 125(2), 276–302.

Diener, E., Tay, L., & Myers, D. G. (2011). The religion paradox: If religion makes people happy, why are so many dropping out? *Journal of Personality and Social Psychology, 101*(6), 1278–1290.

Digman, J. (1990). Personality structure: Emergence of the five-factor model. *Annual Review of Psychology*, 41,417-440.

Digman, J., & Takemoto-Chock. (1981). Factors in the natural language of personality: Reanalysis, comparison, and interpretation of six major studies. *Multivariate Behavioral Research*, 16, 1246–1256.

Dinca, M., & Iliescu, D. (2009). *Linking social axioms with behavioral indicators and personality in Romania*. In K. Leung & M. H. Bond (Eds.), Psychological aspects of social axioms: Learning from the past and looking forward (pp. 145–162). New York: Springer.

Dunahoo, C., Hobfoll, S. E., Monnier, J., Hulsizer, M. R., & Johnson, R. (1998). There's more than rugged individualism in coping: Part 1: Even the Lone Ranger had Tonto. *Anxiety, Stress, and Coping,* 11,137–165.

Dykstra, C. (1986). Youth and the language of faith. *Religious Education, 81*, 163–184.

Dzuka, J., & Dalbert, C. (2006). The belief in a just world and subjective well-being in old age. *Aging & Mental Health*, 10, 439–444.

Eaves, L. J., Eysenck, H. J., & Martin, N. G. (1989). *Genes, culture, and personality: An empirical approach*. London: Academic Press.

Ebaugh, H. R., & Chafetz, J. S. (2000). *Religion and the new immigrants*: *Continuities and adaptations in immigrant congregations*. Walnut Creek, CA: AltaMira.

Eisenberg, N., &Fabes, R. A. (1990). Empathy: Conceptualization, measurement, and relation to prosocial behavior. *Motivation and Emotion*, 14, 131–149.

Eisenberg, N., Fabes, R. A., Murphy, B., Karbon, M., Smith, M., et al. (1996). The relations of children's dispositional empathy-related responding to their emotionality, regulation, and social functioning. *Developmental Psychology*, 32, 195–209.

Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of Management Review*, 14, 532–50.

Ellison, C. G. (1991). Religious involvement and subjective well-being. *Journal of health and social behavior*, 80-99.

Emmons, R. A., & Shelton, C. S. (2002). Gratitude and the science of positive psychology. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of positive psychology* (pp. 459–471). New York: Oxford University Press.

Emmons, R. A., McCullough, M. E., & Tsang, J. (2003). The assessment of gratitude. In S. J. Lopez & C. R. Snyder (Eds.), *Handbook of positive psychology assessment* (pp. 327–341). Washington, DC: American Psychological Association.

Erdle, S & Aghababaei, N. (2012). Evidence for the general factor of personality in the Big Five from 600 Iranians. *Personality and individual differences*. 53: 359-361.

Fassinger, R. E. (2005). Paradigms, praxis, problems, and promise: Grounded theory in counseling psychology research. *Journal of Counseling Psychology, 52*(2), 156-166. doi: http://dx.doi.org/10.1037/0022-0167.52.2.156

Feizabadi, Z., Farzad, V., & Shahraray, M. (2007). Investigation the relationship between empathy, identity styles and commitment in humanities and technical engineering students. *Psychological Studies*. 3(2): 65-90. (Farsi).

Ferguson, G. A., & Takane, Y. (1989). Statistical analysis *in psychology and education* (6th ed.). New York: McGraw-Hill.

Ferraro, K. F., & Koch, J. R. (1994). Religion and Health among Black and White Adults: Examining Social Support and Consolation. *Journal for the Scientific Study of Religion, 33*(4), 362-375. doi: 10.2307/1386495

Ferreira, V. M. & Sherman, A. M. (2006). Understanding associations of control beliefs, social relations, and well-being in older adults with osteoarthritis. *International Journal of Aging and Human Development*.62(3), 255-74.

Feshbach, S. (1978). The environment of personality. *American Psychologist*, 33, 447–455.

Fisher, R.J. (1993). Social desirability bias and the validity of indirect questioning. *Journal of Consumer Research, 20*, 303-315.

Foster, M.D., & Tsarfati, E.M. (2005). The effects of meritocracy beliefs on women's well-being after first-time gender discrimination. *Personality and Social Psychology Bulletin,* 31, 1730-1738.

Franzoi, S. L., Davis, M. H., & Young, R. D. (1985). The effects of private self-consciousness and perspective taking on satisfaction in close relationships. *Journal of Personality and Social Psychology, 48*, 1584-1594.

Gadermann, A. M., Schonert-Reichl, K. A., & Zumbo, B. D. (2010). Investigating validity evidence of the Satisfaction with Life Scale adapted for children. *Social Indicators Research, 96*, 229-247.

Galinsky, A. D., Maddux, W. W., Gilin, D., & White, J. B. (2008). Why it pays to get inside the head of your opponent: The differential effects of perspective taking and empathy in negotiations. *Psychological Science, 19*, 378-384.

Galinsky, A. D., Wang, C. S., & Ku, G. (2008). Perspective-takers behave more stereotypically. *Journal of Personality and Social Psychology, 95*, 404-419.

Gari, A., Panagiotopoulou., & Mylonas, K. (2009). *Social axioms in Greece; Etic and Emic dimensions and their relationship with locus of control*. In K. Leung and M.H. Bond (eds.), Psychological Aspects of Social Axioms: understanding global belief system (1st ed., pp. 197-216). New York: Springer.

Gebauer, J. E., Wagner, J., Sedikides, C., &Neberich, W. (2013). Agency-Communion and Self-Esteem Relations Are Moderated by Culture, Religiosity, Age, and Sex:

Evidence for the "Self-Centrality Breeds Self-Enhancement" Principle. *Journal of Personality, 81*(3), 261-275. doi: 10.1111/j.1467-6494.2012. 00807.x

George, L. K. (2006). Perceived quality of life. In R. H. Binstock and L. K. George (Eds.), *Handbook of Aging and the Social Sciences* (pp. 320-336). San Diego, CA: Elsevier.

Ghaffari, A., & Ciftci, A. (2010). Religiosity and self-esteem of Muslim immigrants to the United States: The moderating role of perceived discrimination. *International Journal for the Psychology of Religion, 20*(1), 14-25.

Ghaffarian, S. (1998). The acculturation of Iranian immigrants in the United States and the implications for mental health. *The Journal of Social Psychology, 138*(5), 645-654.

Ghorbani, N., Watson, P.J., & Weathington, B.L. (2009). Mindfulness in Iran and the United States: Cross-Cultural structural complexity and parallel relationships with psychological adjustment. *Current Psychology, 28*, 211-224.

Glaser, B. G. (1978). *Theoretical sensitivity: Advances in the methodology of grounded theory* (Vol. 2). Mill Valley, CA: Sociology Press.

Glaser, B. G. (1992). *Emergence vs forcing: Basics of grounded theory analysis.* Mill Valley, CA: Sociology Press.

Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory*. Chicago: Aldine.

Gousheh, A., Ziaaddini, H., Baneshi, M. R., Nakhaee, N. (2014). Drug use among residents of Juvenile correctional center in kerman, Iran, and its relationship with personality dimension and self-concepts. Addiction & Health. 6(1-2): 22-29. (Farsi).

Green, M., & Elliott, M. (2010). Religion, Health, and Psychological Well-Being. *Journal of Religion and Health, 49*(2), 149-163. doi: 10.1007/s10943-009-9242-1.

Greene, J. C., Caracelli, V. J., & Graham, W. F. (1989) "Toward a Conceptual Framework for Mixed-method Evaluation Designs". Educational Evaluation and Policy Analysis, Vol 11, No. 3, pp 255-274.

Griffith, J. (1983). Relationship between acculturation and psychological impairment in adult Mexican Americans. *Hispanic Journal of Behavioral Sciences, 5*, 431-459.

Gross, J. J. & John, O. P. (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. *Journal of Personality and Social Psychology* 85(2), 348–362.

Grossman, P., Niemann, L., Schmidt, S., & Walach, H. (2004). Mindfulness-based stress reduction and health benefits: A meta-analysis. *Journal of Psychosomatic Research, 57*, 35-43.

Güngör, D., Fleischmann, F., & Phalet, K. (2011). Religious Identification, Beliefs, and Practices Among Turkish Belgian and Moroccan Belgian Muslims Intergenerational

Continuity and Acculturative Change. *Journal of Cross-Cultural Psychology*, *42*(8), 1356-1374.

Hadianfar, H. (2005). Subjective well-being and religious activities in a group of Muslims [article in Persian]. *Iranian Journal of psychiatry and psychology*, 11(2), 224-232.

Halpern, J. (2001). From *detached concern to empathy: humanizing medical practice*. New York: Oxford University Press.

Haselton, M. G., & Nettle, D. (2006). The paranoid optimist: An integrative evolutionary model of cognitive biases. *Personality and social psychology Review*, *10*(1), 47-66.

Hatemi, P. K., Hibbing, J. R., Medland, S. E., Keller, M. C., Alford, J. R., Smith, K. B., et al. (2010). Not by twins alone: Using the extended family design to investigate genetic influence on political beliefs. *American Journal of Political Science, 54*(3), 798-814.

Hayes, S.C., Strosahl, K.D., & Wilson, K.G. (1999). *Acceptance and commitment therapy: An experiential approach to behavior change*. New York: Guildford Press.

Heath, A., & Roberts, J. (2006). *British identity: its sources and possible implications for civic attitudes and behavior.* University of Oxford.

Heath, H., Cowley, S. (2004). Developing a grounded theory approach: a comparison of Glasser and Strauss. *International Journal of Nursing Studies*. 41: 141–150.

Heider, Fritz (1958), The Psychology for Interpersonal Relations, New York: Wiley.

Heidrich, S. M., Ryff, C. D., (1993). Physical and mental health in later life: the self-system as mediator. *Psychology and Aging*, 8, 327–338.

Heine, S. J., Lehman, D. R., Markus, H. R., & Kitayama, S. (1999). Is there a universal need for positive self-regard? *Psychological Review*, *106*, 766-794.

Herbert, J. D., & Cardaciotto, L. (2005). *An acceptance and mindfulness-based perspective on social anxiety disorder.* In S. M. Orsillo & L. Roemer (Eds.), Acceptance and mindfulness-based approaches to anxiety: conceptualizations and treatment (pp. 189–212). Ne York: Springer. doi:10.1007/0-387-25989-9_8.

Herndon, F. (2008). Testing mindfulness with perceptual and cognitive factors: External vs. internal encoding, and the Cognitive Failures Questionnaire. *Personality and Individual Differences, 44(1),* 32-41.

Hill, P.C., & Butter, E.M. (1995). The role of religion in promoting physical health. *Journal of Psychology and Christianity, 14*, 141–155.

Hitt, M., Harrison, J., Ireland, R.D. & Best, A. (1998). Attributes of successful and unsuccessful acquisitions of US firms. *British Journal of Management*, 9, 91–114.

Hobfoll, S. E. (2001). The influence of culture, community and the nested self in the stress process: advancing conservation of resources theory. *Applied Psychology: An International Review*. 50(3): 337-421.

Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*. Beverly Hills, CA: Sage.

Hofstede, G. (2010). The GLOBE debate: Back to relevance. *Journal of International Business Studies*, *41*, 1339-46.

Hofstede, G. (2011). Dimensionalizing Cultures: The Hofstede Model in Context. *Online Readings in Psychology and Culture, 2*(1). http://dx.doi.org/10.9707/2307-0919.1014.

