

INVESTIGATING THE STRUCTURE AND FUNCTIONS
OF WORLDVIEW ASSUMPTIONS

by

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A DISSERTATION

Presented to the Department of Psychology
and the Graduate School of the University of Oregon
in partial fulfillment of the requirements
for the degree of
Doctor of Philosophy

June 2017

DISSERTATION APPROVAL PAGE

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Title: Investigating the Structure and Functions of Worldview Assumptions

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Degree awarded June 2017

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DISSERTATION ABSTRACT

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Doctor of Philosophy

Department of Psychology

June 2017

Title: Investigating the Structure and Functions of Worldview Assumptions

The goal of this dissertation was to develop a relatively comprehensive and culturally de-centered measure of worldview assumptions, basic beliefs that humans have about the world and reality. A pool of 179 items was compiled from a selective review of the literature and submitted to Exploratory Factor Analysis in a US sample. The emergent 6-factor structure was submitted to increasingly stringent tests of invariance in samples from Lebanon, Singapore, and India and met the standards for factorial invariance. The 6-factors showed a diverse set of relationships with measures of the potential functions of worldview: subjective well-being, meaning in life, and tolerance for inequality.

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Bou Malham, P., & Saucier, G. (2015). Intersubjective norms: Inviting a more interdisciplinary perspective. *Journal of Cross-Cultural Psychology, 46*, 1341-1345. doi:10.1177/0022022115610215

Bou Malham, P., & Saucier, G. (2014). Measurement invariance of Social Axioms in 23 countries. *Journal of Cross-Cultural Psychology, 45*, 1046-1060. doi:10.1177/0022022114534771

Saucier, G., Kenner, J., Iurino, K., Bou Malham, P., et al. (2014). Cross-cultural differences in a global “survey of world views”. *Journal of Cross-Cultural Psychology, 46*, 53-70. doi: 10.1177/0022022114551791

ACKNOWLEDGMENTS

I wish to express sincere appreciation to Dr. Gerard Saucier at the University of Oregon, Dr. Rim Saab at the American University of Beirut, and Dr. William Tov at Singapore Management University who were instrumental in collecting the data for this dissertation.

I would like to dedicate this manuscript to my mother Aida (amar) and family as well as to the people who have become family, especially Andrew Beach and the Joneses, Irida Mance, Zeina Yaghi, and Kathryn Iurino. Thank you for choosing me back. I wish to also express my gratitude to Dr. Adrienne Samuels Pitzini, who believed in the success of my graduate career long before I did.

Finally, I would like to express my appreciation to my committee members for their continued support and to the Department of Psychology and the larger University of Oregon community for all of the experiences they have afforded me during my graduate career.

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CHAPTER I

INTRODUCTION

Despite having a long history in philosophy, anthropology, and psychology, worldview is a fairly neglected concept that lacks a comprehensive mode of measurement. This dissertation manuscript details the process of developing a relatively comprehensive and culturally-decentered survey of worldview. First, a definition of worldview is derived from its treatment in philosophy and anthropology. Worldview is then situated at the core of cultural knowledge where it serves many functions including providing meaning and sustaining the cultural status quo. A case is made for the likely association between worldview, well-being, and tolerance for inequality. A list of items is compiled from a theoretical mapping of worldview, and the structure of these items is explored in a fairly diverse sample of countries. The association of worldview with well-being, and tolerance for inequality is then examined.

Historical Overview

The term “worldview” is derived from the German “*weltanschauung*”, a view of the world, which was first used academically by Immanuel Kant in *The Critique of Judgment* (1790/1987; Naugle, 2002), in which Kant proposed organizing worldview around God. By Kant’s account, the human mind was structured similarly in each individual, and worldview could therefore be organized according to one scheme. After Kant, the concept gradually lost its exclusively theological associations.

Nietzsche (Kaufman, 1968; Naugle, 2002) proposed that worldview was composed of a finite set of beliefs and was the first to propose explicitly that it did not matter whether the constituent assumptions were true. He believed that the assumptions

that make up worldview (as well as any and all derivative beliefs) were reifications of subjective experience that are embellished and attributed to some external source imbued with authority, e.g., nature, God, or the social environment. Wittgenstein (1968 as cited in Naugle, 2002) challenged the prevailing notion that there is an objectively true reality that one must aspire to represent accurately and against which one can evaluate a worldview. Any given worldview, like the rules of a game that one intuits by playing rather than by learning a rulebook, is a set of unprovable and untested (though not necessarily untestable) assumptions gained gradually and organically from one's context. Consequently, worldview assumptions function as a sort of mythology grounding one's beliefs and values and often go unchallenged. The role of psychology is to understand the components of each of the many existent or possible worldviews and their ramifications (Jaspers, 1919 as cited in Naugle, 2002).

Beginning with Nietzsche, the focus shifted from the accuracy of worldview assumptions to the purpose these assumptions served in facilitating the survival of individual humans and the human species. Indeed, worldview has been discussed in terms of shared views about the methods by which to accomplish certain fundamental goals such as negotiating the environment (e.g., Johnson et al., 2011) and surviving, reproducing, and child rearing (Kenrick, Girskevicius, Neuberg, & Schaller, 2010). Freud (1964 as cited in Naugle, 2002) saw worldview as an outgrowth of the human need for meaning and security. In short, worldviews are thought to be adaptive in meeting basic needs, and their existence is assumed to be a human universal (Koltko-Rivera, 2000).

Defining Worldview

In anthropology, the study of worldview developed in two parallel traditions. The (Franz) Boas tradition departed from philosophy's assumption that worldviews consisted of a set of universal themes. This tradition adopted a strong relativist stance and assumed that each society had a unique worldview organized around a singular theme. It sought to identify this theme and gained the label monothematic configurationalism. On the other hand, the (Robert) Redfield tradition was much closer to the philosophical treatment and sought to systematically break down worldview into a set of universal themes that arise across cultures instead of a singular culture-specific theme. The Redfield tradition's approach and definition are adopted here for two reasons. First, the Redfield tradition aligns better with the philosophical literature on the topic of worldview. Second, the Redfield tradition allows for ordered group-level variation across a common domain and so lends itself more to psychological investigation.

According to the Redfield tradition (Kearney, 1984), worldview consists of a finite set of interrelated, implicit assumptions, shared widely but not perfectly within cultural groups, often untested and sometimes unprovable, about how the world is or how the world works or about humanity and its relationship with the world. These assumptions are descriptive (i.e., statements about what exists) and provide a more or less coherent though not necessarily accurate representation of the world. They facilitate the process of meeting basic human needs and provide emotional security (Kraft, 1979). If worldview is structured as the Redfield tradition suggests, then certain assumptions that pertain to a similar domain or theme or that help solve related problems should cluster together. Of course, there needs to be some level of sharedness within a group for the clusters to emerge at all, but for worldview to be a cultural universal, the clusters should

be similarly structured across multiple cultural groups (allowing for the possibility of some degree of both within and across group variation). In defining worldview assumptions, we can also consider what they are not. Worldview assumptions do not directly guide or motivate behavior (Ashton et al., 2005; Saucier, 2013). Instead, they serve as models for reality from which can be derived models for action (Mannheim as cited in Naugle, 2002; Walsh & Smith, 2007). For example, a worldview assumption like the belief that there are malevolent spirits that interact with the human world does not, in itself, suggest any line of behavior. It can, however, facilitate a norm of avoiding certain foods because they are touched by spirits. The definition of worldview is sometimes broadened to include statements about what goals should be sought (e.g., Koltko-Rivera, 2004), but this inclusion leads to conflating “what is” with “what ought to be” (Kluckhohn & Strodtbeck, 1956). Worldviews are more commonly thought of as being more fundamental and more removed from concrete, everyday life than values.

The assumptions that make up worldview can therefore only be two of the three types (the third being prescriptive/proscriptive) of beliefs identified by Rokeach (1973), existential/descriptive (e.g., “There is a God”) or evaluative within a descriptive framework, i.e., establishing the valence of broad, abstract phenomena that can be conceived of as singular and that are believed to exist (e.g., “Human nature is fundamentally bad”). In contrast, values are explicitly evaluative, and norms are prescriptive and/or proscriptive. Kelly’s (1955; Koltko-Rivera, 2004) model of worldview sheds light on the relationship between descriptive worldview beliefs and prescriptive/proscriptive values and norms.

Worldview and Cultural Groups

How is worldview related to culture? Culture is defined as a set of ideas, norms, values, beliefs, or standards that underlies and guides behavior and is widely shared across a group of people (Hill, 2009; Saucier, 2013). The distributive model of culture (see Schwartz, 1978) explicitly discusses the degree to which components of culture are shared within a cultural group and allows for substantial individual variation. The distributive model of culture proposes a core cultural profile that is shared relatively widely across the members of a cultural group. The profile is not shared uniformly, so there may exist divergent profiles that are shared less widely as well as beliefs, values, and other cultural components that are idiosyncratic to individuals.

Although a complete test of the distributive model of culture is missing from the literature, there is some indirect evidence in support of its propositions in the literature on individual components of culture according to the above definition, like values for example (e.g., Schwartz & Bardi, 2001; Schwartz & Bilsky, 1990). Values are commonly ordered into factors or dimensions on which there is individual variation within (national or other meaningful large-scale) groups. The structure of the factors, however, is fairly replicable across groups, and there is even some stability in the rank ordering of these factors.

By the preceding definition and considerations, worldview can be considered a component of culture (Triandis, 1996) and has featured in some treatments of culture, e.g., “[worldviews are the means by which] the human individual is endlessly simplifying, organizing, and generalizing his [sic] own view of his environment [by imposing] his own constructions and meanings [which may be] characteristic of culture” (Bateson, 1944, as cited in Kluckhohn & Stodtbeck, 1961, p. 2). Worldview assumptions

lend themselves well to a similar conceptualization to that of values, as ordered into factors that with a relatively replicable structure across groups on which there is some degree of within-group and between-group variation, especially when linked to human needs for survival.

Because there is a limited number of common human problems for which all peoples at all times must find some solution, it is assumed that there is an ordered variation in the basic assumptions that constitute worldview (Kluckhohn & Strodtbeck, 1961). While there is variability in solutions to these problems, it is neither limitless nor random. Every society has a dominant profile of preferred solutions as well as a limited range of variant profiles and potentially some idiosyncratic worldview assumptions as well. Individual worldviews are socially formed from some combination of the dominant and variant profiles (Redfield, 1952).