Hofstrede, G. (2001). *Culture's consequences*: Comparing values, behaviours, institutions and organizations across nations. California: Sage Publications.

Hogan, R. (1969). Development of an empathy scale. *Journal of Consulting, and Clinical Psychology, 33(3)*, 307–316.

Hollway, W., & Jefferson, T. (1997). Eliciting narrative through the in-depth interview. *Qualitative Inquiry*, *3*(1), 53-70.

House, R., Javidan, M., & Dorfman, P. (2001). Project GLOBE: An introduction. *Applied Psychology*, *50*(4), 489-505.

House, R., Javidan, M., Hanges, P., & Dorfman, P. (2002). Understanding cultures and implicit leadership theories across the globe: An introduction to project GLOBE. *Journal of World Business*, *37*(1), 3-10.

Hoyle, R. H. (1995). The structural equation modeling approach: basic concepts and fundamental issues. In structural equation modeling: concepts, issues, and applications. R. H. Hoyle (editor). Thousand Oaks, CA: Sage Publications, Inc., pp.1-15.

Hsu, L., & Alden, L. E. (2008). *Cultural influenceson Willingness to seek treatment for social anxiety in Chinese and European heritage students*. Cultural Diversity and Ethnic Minority Psychology. 14(3): 215-223.

Hughes, E. (1971). *The sociological* eye. Chicago: Aldine.

Hui, C.-M., & Hui, N. H.-H. (2009). *The mileage from social axioms*: Learning from the past and looking forward. In K. Leung & M. H. Bond (Eds.), *Psychological aspects of social axioms: Learning from the past and looking forward* (pp. 13–30). New York: Springer.

Hui, C.-M., & Hui, N. H.-H. (2009). The mileage from social axioms: Learning from the past and looking forward. In K. Leung & M. H. Bond (Eds.), Psychological aspects of

social axioms: Learning from the past and looking forward (pp. 13–30). New York: Springer.

Hui, V. K. Y., Bond, M. H., & Ng, T. S. W. (2007). General beliefs about the world as defensive mechanisms against death anxiety. *Omega*, 54, 199–214.

Hui, V. K. Y., Bond, M. H., & Ng, T. S. W. (2007). General beliefs about the world as defensive mechanisms against death anxiety. *Omega*, 54, 199–214.

Huta, V., & Ryan, R. M. (2010). Pursuing pleasure or virtue: The differential and overlapping well-being benefits of hedonic and eudaimonic motives. *Journal of Happiness Studies*, *11*(6), 735-762.

Huta, V., & Waterman, A. (2013). Eudaimonia and Its Distinction from Hedonia: Developing a Classification and Terminology for Understanding Conceptual and Operational Definitions. *Journal of Happiness Studies*, 1-32.

Inglehart, R. (2010). Faith and freedom: Traditional and modern ways to happiness. In E. Diener, J. F. Helliwell, & D. Kahneman (eds.), *International differences in well-being*, New York: Oxford University Press, pp. 351–397.

Inglehart, R., & Norris, P. (2009). *Muslim integration into Western cultures*: Between origins and destinations: HKS Working Paper Series: RWP-007. Harvard Kennedy School of Government.

Inglehart, R., & Welzel, C. (2005). *Modernization, cultural change, and democracy: The human development sequence.* New York: Cambridge University Press.

Inglehart, R., Foa, R., Peterson, C., & Welzel, C. (2008). Development, freedom, and rising happiness: A global perspective (1981–2007). *Perspectives on Psychological Science, 3*(4), 264-285.

Ismail, R. (2009). *Social Axioms among Malay, Chinese, and Kadazan Students in Sabah, Malaysia: Differences in Gender and Ethnic Groups*. In K. Leung and M.H. Bond (eds.), Psychological Aspects of Social Axioms: understanding global belief system (1st ed., pp. 95-108). New York: Springer.

Jadalla, A., & Lee, J. (2012). The relationship between acculturation and general health of Arab Americans. *Journal of Transcultural Nursing*, *23*, 159–165. doi: 10.1177/1043659611434058

Jafarian, R. (2002). *Iranian identity in challenges of political development in the past four centuries.* In Islamic Political Research Group. (2002). Components of national identity in Iran. PP: 5-28. Tehran. Institute of Humanities and Cultural Studies. (Farsi).

Jalili, B. (1982). *Iranian families*. In M. McGoldrick, J. K. pearce, & J. Giordano (Eds), Ethnicity and Family therapy (pp 289-309). New York: Guilford Press.

Jamil, H., Grzybowski, M., Hakim-Larson, J., Fakhouri, M., Sahutoglu, J., Khoury, R., & Fakhouri, H. (2008). Factors associated with self-reported depression in Arab, Chaldean, and African Americans. *Ethnicity and Disease*, *18*, 464–470. PMID: 19157251

Janoff-Bulman, R. (1989). Assumptive worlds and the stress of traumatic events: Applications of the schema construct. *Social Cognition. 7,* 113-136.

Janoff-Bulman, R. (1992). *Shattered assumptions.* New York: Free Press.

Jasinskaja-Lahti, I., Liebkind, K., Horenczyk, G., & Schmitz, P. (2003). The interactive nature of acculturation: perceived discrimination, acculturation attitudes and stress among young ethnic repatriates in Finland, Israel and Germany. *International Journal of Intercultural Relations, 27*(1), 79-97.

Javadi Amouli, A. (2002). Human expects from religion. Ghom. Asra (Farsi).

Javidan, M., & Dastmalchian, A. (2003). Culture and leadership in Iran: The land of individual achievers, strong family ties, and powerful elite. *The Academy of Management Executive (1993-2005), 17*(4), 127-142. doi: 10.2307/4166016

John, O. P. (1990). The "Big Five" factor taxonotny: DinlensiQns of personality in the natural language and in questionnaires. In L. Pervin (Ed.), handbook of personality: Theory and esearch (pp. 66-100). N ew York: Guilford Press.

John, O. P., & Srivastava, S. (1999). The Big Five trait taxonomy: History, measurement, and theoretical perspectives. In L. A. Pervin, & O. P. John (Eds.), *Handbook of personality: Theory and research* (pp. 102-138). New York: Guilford Press.

John, O. P., & Srivastava, S. (1999*). The Big-Five trait taxonomy: History, measurement, and theoretical perspectives*. In L. A. Pervin & O. P. John (Eds.), Handbook of personality: Theory and research (Vol. 2, pp. 102–138). New York: Guilford Press.

John, O. P., Donahue, E. M., & Kentle, R. L. (1991). *The Big Five Inventory--Versions 4a and 54*. Berkeley: University of California, Berkeley, Institute of Personality and Social Research.

John, O. P., Naumann, L. P., & Soto, C. J. (2008). Paradigm Shift to the Integrative Big-Five Trait Taxonomy: History, Measurement, and Conceptual Issues. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of personality: Theory and research* (pp. 114-158). New York, NY: Guilford Press.

Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational researcher*, 33(7), 14-26.

Jones, M., & Alony, I. (2011). Guiding the use of grounded theory in doctoral studies: An example from the Australian film industry. *International Journal of Doctoral Studies*, 6, 95-114.

Joshanloo, M. & Daemi, F. (in press). Investigation of statistical characteristics of the Satisfaction With Life Scale in Iranian students. *Journal of behavioral science* [in Persian].

Joshanloo, M. (2013). A Comparison of Western and Islamic conceptions of happiness. *Journal of Happiness Studies, 14*(6), 1857-1874. doi: 10.1007/s10902-012-9406-7

Joshanloo, M., & Ghaedi, Gh., (2009). Value priorities as predictors of hedonic and eudaimonic aspects of well-being. *Personality and Individual Differences*, 47, 294–298.

Joshanloo, M., Afshari, S., & Rastegar, P. (2010). Linking social axioms with indicators of positive interpersonal, social and environmental functioning in Iran: An Exploratory Study. *International Journal of Psychology*, 45(4), 303-310.

Joshanloo, M., Daemi, F., Bakhshi, A., Nazemi, S. & Ghafari, Z. (2010). Construct Validity of NEO-Personality Inventory-Revised in Iran. *Iranian Journal of Psychiatry and Clinical Psychology, 16(3)*, 220 – 230. [in Persian].

Joshanloo, M., Rastegar, P., & Bakhshi, A. (2012). Big five personality domains as predictors of social well-being in Iranian university students. *Journal of Social and Personal Relationships, 29(5)*, 639–660.

Joshanloo, M., Rostami, R., & Nosratabadi, M. (2006). Examining the factor structure of the Keyes' comprehensive scale of well-being. *Journal of Iranian Psychologists*, 9, 35–51 [in Persian].

Kabat-Zinn, J. (1990). *Full Catastrophe living: Using the wisdom of your body and mind to face stress, pain and illness*. New York, New York: Dell Publishing.

Kabat-Zinn, J. (1994). Wherever you go, there you are: mindfulness meditation in everyday life. New York: Hyperion.

Kabat-Zinn, J. (2003). Mindfulness-based interventions in context: Past, present, and future. *Clinical Psychology: Science and Practice, 10*, 144-156.

Kaplan, A., & Maher, M. L. (1999). Achievement goals and student wellbeing. Contemporary Educational Psychology 24, 330–358.

Kashdan, T. B., Biswas-Diener, R., & King, L. A. (2008). Reconsidering happiness: The costs of distinguishing between hedonics and eudaimonia. *Journal of Positive Psychology, 3*, 219-233.

Kelley, H. H. (1973). The Process of Causal Attribution.*American Psychologist*, 28, 107-128.

Kendall, J. (1999). Axial coding and the grounded theory controversy. *Western Journal of Nursing Research*, *21*(6), 743-757.

Kessler, R. C., Berglund, P. A., Zhao, S., Leaf, P. J., Kouzis, A. C., Bruce, M. L., Freidman, R. L., Grosser, R. C., Kennedy, C., Narrow, W. E., Kuehnel, T. G., Laska, E. M., Manderscheid, R. W., Rosenheck, R. A., Santoni, T. W., & Schneier, M. (1996). The 12-month prevalence and correlates of serious mental illness (SMI). In R. W. Manderscheid & M. A. Sonnenschein (Eds.), *Mental health, United States* (Pub. No. [SMA] 96–3098). Rockville, MD: Center for Mental Health Services.

Keyes, C. L. M. (1998). Social well-being. Social Psychology Quarterly, 61, 121-140

Keyes, C. L. M. (1998). Social well-being. *Social Psychology Quarterly*, 61, 121–140.

Keyes, C. L. M., & Annas, J. (2009). Feeling Good and Functioning Well: Distinctive Concepts in Ancient Philosophy and Contemporary Science.*Journal of Positive Psychology*, 4(3),197-201.

Keyes, C. L. M., Shmotkin, D., & Ryff, C. D. (2002). Optimizing well-being: The empirical encounter of two traditions. *Journal of Personality and Social Psychology*, 82, 1007–1022.

Khodayarifard, M., Gobari Bonab, B., Faghihi, A., Shokohi Yekta, M & BehPajoh, A. (2006). Development and standardization the religiosity questioner among Iranian students. University of Tehran (In Persian).

Khormaei, F., & Farmani, A. (2014). Surveying the role of big five personality factors in prediction of patience and its components in students (Persian)]. Journals of Clinical Psychology and Personality, 21(11), 11-24.

Kiken, L. G. & Shook, N. J. (2011). Looking up: Mindfulness increases positive judgments and reduces negativity bias. *Social Psychological and Personality Science, 2,* 25-431.

King, L. A., & Napa, C. K. (1998). What makes a life good? *Journal of Personality and Social Psychology*, 75, 156–165.

Kirby, S. E., Coleman, P. G., & Daley, D. (2004). Spirituality and well-being in frail and nonfrail older adults. *Journals of Gerontology: Series B: Psychological Sciences and Social Sciences*, 59B, 123–129.

Kitayama, S., Duffy, S., & Uchida, Y. K. (2007). Self as cultural mode of being. In S. Kitayama & D. Cohen (Eds.) *The Handbook of Cultural Psychology* (pp. 136-174). New York: Guilford Press.

Kleinman, A. (1977). Depression, somatization and the "new cross-cultural psychiatry." *Social Science and Medicine, 11,* 3–10.

Kleinman, A. (1988). *Rethinking psychiatry: From cultural category to personal experience.* New York: Free Press.

Kline, R.B (2005). *Principles and practice of structural equation modelling (2ed ed.).* New York, Guilford Press.

Kline, *R. B.* (2010). *Principles and practice of structural equation modeling* (3rd ed.). New York: Guilford Press.

Knowles, M. (2014). Social rejection increases perspective taking. Journal of Experimental Social Psychology. 55: 126-132.

Koneru, V. K., & Weisman de Mamani, A. G., et al., (2007). Acculturation and mental health: current finding and recommendations for future research. ***Applied and Preventive Psychology****. 12 (2): 76-96.

Kormi Nouri, R., Mokri, A., MohammadiFar, M., & Yazdani, E. (2002). Factor effects on happiness and well-being. *Journal of Psychology and education*. 32 (1): 3-41 (In Persian).

Krause, N. (2003). Religious meaning and subjective well-being in late life. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, *58*(3), S160-S170.

Kuo, B. C. H. (2012): Collectivism and coping: Current theories, evidence, and measurements of collective coping, *International Journal of Psychology*.

Kuo, B.C.H., Kwantes, C. T., Towson, S., & Nanson, K. M. (2006). Social beliefs as determinants of attitudes toward seeking professional psychological help among ethnically diverse university students. *Canadian Journal of Counseling*, 40, 224–241.

Kurman, J., & Ronen-Eilon, C. (2004). Lack of knowledge of a culture's social axioms and adaptation difficulties among immigrants. *Journal of Cross-Cultural Psychology, 35*(2), 192-208.

Lai, J. H., Bond, M. H., & Hui, N. H. (2007). The role of social axioms in predicting life satisfaction: A longitudinal study in Hong Kong. *Journal of Happiness Studies*, 8, 517–535.

Lam, B. C. P., Bond, M. H., Chen, S. X., & Wu, C. H. (2010). Worldviews and individual vulnerability to suicide: The role of social axioms. *European Journal of Personality, 24*, 602-622.

Larkin, M., Watts, S., & Clifton, E. (2006). Giving voice and making sense in interpretative phenomenological analysis. *Qualitative Research in Psychology*, 3(2), 102-120.

Layous, K., Lee, H., Choi, I., & Lyubomirsky, S. (2013). Culture matters when designing a successful happiness-increasing activity: A comparison of the United States and South Korea. *Journal of Cross-Cultural Psychology, 44*, 1294-1303.

Legard, R., Keegan, J., & Ward, K. (2003). *In-depth interviews*. In J. Ritchie & J. Lewis (Eds.), *Qualitative research practice: A guide for social research students and researchers* (pp. 138-169). Thousand Oaks, CA: SAGE.

Leung, K., & Bond, M. H. (2007). Psycho-logic and eco-logic: Insights from social axiom dimensions. In F. van de Vijver, D. van Hemert, & Y. P. Poortinga (Eds.), *Individuals and cultures in multilevel analysis* (pp. 197 – 219). Mahwah, NJ: Lawrence Erlbaum Associates.

Leung, K. & Bond, M.H. (2004). Social axioms: A model for social beliefs in multicultural perspective. *Advances in Experimental Social Psychology*, 36, 119-197.

Leung, K., & Bond, M. H. (2008). Psycho-logic and eco-logic: Insights from social axiom dimensions. In F. van de Vijver, D. van Hemert, & Y. P. Poortinga (Eds.), *Individuals and cultures in multilevel analysis* (pp. 199-221). Mahwah, NJ: Lawrence Erlbaum Associates.

Leung, K., Au, A., Huang, X., Kurman, J., Niit, T., & Niit, K. K. (2007). Social axioms and values: A cross-cultural examination. *European Journal of Personality*, 21, 91–111.

Leung, K., Bond, M, H., Carrasquel, S. R., Munoz, C., Hernandez, M., et al., (2002). Social axioms; the search for universal dimensions of general beliefs about how the world functions. *Journal of Cross Cultural Psychology*. 33(3). 286-302.

Leung, K., Bond, M. H., de Carrasquel, S. H., Muñoz, C., Hernández, M., Murakami, F., Yamaguchi, S., Bierbrauer, G., & Singelis, T. M. (2002). Social axioms: The search for universal dimensions of general beliefs about how the world functions. *Journal of Cross-Cultural Psychology*, 33, 286-302.

Leung, K., Ip, O. K. M., & Leung, K. K. (2010). Social cynicism and job satisfaction: A longitudinal analysis. *APPLIED PSYCHOLOGY: AN INTERNATIONAL REVIEW,* 2010, 59 (2), 318–338.

Leung, K., Ip, O. K. M., & Leung, K. K. (2010). Social cynicism and job satisfaction: A longitudinal analysis. *APPLIED PSYCHOLOGY: AN INTERNATIONAL REVIEW,* 2010, 59 (2), 318–338.

Leung, K., Lam, B. C. P., Bond, M. H., Conway, L. G., Gornick, L. J., Amponsah, B., et al. (2012). Developing and Evaluating the Social Axioms Survey in Eleven Countries: Its Relationship With the Five-Factor Model of Personality. *Journal of Cross-Cultural Psychology, 43*(5), 833-857.

Leung, K., Lam, B. C. P., Bond, M. H., Conway, L. G., Gornick, L. J., Amponsah, B., et al. (2012). Developing and Evaluating the Social Axioms Survey in Eleven Countries: Its Relationship with the Five-Factor Model of Personality. *Journal of Cross-Cultural*

Psychology, 43(5), 833-857.

Lichtenstein, B.M.B. & Brush, C.G. (2001) How do 'resource bundles' develop and change in new ventures? A dynamic model and longitudinal exploration. *Entrepreneurship Theory and Practice,* 25, 37–58.

Linehan, M.M. (1993*). Cognitive-behavioral treatment of borderline personality disorder.* Something missing here

Lipson, J. G. (1992). The health and adjustment of Iranian immigrants. Western *Journal of Nursing Research, 14*(1), 10-29.

Lo, L. K. (2006). *Comparing the predictive power of social axioms and personality on social anxiety.* Unpublished undergraduate thesis. The Chinese University of Hong Kong, Hong Kong.

Lobchuk, M. (2006). Concept analysis of perspective-taking: Meeting informal caregiver needs for communication competence and accurate perception. *Journal of Advanced Nursing 54(3)*, 330–341.

Lobrano, M. T. (2014). *Psychopathy and the HEXACO personality Model.*Mastor KA, Jin P,

Locke, K. (2001). *Grounded theory in management research*. London: Sage.

Lofland, J. & Lofland, L.H. (1995). *Analysing social settings* (3rd ed.), Belmont, CA: Wadsworth.

Loftland, J., & Loftland, L. H. (1995). *Analysing Social Setting: A Guide to Qualitative Observation and Analysis*, 3rd ed., CA: Wadsworth.

Lucas, R. E., & Diener, E. (2008). Personality and subjective well-being. In John, Robins, & Pervin, (Eds.), *Handbook of Personality: Theory and Research* (3rd Ed), pp. 795-814. New York, NY, US: Guilford Press.

Lucas, R. E., Diener, E., & Suh, E. (1996). Discriminant validity of well-being measures. *Journal of Personality and Social Psychology*, 71(3), 616–628.

Mak, M. C. K., Han, Y. M. Y., You, J., Jin, M., & Bond, M. H. (2010). Building life satisfaction through attachment to mother and beliefs about the world: Social axioms as mediators in two cultural groups. *Mental Health, Religion & Culture*, 1469-9737, First published on 22 February 2010.

Manço, U., & Manço, A. (2000). Religiosité et rapport à l'intégration de jeunes hommes issus de l'immigration musulmane [Religiosity and integration of young men born of Muslim immigration]. In U. Manço (Ed.), *Voix et voies musulmanes de Belgique [Muslim voices and paths in Belgium]* (pp. 167-188). Bruxelles: Publications des Facultés universitaires Saint-Louis.

Marks, N. F., Lambert, J. D. (1998). Marital status continuity and change among young and midlife adults: longitudinal effects on psychological well-being. *Journal of Family Issues* 19, 652–686.

Marlowe, D. & Crowne, D. P. (1961). Social desirability and response to perceived situational demands. *Journal of Counseling Psychology, 25(2)*, 109-115.

Marsella, A. J. (2010). Ethnocultural aspects of PTSD: An overview of concepts, issues, and treatments. *Traumatology*, 16(4), 1726.

Marshall, S. E., & Ghazal Read, J. (2003). Identity politics among Arab-American Women.*Social Science Quarterly, 84*(4), 875-891.

Martin, J. R. (2002). The common factor of mindfulness - an expanding discourse: Comment on Horowitz (2002). *Journal of Psychotherapy Integration, 12*, 139-142.

Martin, N. G., Eaves, L. J., Heath, A. C., Jardine, R., Feingold, L. M., & Eysenck, H. J. (1986). Transmission of social attitudes. *Proceedings of the National Academy of Sciences*, *83*(12), 4364-4368.

Matsumoto, D. (2009). *Culture and Emotional Expression*. In Understanding Culture; theory, research and application. Edited by Wyer, R. S., Chiu, Ch., & Hong, Y. psychology press.

Mayer, F. S., & Frantz, C. M. (2004). The connectedness to nature scale: A measure of individuals' feeling in community with nature. *Journal of Environmental Psychology, 24*, 503–515.

Mazella, D. (2007). *The making of modern cynicism*. Charlottesville: University of Virginia Press.

McAdams, D. P., & Pals, J. L. (2006). A new Big Five: Fundamental principles for an integrative science of personality. *American Psychologist*, 61(3), 204–217.

McCarty, C. A., Weisz, J. R., Wanitromanee, K., Eastman, K. L., Suwanlert, S., Chaiyasit, W., et al. (1999). Culture, coping, and context: Primary and secondary control among Thai and American youth. *Journal of Child Psychology and Psychiatry*, 40, 809–818.

McCrae, R. R., & Allik, J. (2002). The five-factor model of personality across cultures. In in RR McCrae & J. Allik (Eds), 2002. *International and Cultural Psychology Series*.

McCrae, R. R., & Costa, P. T., Jr. (1997). Personality trait structure as a human universal. *American Psychologist*, 52, 509–516.

McCrae, R. R., & Costa, P. T., Jr. (2003). *Personality in adulthood: A five-factor theory perspective* (2nd ed.). New York: Guilford Press.

McCrae, R. R., & Costa, P. T., Jr. (2008). The Five-Factor Theory of personality. In: O.P. John, R.W. Robins, and L.A. Pervin (Eds.), *Handbook of personality: Theory and research* (3rd ed.). New York: Guilford.