Worldview appears compatible with the preceding framing of cultural and cultural components, but some suggest that it may occupy a privileged position in cultural models. For example, if cultural belief systems are conceptualized as a hierarchy of (perceived) truths (Cunningham, 1987, as cited in Naugle, 2002), worldview assumptions will be more foundational whereas other beliefs will be more ancillary. This view suggests that worldview assumptions are more likely to remain constant over extended periods of time than surface cultural characteristics, like norms (Kluckhohn, 1951; Kroeber, 1948). It is an empirical question whether worldview assumptions are less changeable than other components of culture. It is also possible for the chain of causation to go in either direction, i.e., for changes in worldview to produce changes in other

beliefs and norms or for changes in beliefs and norms to produce changes in worldview (Kluckhohn, 1951).

Rappaport (1999) proposes one such hierarchical structure of the beliefs, values, and norms of a group. While this hierarchy does not explicitly include worldview, the level in the hierarchy that corresponds most closely to worldview is more foundational and more resistant to change. At the core of Rappaport's hierarchy are ultimate sacred postulates, defined as inviolate beliefs or assumptions about reality that ground the entire hierarchy. These sacred postulates are often not articulated, and when they are articulated, it is in the form of highly ritualized formulas, such as the Nicene Creed in Christianity. Ultimate sacred postulates are remote from the social norms and values of daily life, which are not necessarily directly derived from the sacred postulates. Instead, according to Rappaport, ultimate sacred postulates serve to "sanctify" a subordinate set of cosmological axioms, assumptions about the nature and origins of the universe and reality, and to strip away the apparent arbitrariness of adopting one set of cosmological axioms over another.

Rappaport's cosmological axioms are not values themselves, but they are closer to values and social norms in the hierarchy than sacred postulates. Cosmological axioms form the logical backing of these more mundane elements. In this sense, cosmological axioms are meta-performative in the sense that they organize values and norms and inform their performance. Cosmological axioms are more changeable and less taboo than ultimate sacred postulates. Consequently, though they may also not be articulated, they can be expressed in a non-ritualized manner. Worldview assumptions are most likely to be found among ultimate sacred postulates or cosmological axioms in the hierarchy, since

ultimate sacred postulates and cosmological axioms include beliefs about the world and humanity. Worldviews then ground concrete rules of conduct and perceptions of local and temporal conditions, which are presumably contingent on cosmological axioms and sacred postulates. They are the most directly tied to the running of everyday life, and they are also the most subject to change.

It is important to note that Rappaport developed the above models primarily for liturgical orders, and so some care must be taken in generalizing it to larger-scale, more complex, and more heterogeneous groups. Rappaport's model implies a fair amount of homogeneity between members of a group, especially at the level of sacred postulates and cosmological axioms, and it may be true that subsets of a group that share a particular identity (e.g., religious groups or political parties) have more in common with each other than they do with other groups. In addition to the variation that would be expected between individuals by the distributive model of culture, there may be more systematic variation along divisions of different cultural communities within a society.

Besides grounding cultural systems, worldview assumptions serve to maintain group cohesion, especially when cohesion comes at the cost of justice for some group members (Whitehead, 2006; Whitehead, 2010). In order to remain cohesive, cultural systems that operate outside the bounds of kinship, especially when they strive to maintain inequalities of wealth and power, depend on social contracts to curb biological urges that threaten cooperation. In order to trump self-interest, social contracts depend on assumptions which are often counter-intuitive or illogical and that act as cultural distortions of the world. In short, "every established order tends to produce the naturalization of its own arbitrariness" (Bourdieu, 1972) via worldview and other beliefs

or rather needs to produce such. This line of thinking connects worldview assumptions to concepts related to prejudice and social justice, e.g., the belief in a just world, conservatism, and the Protestant work ethic. This line of research generally focuses on how certain worldview assumptions act as deterrents to the furthering of social justice by justifying inequality. The mechanism by which the belief in a just world is associated with witnesses of suffering being unsympathetic to the victim is described in the next section.

The view that social groups necessitate cultural projections to maintain cohesiveness and the dominance of some members over others has been developed as a political principle. Marx and Engels (1974 as cited in Whitehead, 2010) proposed that false consciousness and cultural obfuscation allow the ruling classes to propagate their own worldview and maintain their control. However, the capacity of worldview to distort the perception of the self and the world predates political systems (Whitehead, 2010). Even preliterate human cultural groups produced perceptual distortions consistent with their worldviews. For example, some preliterate human groups promulgated fluid, non-essentialist views of the self, e.g., humans can transform into animals and animals are sentient agents that have their own valid views of reality.

In summary, worldview assumptions are a component of cultural models, i.e., the shared beliefs, values, and norms that make up culture. They are fundamental in the sense that they ground other elements of cultural knowledge, like other beliefs as well as values. They also presumably facilitate group cohesion. They do this by making people more likely to overcome self-interest by supporting social and moral beliefs and norms that do this directly and by being generally unspoken and unquestioned assumptions that

justify inequality. Consequently, worldview assumptions sustain the social contracts that allow members of a cultural group to cooperate, especially when cooperation is at the expense of personal gain. There is room for individual differences in worldview assumptions, just as there is room for individual differences in all other components of cultural models. Given the fundamental nature of worldview assumptions, it is possible that they are closer to the core of a culture and show relatively less individual variation and relatively more resistance to change.

A Nomological Net for Worldview

Theoretical treatises of worldview highlight its central position in cultural knowledge and the many functions it serves. Empirical research in psychology, especially terror management theory (e.g., Burke, Martens, & Faucher, 2010; Greenberg et al., 1990), worldview violation trauma (e.g. Janoff-Bulman, 1989), system justification (e.g., Jost, Banaji, & Nosek, 2004; Jost, Glaser, Kruglanski, & Sulloway, 2003), regulation-disregulation theory (McGuire, Troisi, Raleigh, & Masters, 1998), and anomy (Berger, 1967) tend to focus on the protective role of worldview, especially in alleviating anxiety and improving well-being, providing meaning, and sustaining the status quo. These variables are promising first candidates for exploring the convergent validity of a measure of worldview, and the theories listed can help make sense of the relationships.

Methodological limitations in the literature make it difficult to unpack the relationships of worldview with well-being, with meaning in life, and with support for the status quo. Existing research often conflates worldview with its functions, for example by using a measure of meaning in life as a proxy for worldview (Shepperd, Miller, Smith, & Algina, 2014). In addition, evidence is mixed about whether worldview is directly related

to well-being, meaning in life, and support for the status quo or if person-group congruence on worldview (i.e., the degree to which an individual worldview corresponds with the worldview predominant in the individual's group) is what is related to these variables. This confusion is most apparent in research on religiosity, in which subjective well-being was associated with a religious worldview (Joshani & Weijers, 2014) and a non-religious worldview (Diener, Tay, & Myers, 2011; Diener, 2013; Lun & Bond, 2013) depending on whether religiosity is the norm in the country of study (Diener et al., 2011). In countries where religiosity is the norm, subjective well-being is positively correlated with religiosity. In countries where religiosity is not the norm, subjective well-being is negatively correlated with religiosity. A direct measure of worldview can clarify relationships between worldview and other variables, beyond just religiosity which is only one part of worldview.

Terror Management Theory, the Belief in a Just World, and Worldview Defense

What is terror management theory, and how does it relate to worldview? Terror management theory (TMT; e.g., Burke, Martens, & Faucher, 2010; Greenberg et al., 1990) is a paradigm that focuses on survival as an unconscious human drive that can never be satisfied. TMT formalizes the notion that worldview functions mainly as a defense mechanism mitigating the anxiety that arises from the inevitability of human mortality. Worldview alleviates death anxiety by providing a sense of meaning to life and allowing people to believe that a valuable part of themselves will live on after their death, conditional on identifying with the worldview of their group. Some worldviews promise literal immortality, e.g., an eternal afterlife, while others promise a more symbolic immortality, e.g., the continued survival of a shared group culture.

TMT proposes that individuals adopt cultural worldviews with the implicit assumption that so long as they adhere to their worldview, they are guaranteed a measure of immortality (Martin & Van den Bos, 2014). This promise of immortality is reassuring and promotes meaning and well-being, but it is contingent on the worldview being true. Exposure to individuals or events that contradict the worldview threaten the promise of immortality and produce a drive to secure worldview, which TMT calls worldview defense. In short, TMT proposes that worldview should be associated with well-being and meaning in life and notes that individuals adopt shared cultural worldviews (with the assumption that constant exposure to individuals who contradict one's worldview is aversive).

TMT proposes that worldview guards against the fear of death. The next models, motivated social cognition and uncertainty management, propose that worldview guards against uncertainty in general. The body of research on the belief in a just world (BJW; Lerner, 1997) serves as an intermediate theoretical step and proposes that the BJW, arguably a subset of worldview assumptions, guards not against death per se but against the fear of undeserved suffering (in life or after death). Like the research on TMT, research on the BJW links it to a host of psychological benefits, including well-being in a host of domains (e.g., Dalbert, 1998; Furnham, 2003; Lipkusa, Dalbert, & Siegler, 1996; Nasser, Doumit, Al-Attayah, & Fokhroo, 2013; Wickham, Shryane, Lyons, Dickins, & Bentall, 2014).

In another parallel with TMT, challenges to the BJW are aversive and produce reactions meant to defend or restore it. A commonly studied threat to the BJW is the persistent suffering of a victim, and victim blaming or victim derogation, in order to

justify the suffering and restore the belief that the world is just, is the label applied to the defense mechanism. The BJW is associated with victim derogation in a variety of situations, including when the “suffering victims” are physically ill (e.g., Correia & Vala, 2003; Furnham, 2003; Herbert & Dunkel-Schetter, 1992). The research on qualifying the association between the BJW and victim derogation led to explicit connections between this component of worldview and social justice and to the idea that worldview is not always conducive to increased social equality. For example, victim derogation arising in the defense of the BJW can result in the belief that the economically disadvantaged deserve their fate and that their suffering is justified.

Motivated Social Cognition and Uncertainty Management

More recent work (e.g., Echebarria-Echabe, 2013; Van den Bos, 2009; Van den Bos, Poortvliet, Maas, Miedema, & van den Ham, 2005) suggests that the need to manage death anxiety is one component of the need to manage uncertainty and threat in general. The motivated social cognition approach (e.g., Jost, Banaji, & Nosek, 2004; Jost, Glaser, Kruglanski, & Sulloway, 2003; Jost, Napier, Thorisdottir, Gosling, Palfai, & Ostafin, 2007) focuses on the need to manage uncertainty and threat primarily to explain individual differences in political ideology. This model proposes that individuals are motivated to perceive the world as predictable and meaningful to sustain their well-being and manage uncertainty. Adhering to a shared worldview facilitates uncertainty management in two ways: Individuals can defer to the shared worldview for making sense of the world, and individuals can feel more connected to others who share their worldview. Incidentally, the need to maintain a coherent conceptual system and the need to maintain relatedness to other people are two of the four basic needs proposed by

Epstein (1998) and measured by Janoff-Bulman (1989). The other two needs are the need to maximize pleasure and minimize pain and the need to maximize self-esteem.