McCrae, R. R., & John, O. P. (1992). An introduction of the five-factor model and its applications. *Journal of personality*. 60: 175-215.

McCrae, R. R., & John, O. P. (1992). An introduction to the five-factor lnodel and its applications. *journal of Personality*, 60, 175-215.

McCrae, R.R. & Costa, P.T. (1987). Validation of the five-factor model of personality across instruments and observers. *Journal of Personality and Social Psychology*, 52, 81-90

McCrae, R. R., Terracciano, A., & 78 Members of the Personality Profiles of Cultures Project. (2005). Universal features of personality traits from the observer's perspective: Data from 50 cultures. *Journal of Personality and Social Psychology*, 88, 547–561.

McCrae, R.R., & Costa, P.T. (1997) Personality trait structure as a human universal. *American Psychologist*, 52, 509-516.

McGregor, I., & Little, B. R. (1998). Personal projects, happiness, and meaning: On doing well and being yourself. *Journal of Personality and Social Psychology*, 74, 494–512.

Meissner, W. W. (1987). *Life and faith: Psychology perspectives on religious experiences.* Washington, DC: Georgetown University Press.

Melbourne Academic Mindfulness Interest Group (2006). Mindfulness-based psychotherapies: A review of conceptual foundations, empirical evidence and practical considerations. *The Australian and New Zealand Journal of Psychiatry, 40*, 285-294.

Meyers, L. S., Gamst, G., & Guarino, A. J. (2006). *Applied multivariate research: Design and interpretation.* Thousand Oaks, CA: Sage Publications, Inc.

Miller, D. T., & Ross, M. (1975). Self-serving biases in the attribution of causality: Fact or fiction? *Psychological bulletin*, *82*(2), 213.

Minkov, M. (2009). Predictors of differences in subjective well-being across 97 nations. *Cross-Cultural Research*, *43*(2), 152-179.

Moin, M (1981). *Moin encyclopedic dictionary*. Tehran. Amir Kabir. (Farsi).

Moradi, B., & Hasan, N. T. (2004). Arab American Persons' Reported Experiences of Discrimination and Mental Health: The Mediating Role of Personal Control. *Journal of Counseling Psychology, 51*(4), 418-428.doi: 10.1037/0022-0167.51.4.418

Moreira-Almeida, A., Neto, F. L., & Koenig, H. G. (2006). *Religiousness and mental health*: A review. Revista Brasileira de Psiquiatria, 28(3), 242-250.

Moreno, A., & Abitia, E. A. (2005). *Los valores de los mexicanos: Nuestros valores: los mexicanos en México y en Estados Unidos al inicio del siglo XXI* (Vol. 6). Banamex.

Morgan, D. (2010). *Essential Islam: A comprehensive guide to belief and practice*. Santa Barbara, California: Praeger/ABC-CLIO.

Motahari, A. (1996). *Human and Faith. Ghom*. Iran. Sadra publisher. (Farsi).

Mroczek, D. K., & Kolarz, C. M. (1998). The effect of age on positive and negative affect: A developmental perspective on happiness. *Journal of Personality and Social Psychology*, 75, 1333–1349.

Murken, S. & Shah., A.A. (2002). Naturalistic and Islamic approaches to psychology, psychotherapy, and religion: Metaphysical assumptions and methodology- A discussion. *International Journal for the Psychology of Religion* 12: 239–54.

Nelson, J. M. (2009). *Psychology, Religion and Spirituality*. Springer

Neto, F. (2006). Dimensions and correlates of social axioms among a Portuguese sample. *Individual Differences Research*, *4*, 340–351.

Ng, A. K., Ho, D. Y. F., Wong, S. S., & Smith, I. (2003). In search of the good life: A cultural odyssey in the East and West. *Genetic, Social and General Psychology Monographs*, 129(4), 317–366.

Nichols, D. S., & Greene, R. L. (1997). Dimensions of deception in personality assessment: The example of the MMPI-2. *Journal of Personality Assessment, 68*, 251–266. NJ: Lawrence Erlbaum Associates, Inc. Chicago

Nosratabadi, M., Joshanloo, M., & JafariKandovan, Gh. (2006). Examining the reliability and validity of Big Five Inventory in Tehran University students. *Journal of Psychology and Educational Sciences*, 5, 123-148.

Nunnally, j. c., & Bernstein, I. H. (1994). *Psychometric theory* (3red ed). New York; McGraw-Hill.

Oishi, S., Graham, J., Kesebir, S., & Galinha, I. (2013). Concepts of happiness across time and cultures. Personality and Social Psychology Bulletin, 39, 559–577.

Ortiz, V., & Arce, C. H. (1984). Language orientation and mental health status among persons of Mexican descent. Hispanic Journal of Behavioral Sciences, 6, 127-143. Padilla, A. M., Alvarez, M., & Lindholm, K. J. (1986). Generational status and personality factors as predictors of stress in students. *Hispanic Journal of Behavioral Sciences, 8*, 275-288.

Ottolenghy E. (2012). Toppling Iran's Unsteady Regime. Retrieved from: http://online.wsj.com/news/articles/SB10000872396390443570904577544510656462 718?mg=reno64-

wsj&url=http%3A%2F%2Fonline.wsj.com%2Farticle%2FSB1000087239639044357
09045775445510656462718.html

Pallant, J. (2010). S*PSS survival manual: A step by step guide to data analysis using SPSS* (4th ed.). Maidenhead: Open University Press/McGraw-Hill.

Park, R., & Burgess, E. (1921). *An introduction to the science of sociology.* Chicago: University of Chicago.

Parker, S. K., & Axtell, C. M. (2001). Seeing another viewpoint: Antecedents and outcomes of employee perspective taking. *Academy of Management Journal, 44*, 1085-1100.

Parto, M. (2010). *Mindfulness, resilience and drug use among at risk adolescents: Assessing the explanatory model of mediating variables a mechanism*. Ph.D., (Doctor of Philosophy in Health Psychology), University of Tehran. [Farsi]

Parto, M., & Besharat, M. A. (2011). Mindfulness, psychological well-being and psychological distress in adolescents: assessing the mediating variables and mechanisms of autonomy and self-regulation. Procedia - *Social and Behavioral Sciences* 30: 578 – 582.

Patton, M. (1990). *Qualitative Evaluation and Research Method*, CA: Sage.

Patton, M. (1990). *Qualitative evaluation and research method*s. London: Sage.

Paulhus, D. (1984). Two-component models of socially desirable responding. *Journal ofPersonality and Social Psychology, 46*, 598-609.

Paulhus, D. L. (1991). *Balanced Inventory of Desirable Responding*: Reference manual for the BIDRVersion 6. Unpublished manuscript, Department of Psychology, University of British Columbia atVancouver.

Paulhus, D. L. (1991). Measurement and control of response bias. In J. P. Robinson, P. R. Shaver, & L. S. Wrightsman (Eds.), *Measurement of personality and social psychological attitudes* (pp. 17-59). New York: Academic Press.

Paulhus, D. L. (1998). *Manualfor Balanced Inventory of Desirable Responding (BIDR-7).* Toronto: Multi-Health Systems.

Paulhus, D. L., & Reid, D. B. (1991). Enhancement and denial in social desirable responding. *Journal of Personality and Social Psychology, 60*, 307–317.

Pavot, W. (2008). *The assessment of subjective well-being*. In M. Eid & R. J. Larsen (Eds.), The science of subjective well-being (pp. 124–140). New York: Guilford Press.

Pavot, W., Diener, E., Colvin, C. R., & Sandvik, E. (1991). Further validation of the Satisfaction With Life Scale: Evidence for the cross-method convergence of well-being measures. *Journal of Personality Assessment*, 57, 149–161.

Peabody, p., & Goldberg, L. R. (1989). Some determinants of factor structurbs from personality-trait descriptors. *Journal of Personality and Social Psychology*, 57, 552-567.

Phinney, J. (1990). Ethnic identity in adolescents and adults: Review of research. *Psychological Bulletin, 108*, 499-514.

Phinney, J. (1992). The Multigroup Ethnic Identity Measure: A new scale for use with diverse groups. *Journal of Adolescent Research, 7,* 156–176.

Phinney, J. S., & Ong, A. D. (2007). Conceptualization and measurement of ethnic identity: Current status and future directions. *Journal of Counseling Psychology, 54*(3), 271.

Phinney, J., Berry, J.W., Vedder, P., & Liebkind, K. (2006). *The acculturation experience*: Attitudes, identities, and behaviors of immigrant youth. In J.W. Berry, J.S. Phinney, D.L.

Pinquart, M., & Sörensen, S. (2000). Influences of socioeconomic status, social network, and competence on subjective well-being in later life: a meta-analysis. *Psychology and Aging*, *15*(2), 187.? Just one page?

Porter, M. E. (2014). *Social Progress Index 2014*. Washington, DC: Social Progress Imperative.*psychological adaptation.* London: Sage.

Putnam, R. D. (2007). "E pluribus unum: diversity and community in the twenty-first century." *Scandinavian political studies*. 30(2): 137-174.

Raiya, H. A., Pargament, K. I., Mahoney, A., & Trevino, K. (2008). When Muslims Are Perceived as a Religious Threat: Examining the Connection Between Desecration, Religious Coping, and Anti-Muslim Attitudes. *Basic and Applied Social Psychology, 30*(4), 311-325. doi: 10.1080/01973530802502234

Richardson, D. R., Hammock, G. S., Smith, S. M., Gardner, W., & Signo, M. (1994). Empathy as a cognitive inhibitor of interpersonal aggression. *Aggressive Behavior, 20*, 275-289.

Roberts, K. & Taylor, B. (1998). *Nursingresearch processes: An Australian perspective*. Melbourne: Nelson.

Roberts. A. l., Gilman, S. E., Breslau, J., Breslau, N., and Koenen, K. C. (2011). Race/ethnic differences in exposure to traumatic events, development of post-traumatic stress disorder and treatment seeking for post traumatic atress disorder in the Unites States. *Psychological Medicine*. 41: 71-83.

Robitschek, C. & Keyes, C. L. M. (2009). Keyes's model of mental health with personal growth initiative as a parsimonious predictor. *Journal of Counseling Psychology*, 56, 321-329.

Robitschek, c., & Keyes, C.L.M. (2009). The structure of Keyes' model of mental health and the role of personal growth initiative as a parsimonious predictor. *Journal of Counseling Psychology*, 56(2), 321-329.

Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.

Rothmann, S. & Coetzer, E.P. (2003). The big five personality dimensions and job performance. SA *Journal of Industrial Psychology*. 29(1), 68-74.

Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs*, 80, 1-28.

Royston, P. (2004). Multiple imputation of missing values. *Stata Journal*, *4*, 227-241.

Rubin, D. B. (1978). Multiple imputation in sample surveys. *Proceedings of the Survey Research Methods Section, American Statistical Association,* 20–34.

Rubin, D. B. (1987). *Multiple imputation for nonresponse in surveys.* New York: Wiley.

Rubin, D. B. (1996). Multiple imputation after 18+ years. *Journal of the American Statistical Association*, *91*(434), 473-489.

Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*, 52, 141–166.

Ryan, R. M., & Deci, E. L. (2008). Self-determination theory and the role of basic psychological needs in personality and the organization of behavior. In O. P. John, R. W. Robbins, & L. A. Pervin (Eds.), *Handbook of personality: Theory and research* (pp. 654-678). New York: The Guilford Press.

Ryan, R. M., & Huta, V. (2009). Wellness as healthy functioning or wellness as happiness: the importance of eudaimonic thinking (response to the Kashdan et al. and Waterman discussion). *The Journal of Positive Psychology, 4*(3), 202-204.

Ryan, R.M., Huta, V., & Deci, E.L. (2008). Living well: A self-determination theory perspective on eudaimonia. *Journal of Happiness Studies*, 9, 139–170.

Ryff C. D., & Singer, B. H. (2006). Best news yet on the six-factor model of well-being. *Social Science Research*, 35(4),1102-18.

Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, 57, 1069–1081.

Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology*, 69, 719–727.

Ryff, C. D., & Singer, B. (1998). The contours of positive human health. *Psychological Inquiry*, 9, 1–28.

Ryff, C. D., & Singer, B. (2008). Know thyself and become what you are: A eudaimonic approach to psychological well-being. *Journal of Happiness Studies*, 9(1), 13-39.

Ryff, C. D., & Singer, B. H. (2006). Best news yet on the six-factor model of well-being. [doi: DOI: 10.1016/j.ssresearch.2006.01.002]. *Social Science Research*, 35(4), 1103-1119.

Ryff, C. D., (1991). Possible selves in adulthood and old age: a tale of shifting horizons. *Psychology and Aging*, 6, 286–295.

Sadeghi, M., Kaviani, H., and Rezaei, R. (2003). Comparison stigma among depression, bipolar and Schizophrenia's family. *Advances in Cognitive Science*. 5(2): 16-25. (Farsi).

Safdar, S., Lewis, J. R., & Daneshpour, M. (2006). Social axioms in Iran and Canada: Intercultural contact, coping and adjustment. *Asian Journal of Social Psychology*, 9, 123–131.

Salehi, K., & Golafshani, N. (2010). Using mixed methods in research studies: an opportunity with its challenges. *International journal of multiple research approaches*, 4, 186 – 191.

Salmon, P. G., Santorelli, S. F., & Kabat-Zinn, J. (1998). Intervention elements in promoting adherence to mindfulness-based stress reduction programs in the clinical behavioral medicine setting. In S. A. Shumaker, E. B. Schron, J. K. Ockene, & W. L. Bee (Eds.), *Handbook of health behavior change* (2nd ed., pp. 239–268). New York: Springer.

Sam, & P. Vedder (Eds.), Immigrant youth in cultural transition: acculturation, identity, and adaptation across national contexts, (pp. 71-116). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Sam, D. L. (2000). Psychological adaptation of adolescents with immigrant backgrounds. *The Journal of social psychology*, *140*(1), 5-25.

Sandvik, E., Diener, E., & Seidlitz, L. (1993). Subjective well-being: The convergence and stability of self-report and non-self-report measures. *Journal of Personality*, 61, 317–342.

Saroglou, V., & Galand, P. (2004). Identities, values, and religion: A study among Muslim, other immigrant, and native Belgian young adults after the 9/11 attacks. *Identity: An International Journal of Theory and Research, 4*, 97-132.

Saroglou, V., & Mathijsen, F. (2007). Religion, multiple identities, and acculturation: A study of Muslim immigrants in Belgium. *Archive for the Psychology of Religion/Archiv für Religionspychologie*, *29*(1), 177-198.

Sartawi, M., & Sammut, G. (2012). Negotiating British Muslim identity: everyday concerns of practicing Muslims in London. *Culture & Psychology*, *18*(4), 559-576.

Sayegh, P., Kellough, J., Otilingam, P. G., & Poon, C. Y. (2013). South Asian and Middle Eastern American Older Adults: Dementia, Mood Disorders, and Anxiety Disorders. *Clinical Gerontologist*, *36*(3), 216-240.

Scheier, M. F., & Carver, C. S. (1992). Effects of optimism on psychological and physical well-being: Theoretical overview and empirical update. *Cognitive therapy and research*, *16*(2), 201-228.

Schimmack, U. (2003). Affect measurement in experience sampling research. *Journal of Happiness Studies*, 4, 79–106.

Schimmack, U. (2008). The structure of subjective well-being. In M. Eid & R. J. Larsen (Eds.), *The science of subjective well-being* (pp. 97–123). New York: Guilford Press.

Schimmack, U., Radhakrishnan, P., Oishi, S., Dzokoto, V., & Ahadi, S. (2002). Culture, personality, and subjective well-being: Integrating process models of life satisfaction. *Journal of Personality and Social Psychology*, 82, 582–593.

Schmitt, D. P., Allik, J., McCrae, R. R., Benet-Martinez, V., et al., (2007). the geographic distribution of big five personality traits. Patterns and profiles of human self description across 56 nations. *Journal of Cross-Cultural Psychology*. 38: 173-212.

Schmutte, P. S., & Ryff, C. D. (1997). Personality and well-being: Reexamining methods and meanings. *Journal of Personality and Social Psychology*, 73, 549–559.

Schwartz, S. H. (1994). Beyond individualism and collectivism: New cultural dimensions of values. In U. Kim, H. C. Triandis, C. Kagitcibasi, S. C. Choi, & G. Yoon (Eds.), *Individualism and collectivism: Theory, method and applications* (pp. 85–119). Thousand Oaks, CA: Sage.

Segal, U. A. (1998). The Asian Indian-American family. In C. H. Mindel, R. W. Haberstein, and R. Wright, Jr. (Eds.), *Ethnic families in America: Patterns and variation* (4th ed.). Upper Saddle River, NJ: Prentice-Hall.

Seiffge-Krenke, I., & Shulman, S. (1990). Coping style in adolescence A cross-cultural study. *Journal of Cross-Cultural Psychology*, *21*(3), 351-377.

Seybold, K. S., & Hill, P. C. (2001). The role of religion and spirituality in mental and physical health. *Current Directions in Psychological Science, 10*, 21–24.

Shapiro, S. L.; Carlson, L. E.; Astin, J. A.; & Freedman, B. (2006), "Mechanism of mindfulness", *Journal of Clinicalpsychology*, 62, 373-386.

Shea, L. (2010). *The cynic enlightenment: Diogenes in the salon*. Baltimore: Johns Hopkins University Press.

Shevlin, M. E., & Bunting, B. P. (1995). Confirmatory factor analysis of the Satisfaction With Life Scale. *Perceptual and Motor Skills*, 79, 1316–1318.

Shokri, O., Kadivar, P., Farzad, V., Daneshvarpour, Z., Dastjerdi, R., & Paeezi, M. (2008). A study of factor structure of 3, 9 and 14-item Persian versions of Ryff's Scales Psychological Well-being in university students [in Persian]. *Iranian Journal of Psychiatry and Clinical Psychology*, 14, 152-161.

Siegle, G.J., Moore, P.M., & Thase, M.E. (2004). Rumination: One construct, many features in health individuals, depressed individuals, and individuals with lupus. *Cognitive Therapy and Research, 28*, 645-668.

Singelis, T. M., Hubbard, C, m Her, P, & An, S. (2003). Convergent validation of the social axioms survey. *Personality and Individual Differences.* 34: 269-282.

Singelis, T. M., Hubbard, C., Her, P., &An, S. (2003). Convergent validation of the social axioms survey. *Personality and Individual Differences*, 34, 269–282.

Smith, J. A. (2004). Reflecting on the development of interpretative phenomenological analysis and its contribution to qualitative research in psychology. *Qualitative Research in Psychology, 1*(1), 39-54.

Smith, J. A., Flowers, P., & Larkin, M. (2009). *Interpretative phenomenological analysis: Theory, method and research*. London, England: Sage.

Smith, P. B., Trompenaars, F., & Dugan, S. (1995). The Rotter locus of control scale in 43 countries: A test of cultural relativity. *International Journal of Psychology, 30*(3), 377-400.

Smith, J. A. & Osborn, M. (2003). Interpretative phenomenological analysis. In J. A. Smith (Ed.) *Qualitative psychology* (pp. 51–80). London: Sage

Springer, K. W. & Hauser, R. M., (2005). An assessment of the construct validity of Ryff's scales of psychological well-being: Method, mode and measurement effects. *Social Science Research* 35, 1079–1101.

Springer, K. W. & Hauser. R. M. (2006). An Assessment of the Construct Validity of Ryff's Scales of Psychological Well-Being: Method, Mode and Measurement Effects. *Social Science Research*, 35(4), 1080-1102.

Stanley, M. & Cheek, J. (2003). Well-being and older people: A review of the literature. *Canadian Journal of Occupational Therapy*, 70(1), 51–59.

Stavrova, O., & Ehlebracht, D. (2016). Cynical beliefs about human nature and income: longitudinal and cross-cultural analysis. *Journal of Personality and Social Psychology*. 110 (1). 116-132.

Stephan, W.G., & Finlay, K. (1999). The role of empathy in improving intergroup relations. *Journal of Social Issues, 55*, 4, 729-743.

Steptoe, A., Tsuda, A., & Tanaka, Y. (2007). Depressive symptoms, socio-economic background, sense of control, and cultural factors in university students from 23 countries. *International Journal of Behavioral Medicine*, *14*(2), 97-107.

Steptoe, A., Tsuda, A., Tanaka, Y., & Wardle, J. (2007). Depressive symptoms, socioeconomic background, sense of control and cultural factors in University students from 23 countries. *International Journal of Behavioral Medicine*, 14(2), 97 – 107.

Stern, P.N. (1980). Grounded theory methodology: Its uses and processes. *Journal of Nursing Scholarship,* 12(1), 20–23.

Stevenson, B. & Wolfers, J. (2008). Happiness inequality in the United States.*Journal of Legal Studies,* 37: S33-S79.

Strauss, A. L., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (2nd ed.). Thousand Oaks, CA: Sage.

Strauss, A., & Corbin, J. (1990). *Basics o f qualitative research: Grounded theory procedures and techniques.* Newbury Park, CA: Sage.

Subḥānī, J., & Shah-Kazemi, R. (2001). *The doctrines of Shi'ism: A compendium of Imami beliefs and practices*. London: I.B. Tauris Publishers.

Suh, E., Diener, E., Oishi, S., & Triandis, H. C. (1998). The shifting basis of life satisfaction judgments across cultures: Emotions versus norms. *Journal of Personality and Social Psychology*, 74, 482–493.

Sussman, L. K., Robins, L. N., & Earls, F. (1987). Treatment-seeking for depression by black and white Americans. *Social Science and Medicine, 24,* 187–196.

Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics* (4th ed.). Boston: Allyn and Bacon.

Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics*. Boston: Pearson/Allyn & Bacon.

Tabatabaei (Allameh), S. M. H. (1984). *Al-mizan* (vol 3). Ghom. Iran. Institute of AllamehTabatabaei. (Arabic).

Talaei A, Mokhber N, Abdollahian E, Bordbar MR, Salari E. (2010). Attention deficit/hyperactivity disorder: a survey on prevalence rate among male subjects in elementary school (7–9 years old) in Iran. *Journal of Attention Disorders*; 13: 386–390.

Tashakkori, A. & Teddlie, C. (2003). *Handbook of Mixed Methods in Social & Behavioral Research*. Thousand Oaks: Sage.

Teasdale, J. D. (1999). Emotional processing, three modes of mind and the prevention of relapse in depression. *Behaviour Research and Therapy, 37*, 53–77.

Teasdale, J. D., Segal, Z. V., Williams, J. M. G., & Mark, G. (1995). How does cognitive therapy prevent depressive relapse and why should attentional control (mindfulness) training help? *Behavior Research and Therapy, 33*, 25–39.