Though people are to a certain extent motivated to manage uncertainty (Gao & Gudykunst, 1990), they vary in the extent to which they find uncertainty aversive and in their motivation to avoid it (Kruglanski, 2004). People high in the need to reduce uncertainty are more likely to be attached to the status quo, which is a known quantity, and to be resistant to social change and the associated uncertainty (Jost et al., 2007). These people then adopt worldview assumptions that legitimate and support the status quo in a process called system-justification. Much of the evidence accumulated links the need to reduce uncertainty and system justification with conservatism (see Jost & Amodio, 2012). Most of this research is conducted in societies whose status quo maintains inequalities of wealth and power. Although it is possible that the shared worldview in more egalitarian societies is negatively associated with tolerance for inequality, the shared worldview in unequal societies should be associated with a greater tolerance for inequality.

System justification, like TMT, proposes that worldview functions to provide meaning and well-being. It also focuses on the relative sharedness of a consensual cultural worldview and suggests that sharing in the consensus may magnify well-being and meaning. A pitfall of the consensual worldview is that it generally upholds the status quo of the cultural group that endorses it and its uneven distribution of wealth and power (Jost et. al, 2003; Whitehead, 2010). Person-group congruence in worldview is expected to be associated with a greater tolerance for inequality as a consequence, at least in non-egalitarian societies. It is possible that uncertainty management plays a mediating role in

the relationship between worldview and meaning and satisfaction in life, but it would be speculative to hypothesize a mediating role for the need for uncertainty management when there is no evidence yet of a relationship between worldview and life meaning and satisfaction. This step can be undertaken once the relationship between worldview and life meaning and satisfaction is clear.

Physiological Effects of Beliefs

Regulation-disregulation theory (RDT; McGuire et al., 1998) proposes a physiological mechanism by which worldview meets needs for meaning and security and is associated with well-being. RDT suggests that humans and other primates seek to maintain a state of physiological homeostasis that arises when physiological and psychological forces are balanced and harmonious and that is associated with a generalized sense of well-being. External social and environmental cues as well as internal thoughts produce physiological effects, such as changes in hormone or neurotransmitter levels, which can help regulate and maintain homeostasis or disregulate it. In the absence of the appropriate external and internal cues, internal states tend to drift away from homeostasis and optimal functioning, in a process analogous to the drop in blood-glucose levels if glucose is not periodically replenished.

According to RDT, humans tend to gravitate towards certain sets of beliefs which help regulate their inner physiological states, and the association with calm inner states makes these beliefs self-reinforcing. RDT emphasizes the important role of beliefs that contain general explanations of human experiences and the external world, including the social and political environments, and which can be considered worldview beliefs. People

adhere to these worldview beliefs, especially the ones that are widely shared in the social group, because they maintain a hedonically satisfying internal physiological state by imbuing the world with meaning and providing a sense of belonging.

Nomos and Anomy

It would be remiss to leave Berger's (1967) discussion of the cultural nomos (of which worldview is a part) out of a section on the nomological net of worldview, especially since Berger's discussion blends key elements from the models presented. According to Berger, worldview, which he defines as the sum total of what a cultural group believes about what is and how things are, is an integral part of the nomos of a cultural model (the other part being what he calls ethos and is essentially the sum total of values and norms).

Worldview forms partly as a result of humans constantly having to make choices about how to perceive and interact with a world in which there is much uncertainty. These choices are shared within a group as people pattern their behavior on the behavior of others, and so uncertainty is mitigated. However, the external environment and the ways humans relate to it are constantly in flux, which creates tension as uncertainty threatens to destabilize worldview. In a parallel to its function in TMT, uncertainty management, and RDT, worldview plays an instrumental role in combatting this building tension. Human cultural groups are motivated to imbue worldview with a sense of objective reality and permanence, i.e., forget that conscious choices were made about how to perceive and act upon the world and that therefore other choices are possible.

Worldview then appears to be not a matter of choice but necessary, inevitable, and objectively real.

Berger calls the constant threat of a collapse of the cultural nomos under the weight of external change and uncertainty “anomy”. He notes that states of anomy arise under conditions that highlight the arbitrariness of worldview and the nomos, such as exposure to others who hold a different worldview, thereby calling into question the objective reality and inevitability of one’s own worldview. Religious symbolism, according to Berger, is especially good at reinforcing worldview against the threat of anomy because it imbues worldview with sanctity and paints worldview as an actual manifestation of the will or plan of the cosmos or the divine. This makes worldview seem eternal and unquestionable. Based on this, we would expect religious ideation to play a prominent role in worldview.

Like many models of culture and worldview, Berger’s theory as a whole has not been tested. However, it synthesizes many of the concepts presented in more specific models that are being extensively tested in psychological and anthropological literature. It is also quite compatible with the notion that worldview is an integral part of cultural models that is distinct from values and norms and serves to provide a sense of order and meaning to the human experience. It also promotes well-being by mitigating the stress of uncertainty and can vary in content (though not necessarily in structure) between human groups.

Quantifying Person-Group Congruence

Worldview assumptions are part of the ordered variation of cultural knowledge. Like other constituents of cultural knowledge and consistently with the distributive model of culture described earlier, worldview assumptions should be distributed non-uniformly across members of a cultural group, with a central core that is widely shared and both group-specific and individual-specific variations.

The cultural consensus model (Romney, Weller, & Batchelder, 1986) provides the means of quantifying the degree to which individuals are representative of the central tendency in their cultural group through the use of Q-profiles: Individuals are treated as variables and their responses as cases. When used with responses to survey items, this configuration allows the calculation of mean responses of items across individuals to represent the central tendency. The correlation between an individual's responses and the mean response pattern is a measure of representativeness and can be labeled normativity. Higher correlations indicate that an individual more closely represents the typical cultural worldview.

The study of objective person-group value congruence (OVC; e.g., Sørtheix & Lonngvist, 2015) applies the cultural consensus model strictly to values though it makes no reference to the model. OVC consists of the set of correlations between individual ratings on values and corresponding value ratings of a reference group. These correlations capture the degree to which individual values correspond to the average values of the group. While direct responses on the values measure were not correlated with subjective well-being, OVC was actually correlated with subjective well-being, and this relationship was mediated by positive interpersonal relationships (Sørtheix & Lonngvist, 2015). This result suggests that congruence is associated with more positive

social relationships based on similarity. Group congruence showed a link to well-being while personal values did not. In other words, it is not the content of an individual's values that was associated with well-being but the degree to which they converged with the values of the individual's group. Similar results may be found for the domain of worldview assumptions, with relationships being limited to congruence rather than worldview itself.

Previous Mappings of the Worldview Domain

In order to test the above hypotheses, it is necessary to form a general conception of what should be included in a measure of worldview and then to formulate a survey. Previous literature provides a promising starting point in the form of Koltko-Rivera's "collated model of worldview". Koltko-Rivera (2004) proposed a theoretical model of worldview based on a selective review of 20th century dimensional conceptualizations of the domain, including Kluckhohn's (1950; Kluckhohn & Strodtbeck, 1961) value orientations, Wrightsman's (1992) theories about human nature, Lerner's (2003) belief in a just world, and terror management theory (Solomon, Greenberg, & Pyszczynski, 1991). While only specific models of worldview were chosen for review, Koltko-Rivera purposefully included all components and aspects of the models reviewed in his own collated model. The reasoning behind his decision to favor breadth over parsimony was that, for the sake of measurement, it is preferable to begin with a wide pool of items or concepts and then proceed to eliminate redundancy.

Koltko-Rivera's model consists of seven groups of concepts culled from his review of the literature, each of which contains two or more dimensions with two or more

options (which may be mutually exclusive). The seven groups of concepts are human nature, will, cognition, behavior, interpersonal, truth, and world and life. The human nature group contains beliefs about the moral orientation, mutability, and complexity of human nature. The will group consists of beliefs about the nature of purposeful human behavior and functioning, including the distinction between free will and determinism. The cognition group contains epistemological beliefs (i.e., beliefs about the means of obtaining valid knowledge) and beliefs about whether peak experiences can be reached within or without the context of the ego. The behavior group involves beliefs about the focus of or guidelines for behavior, including beliefs about whether behavior is best directed inward or outward and whether its goal should be change and progress or stability. The interpersonal group contains beliefs about the proper or natural characteristics of interpersonal relationships, including the relationship between humanity and the environment. The truth group contains beliefs about the scope and availability of the truth. The world and life group is concerned with beliefs about the world, nature, reality, and the universe, including beliefs about the means to establish a sense of well-being and beliefs about how the world is categorized. Some dimensions (e.g., the purpose of life and activity satisfaction) are more value-laden and directive than others. These dimensions were incompatible with the definition of worldview as descriptive rather than evaluative or prescriptive and were eliminated from the model.

A related albeit less specific theoretical model of worldview was put forth by Johnson and associates (2011). This model highlights some content that is missing from the previous model and begins to clarify the structure of worldview. It proposes six components that show some overlap with Koltko-Rivera's: ontology, epistemology,

semiotics, axiology, teleology, and praxeology. The ontology component overlaps with Koltko-Rivera's world and life group and includes cosmological beliefs (about the origin of the world) as well as beliefs about personhood (i.e., the requirements for an entity to be considered a person) and the scope of moral concern (i.e., the requirements for an entity to be treated according to the rules of moral reciprocity). The epistemology component overlaps with the truth and cognition groups and consists of beliefs about what can be known, i.e., what constitutes valid knowledge, and how one should reason. The semiotics component overlaps rather imperfectly with the behavior group, containing only time orientation. It consists of gestures, symbols, and words that can be used to describe reality, the world, time, and space. Axiology (moral concerns and proximate goals), teleology (ultimate goals, beliefs about the afterlife, and beliefs about causality), and praxeology (social norms and associated sanctions) overlap partly with human nature, will, and the interpersonal groups respectively but are more overtly concerned with values than other components.

The model Johnson and associates (2011) put forth makes useful additions to the Koltko-Rivera (2004) model. Most notably, it explicitly includes beliefs about personhood, the scope of moral concern, and the origin and eventual destiny of the self. It also indicates that certain worldview components, namely, axiology, teleology, and praxeology, are dependent on other components particularly ontology and epistemology. The implication is that the relationship between worldview components may be hierarchical, with a more fundamental core and its contingencies. Consequently, the components are not necessarily all orthogonal, and the contingent components must be consistent with the core components.