Todd, A. R., Bodenhausen, G. V., Richeson, J. A., & Galinsky, A. D. (2011). Perspective taking combats automatic expressions of racial bias. *Journal of Personality and Social Psychology, 100(6)*, 1027-1042. *transition*: Acculturation, identity, and adaptation across national contexts. Mahwah,

Tsai, J. L. (2007). Ideal affect: Cultural causes and behavioral consequences. *Perspectives on Psychological Science, 2*(3), 242-259.

Tsai, J. L., Knutson, B., & Fung, H. H. (2006). Cultural variation in affect valuation. *Journal of Personality and Social Psychology*, *90*(2), 288.

Tsai, J. L., Louie, J. Y., Chen, E. E., & Uchida, Y. (2007). Learning what feelings to desire: Socialization of ideal affect through children's storybooks. *Personality and Social Psychology Bulletin*, *33*(1), 17-30.

Tsai, J.L., Knutson, B.K., & Fung, H.H. (2006). Cultural variation in affect valuation. *Journal of Personality and Social Psychology*, 90, 288–307.

Tsai, J.L., Miao, F.F., Seppala, E., Fung, H.H., & Yeung, D.Y. (2007). Influence and adjustment goals: Sources of cultural differences in ideal affect. *Journal of Personality and Social Psychology*, 92, 1102–1117.

van de Vijver, F.J.R.; Valchev, V.H.; Suanet, I. (2009). *Structural Equivalence and Differential Item Functioning in the Social Axioms Survey*. In K. Leung and M.H. Bond (eds.), Psychological Aspects of Social Axioms: understanding global belief system (1st ed., pp. 51-81). New York: Springer.

Van Dierendonck, D. (2004). The construct validity of Ryff's scales of psychological well-being and its extension with spiritual well-being. *Personality and Individual Differences*, 36(3), 629–643.

Veenhoven, R. (1994). Is happiness a Trait? *Social Indicators Research*, 32: 101–160. http://dx.doi.org/10.1007/BF01078732

Vega, W. A., Kolody, B., Aguilar-Gaxiola, S., Alderate, E., Catalano, R., & Carveo-Anduaga, J. (1998). Lifetime prevalence of DSM–III–R psychiatric disorders among

urban and rural Mexican Americans in California. *Archives of General Psychiatry, 55,* 771–778.

Verkuyten, M., & Slooter, L. (2007). Tolerance of Muslim beliefs and practices: Age related differences and context effects. *International Journal of Behavioral Development, 31*(5), 467-477.

Vescio, T.K., Sechrist, G.B., & Paolucci, M.P. (2003). Perspective taking and prejudice reduction: The mediational role of empathy arousal and situational attributions. *EuropeanJournal of Social Psychology, 33*, 455-472.

Walach, H., Buchheld, N., Buttenmuller, V., Kleinknecht, N., & Schmidt, S. (2006). Measuring mindfulness: The Freiburg Mindfulness Inventory (FMI). *Personality and Individual Differences*, 40, 1543-1555.

Warner, R. M. (2012). Applied Statistics: From Bivariate Through Multivariate Techniques: From Bivariate Through Multivariate Techniques. Los Angeles: SAGE Publications.

Wasserman, J. A., Aghababaei, N., & Nannini, D. (2016). Culture, personality and attitudes toward euthanasia: a comparative study of university students in Iran and the United States. *Journal of Death and Dying*. 72(3): 247-270.

Waterman, A.S., Schwartz, S.J., & Conti, R. (2008). The implications of two conceptions of happiness (hedonic enjoyment and eudaimonia) for the understanding of intrinsic motivation. *Journal of Happiness Studies*, 9, 41–79.

Watson, D., & Tellegen, A. (1985). Toward a consensual structure of mood. *Psychological Bulletin*, 98(2), 219–235.

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54, 1063–1070.

Weiss, B., Tram, J. M., Weisz, J. R., Rescorla, L., & Achenbach, T. (2009). Differential symptom expression and somatization in Thai vs American children. *Journal of Consuling and Clinical Psychology*. 77 (5): 987-992.

Weisz, J. R., Rothbaum, F. M., & Blackburn, T. C. (1984). Standing out and standing in: The psychology of control in America and Japan. *American Psychologist, 39*, 955–969.

Whetten, D. A. (1989). What constitutes a theoretical contribution? *Academy of Management Review*, *14*(4), 490-495.

Williams C.A. (1990) Biopsychosocial elements of empathy: A multidimensional model. *Issues in Mental Health Nursing, 11*, 155–174.

World Health Organization statistics (2015). Global Health Observatory (GHO) data. Suicide rates (per 100 000 population). http://apps.who.int/gho/data/node.sdg.3-4-viz-2?lang=en. January 2017.

Wrobel, N. H., Farrag, M. H., & Hymes, R. W. (2009). Acculturative stress and depression in an elderly Arabic sample. *Journal of Cross Cultural Gerontology*, *24*, 273–290. doi:10.1007*/*s10823-009-9096-8.

Wu, Sh., & Keysar, B. (2007). The effect of culture on perspective taking. *Psychological Science*. 18 (7): 600-606.

Xia, G., & Qian, M. (2001). The relationship of parenting style to self-reported mental health among two subcultures of Chinese. *Journal of Adolescence*, 24, 251-260. doi:10.1006/jado.2001.0375.

Yang, Y. (2008). Social inequalities in happiness in the United States, 1972 to 2004: An age-period-cohort analysis. *American Sociological Review, 73,* 204-226.

Yousefi, R & Molla Alizadeh, M. (2014). Standardization of BFQ-Camong high school students. *New Thoughts on Education*. 10 (3): 123-138

Zamani, BE., Abedini, Y & Kheradmand, A (2011). Internet addiction based on personality characteristics of high school students in kerman, iran. *Addiction & Health*. 3 (3-4): 85-91.

Zhang, A. Y., Snowden, L. R., & Sue, S. (1998). Differences between Asian- and White-Americans' help-seeking and utilization patterns in the Los Angeles area. *Journal of Community Psychology, 26,* 317–326.

Zhou, F., Leung, K., & Bond, M. H. (2009). Social axioms and achievement across cultures: The influence of reward for application and fate control. *Learning and Individual Differences*, 19, 366-371.

Zimmerman, F. J., & Katon, W. (2005). Socioeconomic status, depression disparities, and financial strain: what lies behind the income-depression relationship? *Health Economics*, *14*(12), 1197-1215.

Appendix A - Social Axioms Scale

The following sentences are statements related to beliefs. Please read each statement carefully and mark the answer alternative that most closely reflects your opinion. Please note the meaning of the numbers:

1 Strongly disbelieve	2 Disbelieve	3 No opinion	4 Believe	5 Strongly believe

1. Religious faith contributes to good mental health.	1	2	3	4	5
2. Caution helps avoid mistakes.	1	2	3	4	5
3. Good luck follows if one survives a disaster.	1	2	3	4	5
4. Human behavior changes with the social context.	1	2	3	4	5
5. Religion makes people escape from reality.	1	2	3	4	5
6. People may have opposite behavior on different occasions.	1	2	3	4	5
7. One's appearance does not reflect one's character.	1	2	3	4	5
8. Fate determines one's successes and failures.	1	2	3	4	5
9. Religious people are more likely to maintain moral standards.	1	2	3	4	5
10. Ghosts or spirits are people's fantasy.	1	2	3	4	5
11. Individual effort makes little difference in the outcome.	1	2	3	4	5
12. There is a supreme being controlling the universe.	1	2	3	4	5
13. One who does not know how to plan his or her future will eventually fail.	1	2	3	4	5
14. There are phenomena in the world that cannot be explained by science.	1	2	3	4	5
15. Knowledge is necessary for success.	1	2	3	4	5
16. Young people are impulsive and unreliable.	1	2	3	4	5
17. It is rare to see a happy ending in real life.	1	2	3	4	5
18. Mutual tolerance can lead to satisfactory human relationships.	1	2	3	4	5
19. Individual characteristics, such as appearance and birthday, affect one's fate.	1	2	3	4	5
20. Females need a better appearance than males.	1	2	3	4	5
21. Adversity can be overcome by effort.	1	2	3	4	5
22. Every problem has a solution.	1	2	3	4	5
23. One has to deal with matters according to the specific circumstances.	1	2	3	4	5
24. Competition brings about progress.	1	2	3	4	5
25. There is usually only one way to solve a problem.	1	2	3	4	5
26. Most disasters can be predicted.	1	2	3	4	5
27. To deal with things in a flexible way leads to success.	1	2	3	4	5

28. Old people are usually stubborn and biased.	1	2	3	4	5
29. A person's talents are inborn.	1	2	3	4	5
30. Good deeds will be rewarded, and bad deeds will be punished.	1	2	3	4	5
31. One's behaviours may be contrary to his or her true feelings.	1	2	3	4	5
32. There are certain ways to help us improve our luck and avoid unlucky things.	1	2	3	4	5
33. One will succeed if he/she really tries.	1	2	3	4	5
34. Failure is the beginning of success.	1	2	3	4	5
35. Humility is dishonesty.	1	2	3	4	5
36. To experience various life styles is a way to enjoy life.	1	2	3	4	5
37. Religious beliefs lead to unscientific thinking.	1	2	3	4	5
38. Social justice can be maintained if everyone cares about politics.	1	2	3	4	5
39. Current losses are not necessarily bad for one's long-term future.	1	2	3	4	5
40. To plan for possible mistakes will result in fewer obstacles.	1	2	3	4	5
41. Power and status make people arrogant.	1	2	3	4	5
42. All things in the universe have been determined.	1	2	3	4	5
43. Powerful people tend to exploit others.	1	2	3	4	5
44. People will stop working hard after they secure a comfortable life.	1	2	3	4	5
45. The various social institutions in society are biased towards the rich.	1	2	3	4	5
46. Belief in a religion helps one understand the meaning of life.	1	2	3	4	5
47. It is easier to succeed if one knows how to take short-cuts.	1	2	3	4	5
48. Kind-hearted people are easily bullied.	1	2	3	4	5
49. Old people are a heavy burden on society.	1	2	3	4	5
50. The just will eventually defeat the wicked.	1	2	3	4	5
51. A modest person can make a good impression on people.	1	2	3	4	5
52. Belief in a religion makes people good citizens.	1	2	3	4	5
53. People deeply in love are usually blind.	1	2	3	4	5
54. Kind-hearted people usually suffer losses.	1	2	3	4	5
55. To care about societal affairs only brings trouble for yourself.	1	2	3	4	5
56. There are many ways for people to predict what will happen in the future.	1	2	3	4	5
57. Hard working people will achieve more in the end.	1	2	3	4	5
58. Significant achievement requires one to show no concern for the means needed for that achievement.	1	2	3	4	5
59. Harsh laws can make people obey.	1	2	3	4	5
60. Most people hope to be repaid after they help others.	1	2	3	4	5

Appendix B - Psychological Well-being Scale

Please read the following statements and mark the answer alternative that best describes your situation. Notice the meaning of the numbers:

1 strongly disagree	2 disagree	3 mildly disagree	4 not disagree nor agree	5 mildly agree	6 agree	7 strongly agree

1. I am not afraid to voice my opinions, even when they are in opposition to the opinions of most people.	1	2	3	4	5	6	7
2. In general, I feel I am in charge of the situation in which I live.	1	2	3	4	5	6	7
3. I am not interested in activities that will expand my horizons.	1	2	3	4	5	6	7
4. Most people see me as loving and affectionate.	1	2	3	4	5	6	7
5. I live life one day at a time and don't really think about the future.	1	2	3	4	5	6	7
6. When I look at the story of my life, I am pleased with how things have turned out.	1	2	3	4	5	6	7
7. My decisions are not usually influenced by what everyone else is doing.	1	2	3	4	5	6	7
8. The demands of everyday life often get me down.	1	2	3	4	5	6	7
9. I don't want to try new ways of doing things--my life is fine the way it is.	1	2	3	4	5	6	7
10. Maintaining close relationships has been difficult and frustrating for me.	1	2	3	4	5	6	7
11. I tend to focus on the present, because the future nearly always brings me problems.	1	2	3	4	5	6	7
12. In general, I feel confident and positive about myself.	1	2	3	4	5	6	7
13. I tend to worry about what other people think of me.	1	2	3	4	5	6	7
14. I do not fit very well with the people and the community around me.	1	2	3	4	5	6	7
15. I think it is important to have new experiences that challenge how you think about yourself and the world.	1	2	3	4	5	6	7
16. I often feel lonely because I have few close friends with whom to share my concerns.	1	2	3	4	5	6	7
17. My daily activities often seem trivial and unimportant to me.	1	2	3	4	5	6	7
18. I feel like many of the people I know have gotten more out of life than I have.	1	2	3	4	5	6	7
19. Being happy with myself is more important to me than having others approve of me.	1	2	3	4	5	6	7
20. I am quite good at managing the many responsibilities of my daily life.	1	2	3	4	5	6	7
21. When I think about it, I haven't really improved much as a person over the years.	1	2	3	4	5	6	7
22. I enjoy personal and mutual conversations with family members or friends.	1	2	3	4	5	6	7
23. I don't have a good sense of what it is I'm trying to accomplish in life.	1	2	3	4	5	6	7

24. I like most aspects of my personality.	1	2	3	4	5	6	7
25. I tend to be influenced by people with strong opinions.	1	2	3	4	5	6	7
26. I often feel overwhelmed by my responsibilities.	1	2	3	4	5	6	7
27. I have the sense that I have developed a lot as a person over time.	1	2	3	4	5	6	7
28. I don't have many people who want to listen when I need to talk.	1	2	3	4	5	6	7
29. I used to set goals for myself, but that now seems like a waste of time.	1	2	3	4	5	6	7
30. I made some mistakes in the past, but I feel that all in all everything has worked out for the best.	1	2	3	4	5	6	7
31. I have confidence in my opinions, even if they are contrary to the general consensus.	1	2	3	4	5	6	7
32. I generally do a good job of taking care of my personal finances and affairs.	1	2	3	4	5	6	7
33. I do not enjoy being in new situations that require me to change my old familiar ways of doing things.	1	2	3	4	5	6	7
34. It seems to me that most other people have more friends than I do.	1	2	3	4	5	6	7
35. I enjoy making plans for the future and working to make them a reality.	1	2	3	4	5	6	7
36. In many ways, I feel disappointed about my achievements in life.	1	2	3	4	5	6	7
37. It's difficult for me to voice my own opinions on controversial matters.	1	2	3	4	5	6	7
38. I am good at juggling my time so that I can fit everything in that needs to get done.	1	2	3	4	5	6	7
39. For me, life has been a continuous process of learning, changing, and growth.	1	2	3	4	5	6	7
40. People would describe me as a giving person, willing to share my time with others.	1	2	3	4	5	6	7
41. I am an active person in carrying out the plans I set for myself.	1	2	3	4	5	6	7
42. My attitude about myself is probably not as positive as most people feel about themselves.	1	2	3	4	5	6	7
43. I often change my mind about decisions if my friends or family disagree.	1	2	3	4	5	6	7
44. I have difficulty arranging my life in a way that is satisfying to me.	1	2	3	4	5	6	7
45. I gave up trying to make big improvements or changes in my life a long time ago.	1	2	3	4	5	6	7
46. I have not experienced many warm and trusting relationships with others.	1	2	3	4	5	6	7
47. Some people wander aimlessly through life, but I am not one of them.	1	2	3	4	5	6	7
48. The past had its ups and downs, but in general, I wouldn't want to change it.	1	2	3	4	5	6	7
49. I judge myself by what I think is important, not by the values of what others think is important.	1	2	3	4	5	6	7
50. I have been able to build a home and a lifestyle for myself that is much to my liking.	1	2	3	4	5	6	7
51. There is truth to the saying you can't teach an old dog new tricks.	1	2	3	4	5	6	7
52. I know that I can trust my friends, and they know they can trust me.	1	2	3	4	5	6	7
53. I sometimes feel as if I've done all there is to do in life.	1	2	3	4	5	6	7
54. When I compare myself to friends and acquaintances, it makes me feel good about who I am.	1	2	3	4	5	6	7

Appendix C - Negative Affect Scale

<u>During the past 30 days</u>, how much of the time did you feel□

1 = All the time
2 = Most of the time
3 = Some of the time
4 = A little of the time
5 = None of the time

1. □.so sad nothing could cheer you up?
2...□nervous?
3. □. Restless or fidgety?
4. □. Hopeless?
5. □. That everything was an effort?
6...□worthless?

Appendix D - Positive Affect Scale

<u>During the past 30 days</u>, how much of the time did you feel□

1 = All the time
2 = Most of the time
3 = Some of the time
4 = A little of the time
5 = None of the time

1..□cheerful?
2..□in good spirits?
3..□extremely happy?
4. □. calm and peaceful?
5. □. satisfied?
6. □. full of life?

Appendix E - Satisfaction with Life Scale

Using the 1 - 7 scale below indicate your agreement with each item by placing the appropriate number on the line preceding that item. Please be open and honest in your responding.

1 Strongly disagree	2 Disagree	3 Slightly disagree	4 Neither agree nor disagree	5 Slightly agree	6 Agree	7 Strongly agree

1.____ In most ways my life is close to my ideal.
2.____ The conditions of my life are excellent.
3.____ I am satisfied with my life.
4.____ So far, I have gotten the important things I want in life.
5.____ If I could live my life over, I would change almost nothing.

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Appendix F - Big Five Inventory

Here are a number of characteristics that may or may not apply to you. For example, do you agree that you are someone who likes to spend time with others? Please write a number next to each statement to indicate the extent to which you agree or disagree with that statement. Answer quickly. Please do not skip any items.

1 Disagree strongly	2 Disagree a little	3 Neither agree nor disagree	4 Agree a little	5 Agree strongly

I see myself as someone who...

1.	Is talkative	1	2	3	4	5
2.	Tends to find fault with others	1	2	3	4	5
3.	Does a thorough job	1	2	3	4	5
4.	Is depressed, blue	1	2	3	4	5
5.	Is original, comes up with new ideas	1	2	3	4	5
6.	Is reserved	1	2	3	4	5
7.	Is helpful and unselfish with others	1	2	3	4	5
8.	Can be somewhat careless	1	2	3	4	5
9.	Is relaxed, handles stress well	1	2	3	4	5
10.	Is curious about many different things	1	2	3	4	5
11.	Is full of energy	1	2	3	4	5
12.	Starts quarrels with others	1	2	3	4	5
13.	Is a reliable worker	1	2	3	4	5
14.	Can be tense	1	2	3	4	5
15.	Is ingenious, a deep thinker	1	2	3	4	5
16.	Generates a lot of enthusiasm	1	2	3	4	5
17.	Has a forgiving nature	1	2	3	4	5
18.	Tends to be disorganized	1	2	3	4	5
19.	Worries a lot	1	2	3	4	5
20.	Has an active imagination	1	2	3	4	5
21.	Tends to be quiet	1	2	3	4	5
22.	Is generally trusting	1	2	3	4	5
23.	Tends to be lazy	1	2	3	4	5
24.	Is emotionally stable, not easily upset	1	2	3	4	5
25.	Is inventive	1	2	3	4	5

26.	Has an assertive personality	1	2	3	4	5
27.	Can be cold and aloof	1	2	3	4	5
28.	Perseveres until the task is finished	1	2	3	4	5
29.	Can be moody	1	2	3	4	5
30.	Values artistic, aesthetic experiences	1	2	3	4	5
31.	Is sometimes shy, inhibited	1	2	3	4	5
32.	Is considerate and kind to almost everyone	1	2	3	4	5
33.	Does things efficiently	1	2	3	4	5
34.	Remains calm in tense situations	1	2	3	4	5
35.	Prefers work that is routine	1	2	3	4	5
36.	Is outgoing, sociable	1	2	3	4	5
37.	Is sometimes rude to others	1	2	3	4	5
38.	Makes plans and follows through with them	1	2	3	4	5
39.	Gets nervous easily	1	2	3	4	5
40.	Likes to reflect, play with ideas	1	2	3	4	5
41.	Has few artistic interests	1	2	3	4	5
42.	Likes to cooperate with others	1	2	3	4	5
43.	Is easily distracted	1	2	3	4	5
44.	Is sophisticated in art, music, or literature	1	2	3	4	5

Appendix G - The Revised Multigroup Ethnic Identity Measure (MEIM-R)
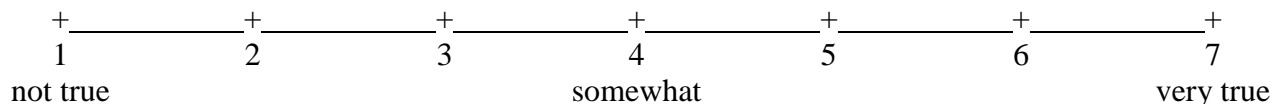
Using the 1 - 5 scale below indicate your agreement with each item.

1 Disagree strongly	2 Disagree	3 Neutral	4 Agree	5 Agree strongly

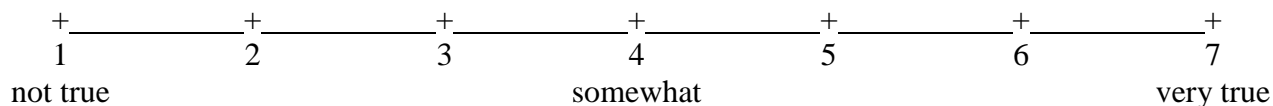|					
1- I have spent time trying to find out more about my ethnic group, such as its history, traditions, and customs.	1	2	3	4	5
2- I have a strong sense of belonging to my own ethnic group.	1	2	3	4	5
3- I understand pretty well what my ethnic group membership means to me.	1	2	3	4	5
4- I have often done things that will help me understand my ethnic background better.	1	2	3	4	5
5- I have often talked to other people in order to learn more about my ethnic group.	1	2	3	4	5
6- I feel a strong attachment towards my own ethnic group.	1	2	3	4	5

Appendix H - BIDR Version 6 - Form 40

Using the scale below as a guide, write a number beside each statement to indicate how true it is.

```
+_____+_____+_____+_____+_____+_____+
1          2          3          4          5          6          7
not true                        somewhat                    very true
```

_____ 1. My first impressions of people usually turn out to be right.
_____ 2. It would be hard for me to break any of my bad habits.
_____ 3. I don't care to know what other people really think of me.
_____ 4. I have not always been honest with myself.
_____ 5. I always know why I like things.
_____ 6. When my emotions are aroused, it biases my thinking.
_____ 7. Once I've made up my mind, other people can seldom change my opinion.
_____ 8. I am not a safe driver when I exceed the speed limit.
_____ 9. I am fully in control of my own fate.
_____ 10. It's hard for me to shut off a disturbing thought.
_____ 11. I never regret my decisions.
_____ 12. I sometimes lose out on things because I can't make up my mind soon enough.
_____ 13. The reason I vote is because my vote can make a difference.
_____ 14. My parents were not always fair when they punished me.
_____ 15. I am a completely rational person.
_____ 16. I rarely appreciate criticism.
_____ 17. I am very confident of my judgments
_____ 18. I have sometimes doubted my ability as a lover.
_____ 19. It's all right with me if some people happen to dislike me.
_____ 20. I don't always know the reasons why I do the things I do.