Formulating a Survey

Kotlko-Rivera's (2004) model of worldview, with the addition of personhood and the scope of moral concern, i.e., the non-overlapping areas contained in the Johnson et al. (2011) model that fit the definition of worldview derived from the definition of worldview derived from the Redfield tradition, was used as a starting point in the development of a survey of worldview beliefs. In order to ensure comprehensiveness of the content, other lists of beliefs were consulted for items of statements that fit within the categorization derived from the two models or that fit the definition of worldview but were not covered by either model. Causality and categorization were added as potential sets of worldview assumptions based on Kearney's (1984) model of worldview.

Besides Kearney (1984), no other source consulted for developing the survey discussed worldview directly. All other sources consulted came from anthropological and ethnographic descriptions of specific human groups in an attempt to counterbalance the more theoretical nature of Koltko-Rivera (2004) and Johnson et al. (2011) and their overrepresentation of psychological and philosophical sources. Ethnological studies were selected based on geographic location (so as not to overly represent a particular region) and on the availability of broad enough descriptions of their subjects' belief systems to infer worldview assumptions. The groups selected included Native American tribes of Northwest and Southwest USA (Haynal, 2000; Kluckhohn & Strodtbeck, 1961; Radin, 2002; Roundface, 1999), Mayan mythology (Gubler, 1997), South American agricultural settlements (Guiteras-Holmes, 1961; Kracke, 1981; Leslie, 1960), Indians of the untouchable caste (Berreman, 1966; Channa, 2001), an African agricultural tribe (Koloss,

2000), and an African herding society (Evans-Pritchard, 1956). Two potential sets of worldview assumptions were added based on these readings: illness and dreams.

Finally, the entire list of isms definitions (Saucier, 2000) was consulted for additional items. This was a list of dictionary definitions of English words ending in the suffix –ism, which usually indicates that the word represents a belief. This was a useful addition to the Koltko-Rivera and Johnson et al. models and to the ethnographic studies for the same reason measures of personality are often derived from lists of person descriptors in the dictionary: The dictionary provides an objective listing of relevant words and concepts that is independent of expert opinion as opposed to all of the other sources used. No additional categories were added to the list of worldviews from this source as many –isms are narrowly focused, overly value-laden, or overlap with the categories taken from the previous sources

Once a list of broad categories was collected, items were derived from the descriptions of the options for each group of concepts provided they met the definition of worldview. Options that referred explicitly to behavior or values were not included, on the basis that worldview assumptions are defined as beliefs that underlie behavior and values. In order to make the measure more user-friendly and time-efficient, the decision was to group thematically related statements under a common stem. For example, the human nature items shared the common stem “Humans everywhere are basically” while the rest of the sentence varied. A complete list of stems and items, which formed the worldview portion of the measures administered in the preliminary study, can be found in Table 1 (see Appendix A for all tables and figures).

CHAPTER II

PRELIMINARY STUDY

The main purpose of the first study was to pilot the initial set of 229 worldview items and identify redundant items or items with poor functioning so as to streamline the survey. A secondary purpose was to identify a user-friendly and time-efficient presentation format. The number of items was rather large, so a non-traditional organizational scheme was used for the sake of minimizing completion time and participant fatigue. Items were formulated to be variations on a set of common stems. For example, items referring to human nature shared the common stem “Humans everywhere are basically”, and each individual item completes the statement in a different way, as in “Humans everywhere are basically good” or “Humans everywhere are basically evil”. Participants were randomly assigned to one of three conditions: In condition 1, items were grouped by stem with the stem appearing first while the unique parts of the items were listed underneath. In condition 2, items were in complete sentences but grouped by stem. In condition 3, items were in complete sentences, ungrouped, and randomized in order of appearance. This was done to test for the emergence of method factors unique to each presentation and to determine which assessment method might be the best. As will be described, preliminary results suggested that condition 2 produced the best results in terms of completion time, missing data, and structure.

Participants

The sample ($n = 273$) came from the University of Oregon Human Subjects Pool. The sample was 67.8% female, 83.2% between the ages of 18 and 22, 83.5% American,

42.7% Christian, 50.8% rated themselves as politically moderate, and 38.3% as politically conservative.

Procedure

Participants were randomly assigned to one of three conditions that varied in the presentation of the worldview items online. They responded to the 229 worldview items, then a series of demographic questions, and finally an extended 109-item version of the Survey of Dictionary-Based Isms (SDI-46; Saucier, 2013) of political and social beliefs and attitudes supplemented with a number of promising additional or alternative items. Certain indicators of response tendency were calculated for each condition, including mean time of completion, the frequency of extremely short responses (a sign of poor responding or participant frustration), the frequency and pattern of missing data, and a principal components analysis of the worldview items was used to check for acquiescence and redundancy. An additional measure of acquiescence was calculated from the average of responses on 36 pairs of opposite items. Since the items in these pairs are supposed to be exactly opposite, for a consistent responder, the average item response to them should be the mean of the response scale (3). Larger deviations from 3 indicate a stronger response bias.

Results

Table 2 (see Appendix A for all tables and figures) for details on each of the conditions. There were no significant differences in mean response times between conditions $F(2, 239) = .537, ns$. However, condition 1 seemed to lead to the shortest average time to complete, and condition 3 the longest. Condition 2 had the least amount

of missingness. Condition 2 was also the only condition in which a principal component analysis (PCA) did not yield a large, unipolar (where all loadings are positive) unrotated first factor, the sort of factor which tends to reflect acquiescence in responding. The first unrotated factor in condition 2 included items with substantial negative loadings and was interpretable in substantive terms. Based on the evidence that it stimulated less acquiescence and was more user-friendly (stimulating fewer missing responses), the data that make up the main study were collected only in the condition 2 format, in which items are presented in complete sentences grouped by common stem. This approach is not unusual in psychological literature. It is the format that one would get from juxtaposing a large number of short measures end-to-end with a common set of instructions and then factor analyzing the responses of the measures together.

In order to identify redundant items within stems, correlation matrices between items sharing a stem were examined and substantial positive correlations noted. When a pair of items sharing a stem had a correlation greater than .7, the content of the items was examined and a judgment was made about whether the items were different enough to both be included in the measure. For example, the item “when moral rules are violated, the consequences are passed on to the children of the person who violated the rules” was deemed redundant with the item “when moral rules are violated, the consequences affect the person who violated the rules and the relatives of that person” as children fall in the “relatives” category. Three items in total were eliminated according to this criterion. Additionally, the two stems with the greatest number of items (“human societies fundamentally tend to” and “beyond the physical world, there is”) were split into two and three stems respectively to improve readability. The updated measure used for the main

study and all analyses presented after this point consisted of 179 worldview items, which is the estimated number of items that can be completed in 30 minutes based on completion times in the USA.

CHAPTER III

MAIN STUDY

The goal of the main study was to develop a relatively culturally de-centered survey of worldview, the Worldview Assumptions Questionnaire (WAQ), and to test its concurrent validity by relating it to measures of the proposed functions and effects of worldview.

Three psychological variables were chosen as proxies for the effects of worldview: subjective well-being (SWB), meaning in life (MIL), and inequality aversion (IA) vs. inequality tolerance (IT).

Given that the fulfillment of basic needs is positively correlated with SWB (e.g., Diener et al., 2011; Diener, 2012; Diener et al., 1995), it was sensible to expect a positive association between worldview and SWB if worldview does, in fact, facilitate the meeting of needs. It was also possible for the association between worldview and SWB to be affected by person-group congruence (Diener, 2012; Diener, Tay, & Myers, 2011). A positive association could also be expected between worldview and meaningfulness given that worldview serves to help organize and understand the world. Meaningfulness could be taken as an indication that worldview is functioning properly (Edmondson et al., 2011). Crises in meaning, on the other hand, generally arise from stressful life situations, of the kind that also violate worldview (Schnell, 2009). A positive association was expected between worldview and IT. Worldview is theorized to sustain the status quo, and, in countries with socio-economic inequalities, IT corresponds to a tolerance of the status quo. In addition to these theoretical reasons for connecting worldview to these variables, it is notable that well-being has a long history of use, especially in research on

the BJW, as an external criterion for worldview. While IT has not been used directly, BJW and system justification research provide links to social justice and social inequality, which IT captures.

While data collected in a single sample could inform the format of the WAQ, its structure and validity needed to be explored in dissimilar cultural contexts. To this end, the main study expanded data collection to non-US samples from Lebanon, Singapore, and India. These countries were selected to maximize the diversity of the samples being compared and the generalizability of the derived structure while still allowing the measure to be administered in English. It was also notable for the purposes of validation that socio-economic inequalities are common in these countries.

Participants

In the US, Lebanon, and Singapore, the samples consisted of university students from the University of Oregon, the American University of Beirut, and Singapore Management University respectively. Participants in India were recruited through a Qualtrics panel. In all four samples, there were only two eligibility criteria: Participants had to be 18 years old or older and fairly proficient in the English language. The measures were administered through a website in all cases. The recruitment strategy and eligibility criteria had the practical benefits of easing recruitment and administration. Additionally, they served to minimize between-population differences in educational and socio-economic levels and avoided variation that could arise in the content and quality of translations.

The initial sample sizes were as follows: Lebanon (n = 319), Singapore (n = 263), India (n = 214), and US (n = 616). Cases with missing values for at least half of the worldview items were dropped from each sample in order to avoid biasing the results with excessive estimation. The sample sizes used in the analyses were: Lebanon (n = 238, %female = 55.04, mean age = 18.83), Singapore (n = 263, %female = 50, mean age = 34.22), India (n = 214, %female = 69.16, mean age = 22.38), and US (n = 534, %female = 68.35, mean age = 19.88).

Measures

In addition to the updated measure of worldview, the study included measures of subjective well-being (5 items), meaning in life (10 items), and inequality tolerance (14 items). Subjective well-being was measured using the Satisfaction with Life Scale (SWLS; Pavot & Diener, 1993), which is a measure of the subjective perception of life satisfaction. Meaningfulness and crisis in meaning were measured with the corresponding scales developed by Schnell (2009). Inequality tolerance was measured using the reversed score of the inequality aversion vs. inequality tolerance factor in the survey of dictionary-based isms (based on Saucier, 2013). The survey is an extensive measure of political and social attitudes developed originally from the same dictionary definitions of English words ending in the suffix –ism, which is the most common suffix in English that denotes a belief or attitude. The list in question, from which the survey was derived, is the same list which was consulted for additional worldview beliefs at the earlier stage of derivation of the WAQ.