Using the scale below as a guide, write a number beside each statement to indicate how true it is.

```
+_____+_____+_____+_____+_____+_____+
1          2          3          4          5          6          7
not true                        somewhat                    very true
```

_____ 21. I sometimes tell lies if I have to.
_____ 22. I never cover up my mistakes.
_____ 23. There have been occasions when I have taken advantage of someone.
_____ 24. I never swear.
_____ 25. I sometimes try to get even rather than forgive and forget.
_____ 26. I always obey laws, even if I'm unlikely to get caught.
_____ 27. I have said something bad about a friend behind his/her back.
_____ 28. When I hear people talking privately, I avoid listening.

_____ 29. I have received too much change from a salesperson without telling him or her.
_____ 30. I always declare everything at customs.
_____ 31. When I was young I sometimes stole things.
_____ 32. I have never dropped litter on the street.
_____ 33. I sometimes drive faster than the speed limit.
_____ 34. I never read sexy books or magazines.
_____ 35. I have done things that I don't tell other people about.
_____ 36. I never take things that don't belong to me.
_____ 37. I have taken sick-leave from work or school even though I wasn't really sick.
_____ 38. I have never damaged a library book or store merchandise without reporting it.
_____ 39. I have some pretty awful habits.
_____ 40. I don't gossip about other people's business.

Appendix I - Davis' Interpersonal Reactivity Index, Perspective Taking Subscale

Using the scale below, please indicate how well each item describes you.

1 **Does not describe me well**	2	3	4	5 **Describes me very well**

1. I sometimes find it difficult to see things from the "other guy's" point of view.	1	2	3	4	5
2. I try to look at everybody's side of a disagreement before I make a decision.	1	2	3	4	5
3. I sometimes try to understand my friends better by imagining how things look from their perspective.	1	2	3	4	5
4. If I'm sure I'm right about something, I don't waste much time listening to other people's arguments.	1	2	3	4	5
5. I believe that there are two sides to every question and try to look at them both.	1	2	3	4	5
6. When I'm upset at someone, I usually try to "put myself in his shoes" for a while.	1	2	3	4	5
7. Before criticizing somebody, I try to imagine how I would feel if I were in their place.	1	2	3	4	5

Appendix J - The Philadelphia Mindfulness Scale

Please circle how often you experienced each of the following statements *within the past week.*

1. I am aware of what thoughts are passing through my mind.

1	2	3	4	5
Never	Rarely	Sometimes	Often	Very Often

2. When talking with other people, I am aware of their facial and bodye xpressions.

1	2	3	4	5
Never	Rarely	Sometimes	Often	Very Often

3. When I shower, I am aware of how the water is running over my body.

1	2	3	4	5
Never	Rarely	Sometimes	Often	Very Often

4. When I am startled, I notice what is going on inside my body.

1	2	3	4	5
Never	Rarely	Sometimes	Often	Very Often

5. When I walk outside, I am aware of smells or how the air feels against my face.

1	2	3	4	5
Never	Rarely	Sometimes	Often	Very Often

6. When someone asks how I am feeling, I can identify my emotions easily.

1	2	3	4	5
Never	Rarely	Sometimes	Often	Very Often

7. I am aware of thoughts I'm having when my mood changes.

1	2	3	4	5
Never	Rarely	Sometimes	Often	Very Often

8. I notice changes inside my body, like my heart beating faster or my muscles getting tense.

1	2	3	4	5
Never	Rarely	Sometimes	Often	Very Often

9. Whenever my emotions change, I am conscious of them immediately.

1	2	3	4	5
Never	Rarely	Sometimes	Often	Very Often

10. When talking with other people, I am aware of the emotions I am experiencing.

1	2	3	4	5
Never	Rarely	Sometimes	Often	Very Often

Appendix K – The Demographic Questionnaire

1- **Age**: _____

2- **Gender**:   Female☐   Male☐

3- What **degree** are you studying for?
Undergraduate degree ☐   Subject_____ Year of study: ___
Postgraduate degree   ☐☐ Level: Masters ☐ PhD☐
Subject_____ Year of study: ___

4- **Relationship Status**:
Single:
No partner ☐
In a relationship but not living with partner   ☐
Single and living with partner ☐
Married ☐
Separated ☐
Divorced ☐
Widowed ☐
Other ☐Please specify: _____

5- Do you have any **children**?
No   ☐
Yes ☐☐☐Please state how many and their ages _____

6- **Occupation status**:
Do you have a part-time job?
No   ☐
Yes ☐☐☐Please state the nature of this job and how many hours a week you work in this job
   _____

7- **Ethnicity**:
White ☐
Black – Caribbean ☐
Black – African ☐
Black – Other ☐Please specify: _____
Chinese ☐
Indian ☐
Pakistani ☐
Bangladeshi ☐
Other ☐Please specify: _____

8- **Religious Affiliation**
 Christian:

Anglican ☐
Roman Catholic ☐
Protestant ☐
Eastern Orthodox ☐
Free Church ☐
Other Christian☐   Please specify _____
Muslim:
Shia ☐
Sunni ☐
Jewish ☐
Hindu ☐
Buddhist ☐
Sikh ☐
Other ☐Please specify _____
Non-religious
Atheist ☐
Agnostic ☐
Secular humanist ☐
No religious preference ☐

9- Do you consider that you are **actively practising your religion**?
Yes ☐
No ☐

10- What is the **highest educational qualification of your father**?
None ☐
GCSEs or equivalent ☐
A-Levels or equivalent ☐
Bachelor's degree ☐
Master's degree ☐
PhD ☐
Don't know ☐

11- What is the **highest educational qualification of your mother**?
None ☐
GCSEs or equivalent ☐
A-Levels or equivalent ☐
Bachelor's degree ☐
Master's degree ☐
PhD ☐
Don't know ☐

Appendix L – The Consent forms

I …………………………………………………………………. (Please type name)

Give my full consent to take part in Parviz Rastegar's research investigation with the full understanding that I may withdraw at any time without giving any reason.

If I withdraw from the study, the data that I have submitted will also be withdrawn at my request. I have received an information sheet explaining what the experiment entails and what will be expected from me.

I understand that the information that I will submit will be confidential and used only for this study. I have read and understood the above information.

I agree/do not agree to participate in the study.

Signed:

Date:

Researcher:
Parviz Rastegar

DEBRIEFING

Previous studies have documented the relationship between age, gender, socioeconomic status, personality traits, culture, life experiences, interpretive mechanisms and psychological, emotional and cognitive well-being (Ryff & Singer, 2002). Among these predictors, social beliefs might have an influence on people's well-being. Indeed, in a past study, we found that social beliefs predicted various aspects of well-being. It is likely that the relationship between social beliefs and aspects of well-being are mediated by some other variables. The aim of the present study was to investigate two possible mediators of this relationship, namely, perspective taking and mindfulness.

Do you have any further questions?

Do you wish to be informed as to the outcome of the study?

You may contact us using this email address:

prastegar@yahoo.com (Parviz Rastegar)

Thank you for participating in this study.

INFORMATION SHEET

I am doctoral student at the University of Hertfordshire undertaking a study to investigate the predictors of the different aspects of well-being.

If you agree to take part, you will be asked to simply follow the instructions and complete the questionnaire.

It is expected that the completing of the questionnaire will last about 40 to 50 minutes.

Any data you do provide today will remain both confidential and anonymous and will be used only for the purposes outlined here.

You may use the contact number below should any queries or concerns arise in the future.

(As a participant you will be asked not to discuss the study with others until the study is completed (15/JUN/2011)).

You will have an opportunity to answer questions now and at the end of the experiment.

Please note that any information you may supply today will only be used for the purposes outlined here, and you may withdraw your assistance at any time if you wish and without explanation.

Thank you for your participation.

Name of researcher and his email address.

Parviz Rastegar
prastegar@yahoo.com

Appendix M – ethics approval forms

<u>School of Psychology Research Project</u>

Student Investigator: Parviz Rastegar

Supervisor: David Winter and Stephanie Schmeer

Title: Investigating predictors of social axioms

Registration Protocol Number PSY/10/08/PR

The above research project was approved on by the Ethics Committee of the School of Psychology under delegated authority from the Ethics Committee of the University of Hertfordshire.

Signed   Date: 30 October 2008

Professor Karen Pine
Deputy Chair
Ethics Committee, School of Psychology

Statement of the supervisor:

From my discussions with the above student, as far as I can ascertain, s/he has followed the ethics protocol approved for this project.

Signed (supervisor)_____

date_____

SCHOOL OF PSYCHOLOGY ETHICS COMMITTEE APPROVAL

Student Investigator: Parviz Rastegar

Title of project: An investigation of the mediators of the relationship between social axioms and well-being

Supervisor: David Winter and Stefanie Schmeer

Registration Protocol Number: PSY/01/11/PR

The approval for the above research project was granted on 31 January 2011 by the Psychology Ethics Committee under delegated authority from the Ethics Committee of the University of Hertfordshire.

The end date of your study is 15 June 2011

Signed:

Date: 31 January 2011

Professor Lia Kvavilashvili

Chair

Psychology Ethics Committee

STATEMENT OF THE SUPERVISOR:

From my discussions with the above student, as far as I can ascertain, s/he has followed the ethics protocol approved for this project.

Signed (supervisor): ....

Date: ....

SCHOOL OF PSYCHOLOGY ETHICS COMMITTEE APPROVAL

Student Investigator: Parviz Rastegar – study 3

Title of project: Investigating predictors of well-being among Iranians living in the UK

Supervisor: David Winter and Stefanie Schmeer

Registration Protocol Number: PSY/02/12/PR – study 3

The approval for the above research project was granted on 9 February 2012 by the Psychology Ethics Committee under delegated authority from the Ethics Committee of the University of Hertfordshire.

The end date of your study is 1 July 2012.

Signed: *Kvavilari* (signature)

Date: 9 February 2012

Professor Lia Kvavilashvili

Chair

Psychology Ethics Committee

STATEMENT OF THE SUPERVISOR:

From my discussions with the above student, as far as I can ascertain, s/he has followed the ethics protocol approved for this project.

Signed (supervisor): ....

Date: ....

UNIVERSITY OF HERTFORDSHIRE
HEALTH AND HUMAN SCIENCES

MEMORANDUM

TO   Parviz Rastegar

CC   Stefanie Schmeer

FROM   Dr Richard Southern, Health and Human Sciences ECDA Chairman

DATE   22 July 2013

Protocol number: LMS/PG/UH/00106

Title of study: Social beliefs of Iranians living in the UK and their perceived association with well-being: An interview study

Your application for ethical approval has been accepted and approved by the ECDA for your school.

This approval is valid:

From: 22 July 2013

To: 31 December 2013

Please note:

Approval applies specifically to the research study/methodology and timings as detailed in your Form EC1. Should you amend any aspect of your research, or wish to apply for an extension to your study, you will need your supervisor's approval and must complete and submit form EC2. In cases where the amendments to the original study are deemed to be substantial, a new Form EC1 may need to be completed prior to the study being undertaken.