Procedure

The measurement portion of the analysis was broadly organized into an exploratory step, whose purpose was to derive an initial structure for the WAQ, and a confirmatory step, whose purpose was to test this structure in other, independent samples. Because there was scant *a priori* evidence to guide the specification of a structural model, the initial structure was derived using Exploratory Factor Analysis (EFA) primarily in the US sample, which was the largest. It was necessary to start with the largest sample because it had the most degrees of freedom and so was better suited to estimating parameters from such a large number of variables. The confirmatory step used only data from Lebanon, Singapore, and India.

Initially, all four samples were combined into a pooled dataset, and a correlation matrix between pairs of the worldview variables was estimated using Full Information Maximum Likelihood (FIML) to deal with missing values. This correlation matrix was then submitted to three processes—Parallel Analysis, comparison to data with known structure, and Very Simple Structure—that provided empirical guidance in choosing the optimal number of factors to extract. In parallel analysis (PA; Horn, 1965), eigenvalues are calculated for datasets of the same dimensions as the test case that are randomly generated from a population with zero factors. The eigenvalues are averaged across number of factors extracted and represent a threshold below which eigenvalues differ from one due to sampling error only. PA proposes that factors are meaningful if their eigenvalues are above this threshold. This criterion tends to lead to over-extraction (Ruscio & Roche, 2012). The “comparison to data with known factorial structure” approach (CD; Ruscio & Roche, 2012) builds on PA by comparing observed eigenvalues to those calculated from simulation data with a known factorial structure with exactly the

number of factors being extracted. The Very Simple Structure approach (VSS; Revelle & Rocklin, 1979) formalizes the often used heuristic of focusing on high factor loadings and ignoring the smaller ones by comparing the generated pattern matrix to one in which smaller loadings are set to zero. This method has a tendency to under-extract.

The results of the three approaches did not agree, but they did give a general range of factors to extract between four and eighteen. At this point, only the US sample was used for derivation of the structure. Factor solutions between four and eighteen were estimated using the US data and were examined according to a set of theoretical and pragmatic criteria for deciding on an optimal number of factors. Firstly, solutions with fewer factors were preferred for the sake of parsimony. In addition, factors needed at least four items with substantial primary loadings for them to be properly testable in a confirmatory framework. Factors whose primary loading items were not all from the same stem were preferred because they were less likely to be artifacts of item proximity or shared wording. Finally, factors had to be fairly interpretable, had to represent a relatively coherent theme, and had to remain distinguishable from other factors. The six-factor solution was chosen as optimal because its factors best satisfied these criteria.

After the six factors were extracted, their indicators were pruned so that the factors would be more unidimensional. Unidimensionality is a desirable psychometric property and is rewarded in the context of traditional Confirmatory Factor Analysis (CFA). In order to maximize unidimensionality, the eight factor indicators (twice the recommended four in CFA) whose pairwise correlations tended to be most close to the factor's mean inter-item correlation were selected to specify the factor in the measurement invariance tests. Selecting indicators based on average pairwise correlations

instead of high loadings or high correlations decreases the risk of retaining redundant items. It also decreases the variance in inter-item correlations, thereby increasing unidimensionality (a correlation matrix in which all correlations are identical in magnitude will produce exactly one large factor, with each remaining factor representing the uniqueness of one variable).

This structure (of six factors with eight indicators each) derived in the US sample served as a baseline for comparison in the remaining three countries, Lebanon, Singapore, and India. The samples from these countries were subjected to increasingly stringent measurement invariance tests to explore the effect of constraining estimates to equality across groups on overall model fit. Measurement invariance is an approach that consists of tests on the generalizability of a measurement model across groups (Bou Malham & Saucier, 2014; Vandenberg & Lance, 2000). The most lenient level of invariance, configural invariance, constrains the number of factors (and commonly only allows indicators to load on a single factor) across groups. If this level is met, then it is possible to say that the basic factor structure, i.e., the number of factors and the indicators that load on each factor, is the same across groups. The next level of invariance, factorial invariance, constrains factor loadings to equality across groups. If established, factorial invariance suggests that the content of each factor is well matched across groups, in the sense that each factor is a linear combination of its indicators weighted identically across groups. Although stricter tests of invariance are possible, factorial invariance was the target of the study. Factorial invariance allows for a common interpretation of the factors and their correlations with external variables across groups (see Vandenberg & Lance [2000] for more detail).

Two methods of specification were used for the purpose of comparing the results of the measurement invariance tests. The first method was the traditional CFA, in which factors and indicators are explicitly specified and cross-loadings are generally set to be null. The second method was the related and more novel Exploratory Structural Equation Modeling method (ESEM; as described in Asparouhov & Muthén, 2009), which amounts to a multi-group EFA. In ESEM, only the number of factors needs to be specified, and indicators are allowed to load freely on all factors. The two methods of specification yielded similar results although the benefits of using one method over the other are explored later in the manuscript. All models were estimated using full information maximum likelihood in Mplus 7.0 (Muthén & Muthén, 2012).

The next steps in the analysis depended on the fit and comparability across countries of the test structure. Bad fit would have necessitated serious overhaul of the model. However, as will be seen, initial fit was acceptable, and so the model was refined to improve fit based on modification indices and loadings. Initially, items that were prominent in the modification indices of more than one country or that had relatively high modification indices in any country were eliminated. Then, items that had loadings less than 0.2 in absolute value on their primary factor were eliminated. Factor scores were then calculated for the purposes of testing concurrent validity of the WAQ.

In order to test the existence of a direct correlation between worldview and its outcomes, scores for the factors on the WAQ were correlated with SWLS, MIL, and IT. There was an alternative hypothesis that it is not the particular configuration or content of an individual's worldview that confers the benefits of meaning and satisfaction but rather the degree to which an individual's worldview corresponds to the consensual worldview

of the corresponding country. In order to test this hypothesis, worldview congruence, referred to in the results and interpretation as normativity, was calculated within each sample as the correlation between an individual's responses on all 179 worldview items (including the items that constituted the WAQ) and the mean responses of the country in which the individual was located on those items. All worldview items were used in the calculation of normativity in order to have normativity represent overall worldview via a maximally broad domain coverage of worldview, and in order to maximize the statistical power available for the calculation of each individual's normativity. Finally, normativity was then itself also correlated with SWLS, MIL, and IT.

Results

In order to obtain empirical guidance on the number of factors to extract, a covariance matrix was estimated from all four country samples combined using FIML and submitted to CD, VSS, and PA, which recommended four, eight, and eighteen factors respectively. A smaller number of factors is generally preferred, so the factor solutions consisting of four to eight factors of an EFA of the US sample were examined first. Promax rotation was selected because there was no theoretical reason for the factors to be orthogonal, but relatively distinct factors make for a simpler structure and interpretation.

Ultimately, the six-factor solution was selected over the other solutions because it satisfied the criteria for the optimal number of factors presented in the procedure section (see Appendix B for a listing of the top 10 loadings on each factor from the 4, 6, 8, and 13 factor solutions). Unlike the solutions with fewer factors, the six-factor solution consisted of factors, including the first, that were all interpretable and had significant

negative loadings. Unlike the solutions with a greater number of factors, the factors in the six-factor solution were generally not restricted to items from the same stem. There was only one exception: a factor whose indicators came entirely from the stem “Human beings are unique because they have”. This factor was assumed to be substantive because not all the items from the stem in question loaded significantly on it and because it was extracted consistently in every solution from two to eight factors. The factors were labeled “Trust in the World”, “Mistrust of the World”, “rational explanation”, “human exceptionalism”, “agency in the supernatural”, and “mystical spirituality”.

Eight indicators (twice the preferred minimum number in confirmatory measurement models) were chosen to identify each factor in the measurement invariance test. In order to minimize the variance around each factor’s mean inter-item correlation and maximize the factor’s unidimensionality, indicators were selected from pairs of items that had the closest pairwise correlations to the factor’s mean inter-item correlation. Table 3 (see Appendix A for all tables and figures) shows the list of these items by factor. This structure of six factors with eight indicators each was the basis of comparison in the following measurement-invariance tests.

In order to test the cross-cultural generalizability of the specific six-factor structure derived in the US sample, it was submitted to a series of measurement-invariance tests in the remaining countries. Ideally, the tests would produce evidence of configural and factorial invariance. As previously noted, factorial invariance is particularly important for the purposes of external validation because it is necessary for comparing correlation coefficients across countries (see Vandenberg & Lance [2000] for

more detail and Bou Malham & Saucier [2014] for an example). The models were specified in both CFA and ESEM in order to test the comparability of the results.

The recommendations of Hu and Bentler (1999) on evaluating fit were followed and a variety of fit indices were examined: the standardized root mean square residual (SRMR), the root mean square error of approximation (RMSEA), and the comparative fit index (CFI). SRMR is a measure of absolute fit, i.e., how well (on average) the specified model reproduces the observed correlation matrix. RMSEA indicates absolute fit adjusting for model parsimony, i.e., the magnitude of the covariance residuals are adjusted for degrees of freedom. CFI reflects the proportion of improvement in fit relative to the null (or independence) model. Hu and Bentler (1999) suggest that adequate model fit is indicated by the following: CFI should ideally be greater than .95, RMSEA should be less than .06, and SRMR should be less than .08. Hu and Bentler also suggest more lenient standards for marginal fit (CFI: .90-.95, RMSEA: .06-.08, and SRMR: .08-.10). Table 4 (see Appendix A for all tables and figures) shows the fit of the configural and factorial invariance models in both CFA and ESEM specifications (see also Appendix C for complete output of both configural and factorial tests using the ESEM specification, including an extended list of fit statistics, loadings, and error variances).

The CFA configural test of invariance met the more stringent levels of good fit for RMSEA ($0.053 < 0.06$) and SRMR ($0.076 < 0.080$). It did not meet the standard of good fit for CFI ($0.798 < 0.90$). Although it fit better than the CFA model, the ESEM test of invariance had the same profile on its fit indices (RMSEA = $0.043 < 0.06$, SRMR = $0.041 < 0.08$, and CFI = $0.893 < 0.9$). Importantly, despite the fact that ESEM necessitated only specifying the number of factors and freely allowed cross-loadings,

each set of eight indicators loaded primarily on a shared factor thereby forming a structure very similar to the one specified in the CFA test of invariance. The only difference in the structure was an arbitrary one, that the factor corresponding to factor 4 in the CFA solution was extracted before the factor corresponding to factor 3 in the CFA solution. For the sake of consistency, the naming scheme applied to the CFA solution was also applied to the ESEM solution. In other words, the factor labeled factor 3 in ESEM was extracted fourth, and the factor labeled factor 4 was extracted third. Fit did not deteriorate significantly in the test of factorial invariance (CFA: RMSEA = 0.055, SRMR = 0.087, CFI = 0.779; ESEM: RMSEA = 0.046, SRMR = 0.064, CFI = 0.852). CFI was the only indicator that did not meet even the lenient criterion for fit. Low CFI is a fairly common problem in psychological measures (e.g., Bou Malham & Saucier, 2014), and it tends to reflect situations where indicator loadings are not very high (i.e., deviation from a null model is incomplete).

The above results suggested that the factor structure derived in the US replicated fairly well in Lebanon, Singapore, and India. The model was further refined with the goal of raising the CFI of the best fitting factorial invariance model (ESEM) in the non-US countries past the threshold for marginal fit. Indicators were culled that appeared in the list of modification indices of more than one country or that would have produced the greatest change in chi-squared until removing items would have caused a factor to have fewer than the requisite 4 indicators. The eliminated items are italicized in Table 3. The first two items eliminated were: “Beyond the physical world, there is nothing” for having the largest single modification index (49.98, which was relatively high in context; the two next highest modification indices were 35.11 and 32.00) and “There exists a spiritual

world that can grant requests that are reasonable or possible” for being the only item with modification indices greater than 20 in more than one country (27.48 for adding a correlated error term in India and 22.45 for adding a correlated error term in Singapore).

Since the goal was to increase CFI, factors were then examined to eliminate items with relatively low loadings, beginning with items loading at or below .40 on their primary factor. “Human behavior tends naturally and inevitably to be just and fair to other people” was eliminated for having a .36 loading on Factor 1. “Humans societies fundamentally are politically and socially just” was eliminated for having a .40 loading on Factor 2. “When moral rules are violated, the consequences end when the person who violated the rules dies” was eliminated for having a .36 loading on Factor 6.

The final round of item culling combined the previous strategies of eliminating items with relatively low loadings on their primary factors or relatively large modification indices across countries. “Basically, this world is just, with people generally getting the outcomes they deserve” was eliminated for having a relatively low .43 loading on Factor 1. “Humans everywhere are basically moral” was eliminated for having relatively high modification indices (larger than 10) for correlated error terms in all 3 countries. “Human behavior tends naturally and inevitably to be unfair and unjust to others with people exploiting other people” was eliminated for having a relatively low .44 loading on Factor 2. “Humans are unique because they have life” was eliminated for having relatively large modification indices (larger than 10) in 2 countries. “The most valid way to gain knowledge of reality is to rely on divination” was eliminated for having a relatively low .40 loading on Factor 6. Finally, “Moral rules and moral codes are set by a transcendent source, like a divine being or spirit” was eliminated for having

modification indices in 2 countries. Both of these modification indices recommended freeing some of the equality constraints across countries of the item's loadings on Factor 2, which would be counter-productive to the process of improving the fit of factorial invariance.

The goal was met as eliminating items improved fit to the point of acceptable fit for CFI (0.913) in the ESEM specification. Similar modifications did not improve CFI as much in the CFA specification ($0.838 < 0.90$). Fit statistics of the model with the reduced number of indicators can be seen in Table 4 (although the measurement invariance tests necessitate fixing the factor means to 0 in order to be identified, see Appendix D for the arithmetic means and standard deviations of the factor indicators in the optimized model with the reduced number of indicators grouped by factor).

Although the ESEM model showed better fit than the CFA model, factor scores were calculated based on the factorial invariance test models in both specifications in order to continue the comparison between the results of the two procedures. Factor scores were calculated separately in the US sample based on a six-factor EFA for the ESEM case and a six-factor CFA with no cross-loadings for the CFA case. These models were run using just the reduced set of indicators from the refined model. The two sets of factor scores were then correlated using FIML with the means of the items for each of the external criteria: SWB, MIL, and IA. Two versions of the IA measure were used. The longer version (represented by IAall) represents a more generalized sense of inequality aversion. The 9-item subset (represented by IA9) has a narrower focus and can be interpreted more as disaffection with elites and the current political establishment.

The patterns of correlations between factors and outcomes were very similar if not identical across ESEM and CFA. The following interpretation relies on the ESEM specification as canonical. The correlations between the ESEM model's factor scores and the external criteria can be seen in Table 5. Figure 1 (see Appendix A for all tables and figures) graphically depicts the pattern of correlations in both the ESEM and the CFA specifications.

The hypothesis proposed for the relationship between worldview and the external criteria was that worldview should be positively correlated with SWB, MIL, and both versions of IT. Two of the 6 factors, Trust in the World (TiW, Factor 1) and Agency in the Supernatural (AiS, Factor 5), fit this pattern best. In general, TiW medium to large positive correlations with IT and small to medium positive correlations with SWB and MIL. The effect sizes tended to be smaller for AiS to the point where all correlations but the one with SWB were non-significant in India. The pattern of correlations between the remaining factors tended to be more country-specific, i.e., Mistrust of the World (MoW, Factor 2), Human Exceptionality (HEX, Factor 4), and Mystical Spirituality (MSP, Factor 6), or tended to be fairly consistent across countries but mismatched to the hypothesis, i.e., Rational Explanation (REX, Factor 3).

In the case of Mistrust of the World (MoW, F2), because it is negatively valenced, the hypothesis would expect negative correlations with SWB, MIL, and IT. As a general rule, MoW showed a small to medium negative correlation with MIL. While the correlation with SWB was negative in the USA and Singapore, it was positive in Lebanon and non-significant in India. MoW was generally not significantly correlated with IT.

Human Exceptionality (HEX, F4) showed the expected positive correlations with SWB and MIL in all but Singapore, where the correlations with SWB and MIL were non-significant. It was generally uncorrelated with IT in all but the US, where it showed the expected positive correlations. One possible explanation for this pattern of correlations is that belief that humans are exceptional and unique is associated with happiness and meaning because it accords humans with a privileged position in the world. In some countries, this privileged position is associated with greater inequality tolerance while in others it is associated with less.

The pattern of correlations for Mystical Spirituality (MSP, F6) was even more country-specific. MSP showed small to medium positive correlations with IT in Lebanon and the USA and non-significant correlations with IT in India and Singapore. It was uncorrelated with MIL in all four countries, positively correlated with SWB in Lebanon and India, and uncorrelated with SWB in Singapore and the US. It is possible that MSP was uncorrelated with meaning in life because it does not offer a clear path to positive outcomes in life or the afterlife but instead offers beliefs about reliable ways to commune with the spiritual world.

Rational Explanation (REX, F3) showed small to medium negative correlations with IT in all countries and small positive correlations with SWB and MIL in all countries but Singapore, where the correlations were non-significant. It is possible that rational explanation, whose indicators reference scientific explanation of the natural world, is associated with a particularly critical view of the established socio-political order and, by extension, inequality aversion rather than inequality tolerance. The

emphasis on the orderliness and intelligibility of the world and on the effectiveness of direct action may explain the association with SWB and MIL.

An alternative hypothesis to the one presented above which proposes a direct link between worldview and the external criteria that represent the functions of worldview is that it is person-group congruence on worldview, here called normativity, that is linked to the external criteria. In other words, normativity should be positively correlated with SWB, MIL, and IT. Table 6 and Figure 2 show list the correlations between worldview normativity and each of the external criteria (see Appendix A for all tables and figures).

The pattern of correlations between normativity and the external criteria was relatively consistent across countries but only partially supported this hypothesis. As a general rule, normativity was uncorrelated with SWB. It showed consistent small to medium positive correlations with MIL and less consistent negative correlations with IT that range from null to medium (although the range of variation was smaller for the 9-item measure than for the full measure). This pattern suggests that individuals who are more representative of the mean worldview of their country are more likely to experience their life as meaningful, and (at least in Lebanon and the USA) less likely to tolerate inequality. It is not uncommon for normativity to be associated with other desirable characteristics, and there is some indication that these associations are substantive as opposed to artefactual as a result of response bias. (Bou Malham & Saucier, 2016).

How does the 6-factor model compare to normativity in its correlations with the external criteria? SWB was correlated with all 6 factors in Lebanon, with 5 of the 6 factors in India and the USA, and with 3 of the 6 factors in Singapore but was

uncorrelated with normativity in all but the USA. This would suggest that the worldview factors are more consistently associated with life satisfaction than normativity. This is especially true of Trust in the World and Agency in the Supernatural, which were correlated with SWB in all 4 countries. There were fewer consistent correlations between the 6 factors and IT. Only 2 of the 6 factors, TiW and Rational Explanation, were significantly correlated with IT. The correlations between normativity and IT were significant in only 2 of the 4 countries, and the effect sizes were smaller than those of the correlations between IT and each of TiW and REx. This suggests that those specific factors, though not worldview assumptions in general, are better predictors of IT than normativity. On the other hand, only Mistrust of the World was correlated with MIL in all four countries, and the effect sizes were smaller than those of the correlations between normativity and MIL, which were significant in all four countries. This suggests that normativity has a more consistent relationship than the six factors with the experience of meaning in life.

CHAPTER IV

DISCUSSION, LIMITATIONS, AND CONCLUSION

Discussion

The concept of worldview has a long history in philosophy, psychology, and anthropology and has the potential to serve as a unifying framework and foundation for many higher-order beliefs and values. The lack of a comprehensive measure of worldview has made the study of worldview and its relation to other psychological variables difficult. The main goal of this manuscript was to develop a culturally de-centered and relatively comprehensive measure of worldview assumptions, the Worldview Assumptions Questionnaire (WAQ), and test the hypothesis that the structure of worldview assumptions is fairly generalizable across human societies.

A six-factor structure derived in the US met the criteria for factorial invariance in Lebanon, Singapore, and India (at the more strict cut-offs of $<.06$ for RMSEA and $<.08$ for SRMR and the more lenient cut-off of $>.90$ for CFI). In line with the Redfield anthropological tradition, these results supported the hypothesis that worldview assumptions are organized into a finite set of coherent themes that are fairly similar across national groups although the actual adopted assumptions within any theme vary somewhat from culture to culture.

These factors were: 1) Trust in the World, a general belief that the world is safe and ordered and that humans are good and trustworthy; 2) Mistrust of the World, a general belief that the world is dangerous and that humans are evil and untrustworthy; 3) Rational Explanation, a belief that the world is deterministic and understandable using

the scientific method; 4) Human Exceptionality, a belief that humans have unique distinguishing features (e.g., a soul, free will, etc.) that set them apart from other species; 5) Agency in the Supernatural, a belief in the existence of a spiritual world that human action can reliably influence; and 6) Mystical Spirituality, a belief in the existence of a spiritual world that humans can commune with and petition but can influence less reliably.

How does the content coverage of the 6 factors of the WAQ compare to that of the collated model of worldview (Koltko-Rivera, 2004), from which a substantial portion of the initial item pool was derived? In making this comparison, it is important to note that the collated model of worldview was a compilation of thematically grouped worldview beliefs that appeared in at least one philosophical or psychological source that the author reviewed. The list of themes was purposefully kept broad so that a correspondingly broad pool of items could be derived for the purpose of empirical testing. The process by which the WAQ was derived was such an empirical test of the collated model of worldview (expanded with material from other sources) that emphasized model parsimony and cross-cultural replicability in the selection and evaluation of factor structures. It is possible that extracting a larger number of factors would allow more room for robust country-specific factors and represent more of the content in the collated model of worldview, but its author did not necessarily expect the entirety of the model to be retained after empirical testing.

Broad themes in the collated model of worldview correspond roughly to the common stems included in the initial pool of items from which the WAQ was derived, but, with the exception of Human Exceptionality, itself a blend of Koltko-Rivera's

“Relation to the Biosphere” and “Nature-Consciousness”, the factors of the WAQ had indicators that came from different stems and consequently blended themes in the collated model of worldview. In fact, having indicators that came from different stems was one of the criteria used in selecting an appropriate factor solution to the first exploratory factor analysis. Trust in the World and Mistrust of the World blended the moral orientation of humans and their mutability, world justice, sociopolitical justice, orderliness of the world, and world justice. Rational Explanation blended relationship to authority, human agency over behavior, and the efficacy of behavior in producing desired outcomes in addition to elements about dreams, illness, and causality that were added to item pool from models other than the collated model of worldview. Agency in the Supernatural blended elements from epistemology, the efficacy of behavior in providing desired outcomes, ontology, and ultimate justice in the afterlife. Mystical Spirituality blended elements from epistemology with additional elements about dreams, spirits, and the afterlife.

Though the six factors of the WAQ do not include all elements of the Koltko-Rivera (2004) collated model of worldview, it is not unusual for the responses of lay persons to cluster into themes that blend philosophical or theoretical categories that experts tend to keep distinct (e.g., Saucier, 2013). For example, while epistemology is its own branch of philosophy, only two options that reference reliable sources of knowledge figure into the WAQ, one in Agency in the Supernatural (“The most valid way to gain knowledge is to rely on one’s own mystical and spiritual experiences”) and the other in Mystical Spirituality (“The most valid way to gain knowledge is to rely on divination: fortune-telling or trying to predict the future”). These elements are clustered with other

items that fit particular approaches to spirituality and religiosity rather than clustering with each other or with similar items with an epistemological bent. Given the focus on cross-cultural replicability, it is notable that two of the factors, Trust in the World and Mistrust of the World, contain elements that reference the belief in a just world, which is an extensively researched area of worldview beliefs, and two more, Agency in the Supernatural and Mystical Spirituality, contain religious elements when religiosity is an area with relatively large cross-cultural differences (Saucier, Kenner, Iurino, Bou Malham, Chen, et al., 2015).

The factorial invariance of the WAQ across the four countries in this study was a promising initial finding in support of a generalizable structure of worldview assumptions across countries despite potential response variation both within and across countries. Factorial invariance also allowed meaningful comparisons across countries of correlations between worldview and external criteria that served as indirect indicators of the theoretical functioning of worldview (Vandenberg & Lance, 2000). Some of these external criteria, like subjective well-being, have documented direct relationships with worldview components while others, like inequality aversion vs. inequality tolerance, are related to the social justice and social inequality variables associated with worldview components. These correlations between the factors of the WAQ and subjective well-being (SWB), meaning in life (MIL), and inequality tolerance (IT) provided more evidence for the connection between worldview and human needs.

The initial hypothesis was that a coherent worldview, regardless of content, provides benefits in the form of increased well-being and more derived meaning coupled with a need to maintain the status quo to which the worldview refers through increased

inequality tolerance. This initial hypothesis was overly parsimonious, and the results suggest a more nuanced view. Worldviews are not always associated with all three criteria, and when they are, the associations are not always parallel. Some factors of the WAQ, namely Trust in the World and Agency in the Supernatural, supported the initial hypothesis.

For example, Trust in the World was straightforwardly associated with higher well-being and life meaning and a higher tolerance of inequality. This is notable because Trust in the World is the WAQ factor that is most reminiscent of the belief in a just world (BJW; Furnham, 2003; Lerner, 1997). The BJW is arguably a component of worldview and is associated with well-being in many domains just like Trust in the World is positively associated with well-being and meaning in life. The BJW is also associated with victim derogation, a reaction to the threat of another's persistent suffering to the BJW which entails blaming the victim for their situation in order to justify their continued suffering. The association between Trust in the World and inequality tolerance is compatible with the phenomenon of victim derogation.

Mistrust of the World, on the other hand, was consistently negatively correlated with MIL, as expected, but was less consistently correlated with SWB and TI. A connection between beliefs that the world is unsafe and that humans are untrustworthy on one hand and decreased happiness and meaning on the other hand is fairly intuitive. It seems that this does not necessarily come with decreased inequality tolerance. It may be that the belief that the world is fundamentally unsafe and a sense of one's life being meaningless are not conducive to a focus on inequality or a desire to effect change. It is

also possible that individuals high in Mistrust of the World see inequality as an integral part of and contributor to the inhospitable world.

Two of the other factors, Human Exceptionality and Mystical Spirituality, had patterns of correlations that were fairly country-specific and therefore not as clearly in support of the initial hypothesis. The association between Human Exceptionality, the belief that humans possess unique characteristics that allow for a richer interaction with the world than that of other species, and happiness and meaning is also fairly intuitive and appeared in all four countries. The relationship between human exceptionalism and inequality tolerance was country-specific in that it was negative in Lebanon and India but positive in the US. It is difficult to explain the source of this variation at this stage, but there may be particular aspects of the US experience that produces a link between happiness and meaning associated with human exceptionalism and decreased political alienation and dissatisfaction with wealth inequalities.

A lack of a correlation with meaning was the only consistent component of the pattern of correlations between Mystical Spirituality and the external criteria. Though it is associated with greater happiness or greater inequality tolerance in certain countries, the belief in one's capacity to commune with the spiritual world does not seem to come with a greater sense of meaning or purpose.

Rational Explanation was more difficult to interpret within the framework of the initial hypothesis as it was positively associated with SWB and MIL but negatively correlated with IT in all countries. It would appear that although the belief in the efficacy of direct action and the capacity of scientific exploration to explain the world might come

with greater well-being and greater life meaning without greater tolerance for inequality. It may be that the content of worldview does impact its relationship with other variables. One possible explanation in this case is that a belief in the reliability of scientific exploration comes with or from a critical eye that is dissatisfied with the state of the world. This sense of dissatisfaction comes with a sense of empowerment in the ability to effect change so that one experiences a sense of well-being and a sense of purpose while pursuing change.

In summary, what sorts of worldview beliefs were associated with each of happiness, meaning, and inequality tolerance? SWB was associated with Trust in the World and Agency in the Supernatural. In other words, the beliefs that the world is safe, that humans are trustworthy, that society is just, that there is justice to be found in the afterlife, and that there exists a spiritual world that humans can interact with for better outcomes promoted happiness. MIL was (negatively) associated with Mistrust of the World in all four countries. In other words, the beliefs that the world is unsafe, that humans are untrustworthy, and that society is unjust decreased the perception of meaning in one's life. Like SWB, IT was positively correlated with Trust in the World in all four countries, suggesting that the beliefs that the world is trustworthy came with a decreased perception of inequality. IT was also consistently negatively correlated with Rational Explanation. In other words, the beliefs that the world is organized according to certain physical laws, that humans create their own social order, and that many phenomena can be understood by scientific examination came with increased inequality aversion.

An alternative hypothesis proposed that worldview normativity, i.e., person-group congruence on worldview assumptions, calculated as the correlation between an

individual's responses to all the worldview items (including those that were not chosen to be indicators for the WAQ factors) and the mean responses of the corresponding country, would correlate positively with happiness, meaning in life, and inequality tolerance. Though the pattern of correlations between normativity and the external criteria was fairly consistent across countries, it did not quite match the pattern set by the hypothesis. Worldview normativity was not associated with happiness, but it was associated with greater meaning and decreased inequality tolerance. It would appear that individuals whose responses were fairly representative of those of typical response in their country experience a greater sense of meaning and greater intolerance of wealth inequality and elites. Consistent positive associations with MIL were missing from the list of correlations described for each of the factors above, so normativity (in contrast with Mistrust of the World) promotes meaning, while specific worldview dimensions promote happiness and inequality tolerance. One possible explanation for normativity being associated with MIL but not with SWB is that sharing a common worldview with others is a source of meaning in itself, but a shared worldview is not necessarily one that maximizes happiness for any individual person nor is it necessarily optimal. For example, a shared view that the world is dangerous may produce meaning in the sense of being a coherent framework with which to understand one's life, but it will not necessarily make one happy.

The above interpretation was based on a directional hypothesis about the relationship between components of worldview and external criteria. Such an interpretation is usually framed in terms of having more or less of some variable being associated with having more or less of another. However, scoring higher or lower on

Trust in the World (or any other factor) does not necessarily reflect having a more or less coherent worldview. By extension, such analyses cannot directly answer the question of whether having a more coherent worldview is associated with the external criteria.

However, scores on the factors can provide some answer to that question. By virtue of the 6-factor structure being interpretable and replicable, ordered variation in the 6-factor structure at least roughly represents ordered variation within a coherent worldview structure (at the aggregate level, and so representing the individual worldviews of some people better than others). Consequently, significant associations between factor scores and external criteria, especially across multiple countries, suggest a relationship between worldview coherence and the external criteria. This relationship would be indirect. Given the importance of the question, it is beneficial to consider more direct ways of assessing the relationship between worldview coherence and external criteria.

The results of this study relied heavily on the assumption that though worldview assumptions are often implicit, they can be articulated, especially when an individual is prompted. It is possible that some aspects of worldview cannot be articulated at all or at least not when the prompt is having statements presented in block with related, sometimes contrasting statements. Structured interviews with more elaborate or interactive prompts may produce a different set of assumptions than the ones represented in the survey items and would provide more insight into idiosyncratic aspects of worldview. It is, however, more difficult to obtain larger sample sizes for the purposes of comparison with such a design.

Another novel contribution of this study is a comparison of the results of traditional CFA and those of the more novel ESEM. In terms of structure, the results of

the two methods of specification were very similar although the fit of the model under ESEM specification was significantly better. The ESEM specification gave much clearer indications of problematic cross-loadings as they were all estimated. The results of the correlations generated from both sets of factor scores were also very similar. Therefore, the two modes of specification appear fairly interchangeable although, when sample size permits, ESEM may be preferable when measurement development is at an earlier exploratory stage as it provides more information and more flexibility. It is also a less demanding test and therefore forces fewer restrictions on an exploratory model for good fit.

Limitations and Future Directions

The result of this study is a promising early version of a relatively comprehensive measure of cross-culturally replicable worldview assumptions with indicators based on a broad survey of the relevant literature and supported by evidence of factorial invariance across four fairly diverse countries. The number of indicators per factor was purposefully left fairly large so that future studies can have a broad number of indicators from which to build a more refined measure, in which cross-loadings are minimized even further and the optimal breadth of each factor better established. The fourth factor, Human Exceptionality, merits particular scrutiny in this regard due to the fact that its indicators all shared a common stem. If such a factor can be extracted with a set of indicators that are more varied in wording, it would reaffirm that Human Exceptionality is not a method factor generated by item proximity or by similar wording.

It is of course desirable to ensure that none of the factors are free of stem-dependent method factors due to similar wording and proximity of items. While it did seem to increase time to completion of the survey, one simple test of this would be to present the list of items completely randomized rather than grouped into stems. Another alternative is to create items that are worded completely differently and not grouped by stem and determine whether the structure replicates.

The correlation between worldview and the psychological variables chosen to represent theoretical functions of worldview were fairly varied across countries. For some factors, like Trust in the World, the pattern was consistent across countries and supported the hypothesis that certain components of worldview are associated with greater happiness, meaning in life, and tolerance for social inequality. For other factors, the pattern was either country-specific or did not support the hypothesis. It is important to explore this matter further and determine whether these results are replicable and, if so, what it means for the factors of the WAQ not to show the expected patterns of correlation. After the measure is further refined, it should be submitted to more rigorous tests of external validity that more directly test its relationship with the fulfillment of basic human needs. The ultimate promise of a measure of worldview is that it can unify psychological research on phenomena that have been considered separately. For it to do so, the WAQ needs to be studied in relationship with other measures of beliefs and values and shown to be more fundamental.

Although the set of countries where data were collected was fairly diverse, the survey was administered online and in English in all locations. The mode of administration may have produced certain biases in the measure, and it would be

interesting not only to replicate the structure in a more diverse set of countries but also when the survey is translated and presented in other languages. Besides the requirement of a certain level of English fluency, all participants were required to complete the survey online and were students at institutions of higher education in three out of the four samples. It is possible that English fluency, higher education, and access to computers and the Internet permit greater exposure to a more global worldview, which is the source of the similarity of worldview structure in this study. In such a case, a broader selection of participants may yield more idiosyncratic worldview structures.

Lastly, the issue of stricter tests of measurement invariance, e.g., scalar invariance, was not addressed in the context of this study. Factorial invariance was a necessary first step, even at this early stage, because it establishes that the factors, being identical linear combinations of their indicators, are actually comparable across countries. It also established the comparability of correlational relationships across countries and allowed the exploration of the concurrent validity of the measure. Factorial invariance is not sufficient for comparing factor means across countries, and the more difficult task of establishing the necessary scalar invariance is left to future studies.

Conclusion

The Worldview Assumptions Questionnaire (WAQ) is a comprehensive measure of worldview based on a broad review of the relevant literature in philosophy, anthropology, and psychology. It is culturally de-centered in that it shows measurement invariance across samples from four diverse countries, Lebanon, India, Singapore, and the US. It fills a gap in the study of worldview in having content that is thematically

independent of the proposed function of worldview as a facilitator of human survival goals, permitting the study of worldview without conflating it with its outcomes. Some aspects of worldview, including Trust in the World and Rational Explanation, are associated with positive outcomes such as greater well-being and greater meaning in life. The relationship between worldview and the preservation of the status quo (a main focus of worldview defense theory) is more complicated, and worldview can occasionally lead to less inequality tolerance and the motivation to disrupt the status quo. The WAQ is a necessary first step in the scientific study of worldview and its functions in human existence.

APPENDIX A

Table 1.

Stems and Leaves of Initial Worldview Items

Humans everywhere are basically
Good
Evil
Changeable
Consistent
Complex
Simple
Rational
Irrational
Trustworthy
Untrustworthy
Able to act according to their own free will
Determined by biological factors
Determined by environmental factors
Moral
Immoral
Instinctual
Spiritual
Animalistic
The same or similar in all groups no matter what group they are in
Different, superior, or inferior, in certain groups of people according to what group they are in
Only really becoming people when they begin to act responsible in performing their duties
In the relationship between humans and nature
Humans are at the mercy of nature
Humans and nature coexist in harmony
Humans have some control over nature and take natural resources
Humans are the caretakers of nature
There is damage, and the relationship is in trouble
Humans are unique because they have
A soul
Consciousness
Self-awareness
Motivations
Certain emotions, such as love, shame, and contempt
The ability to create new things
The ability to bring to bring order to the world
The ability to worship properly
The ability to influence the external world
Free will
Intelligence
Culture
Life
The most valid way to gain knowledge of reality is to rely on

Authority
Tradition
The senses
Rationality
Science
Intuition
Divination
Revelation
One's own spiritual or mystical experiences
Nothing because there are no valid sources of knowledge

Human behavior tends naturally and inevitably to

Be in line with past behavior, preserving tradition
Focus on the present
Focus on the future and be planned
Focus on internal qualities and activities, like emotion, personality, or spirituality
Focus on external qualities and activities, like achievement or possessions
Produce change or improvement
Maintain the current situation
Have moral dimensions and implications
Not have moral dimensions and implications
Be fair and just to other people
Be unfair and unjust to others with people exploiting other people
Be neither consistently just nor consistently unjust to other people
Be self-serving
Seek to maximize pleasure and avoid pain
Be affected by the social context
Be the same regardless of the social situation

Moral rules and moral codes are

Absolute, with guidelines that apply across all times and situations
Relative, with guidelines that vary by time, culture, or situations
Set by a human source, like the self or society
Set by a transcendent source, like a divine being or spirit
Universal in their scope, so everything in the world is treated with the same moral concern
Human in their scope, so the same rules apply to all of humanity
Immediate in their scope, so only similar others, such as friends and family, are treated with moral concern
Never a justification for violence
Sometimes a reasonable justification for violence
Violated by behavior, not by what's in the thoughts or feelings
Violated by certain kinds of thoughts, feelings, or desires
Violated only by intentional behavior, not mistakes or lack of awareness
Not important
Necessary
Used by powerful people to keep their power

When moral rules are violated, the consequences

Affect only the person who violated the rules
Are really none because there are no valid moral rules
Are none because people don't pay enough attention
Affect the person who violated the rules and the relatives of that person
Affect the community as a whole

Affect the person who was the target of the violation not the person who committed the violation
End when the person who violated the rules dies
Are passed on to the children of the person who violated the rules
Are passed on to any reincarnations of the person who violated the rules
Affect the situation after the death of the person who violated the rules

If someone wants an outcome to happen

Direct action, by the individual or a group of people, can make it happen
The intervention of a non-material force, such as prayer or ritual, can make it happen
The intervention of a non-material force, such as magic, can make it happen
There is no effective way to make the desired outcome happen

Human societies fundamentally tend to

Be tolerant of people who are different in some way, like beliefs, appearances, or lifestyles
Be uncomfortable with people who have different beliefs, appearances, or lifestyles, or try to change them
Have a clearly defined and relatively fixed hierarchy regarding who has authority and power
Have an even distribution of power, and people who are in power change easily or frequently
Prioritize individual needs and projects over group needs and projects
Prioritize group needs and goods over individual needs and projects
Be organized so that individuals need to depend on each other to meet their needs
Be organized so that individuals can meet their needs independently
Have little room for behavior to deviate from group norms and expectations
Have some general guidelines for behavior that are not strongly enforced
Be politically and socially just
Be politically and socially unjust
Be competitive
Be cooperative
Be organized so that individuals care little about others
Punish criminals for their wrongdoings
Help criminals reintegrate society
Be protective: Social institutions place restrictions on people to prevent them from harming others
Be chaotic unless there are rules and regulations
Be nurturing: Social institutions support people and their well-being
Be untrustworthy: Social institutions oppress, exploit, or hurt people
Be organized by supernatural creators
Be organized to resemble or reflect spiritual worlds
Be organized by humans
Be complex or fragmented

Social, philosophical, and religious truths are

Universal: true always and everywhere
Relative: The truth varies in its accuracy or changes depending on the context
Fully available: Everything there is to know is known or can be known
Partially available: There are some truths that cannot be known or obtained
Available only to a select person or group of people
At least hypothetically able to be attained by many different groups of people
Completely different from each other
Closely related and say the same thing

Basically, this world is

The result of a divine or transcendent plan or purpose
The result of chance and has no divine or transcendent purpose

Just one thing, made up of different aspects of the same basic entity
Made up of fundamentally different entities that cannot be united
Just, with people generally getting the outcomes they deserve
Unjust, with people generally getting outcomes they do not deserve
Neither consistently just nor consistently unjust
Balanced so that people who have too much lose it and people who have too little get more
Generally improving
Generally getting worse
Generally a dangerous place
Generally a safe place
Linear: In nature, time progresses from the past to the future
Cyclical: In nature, time consists of repeating ages and cycles
Experienced similarly by various people
Experienced differently by most people
Inherently ordered or organized
Inherently chaotic and disorganized
The only world to have ever existed
One stage of many other worlds that existed or will exist
Created especially for humanity
Bad
Good
Limited in its resources
Abundant in its resources
Sufficient in its resources for human needs

Beyond the physical world, there is

Nothing
A set of other universes having different laws
A world of ideals that cannot be experienced with the senses
A spiritual world that consists of one divine being
A spiritual world that consists of many divine beings
A spiritual world that contains spirits of people, like the spirits of those who have died
A spiritual world that contains non-human spirits, such as magical, natural, or demonic entities
A spiritual world that is morally concerned with the world and humanity and influences moral guidelines
A spiritual world that is not morally concerned with the world and humanity and does not influence moral issues
A spiritual world that intervenes or is capable of intervening in the physical world
A spiritual world that does not intervene or is incapable of intervening in the physical world
A spiritual world that is ultimately just, so people are rewarded or punished their based on their actions in life
A spiritual world that is ultimately unjust, so people's actions in life are not appropriately rewarded or punished
A spiritual world that can give objects special powers as talismans and protective charms
A spiritual world that can be contacted by humans seeking guidance or power
A spiritual world that can change the world and do things that would otherwise be impossible
A spiritual world that can grant reasonable requests but cannot do impossible things
A spiritual world that is a world where all things are joined in oneness
A spiritual world that all have access to
A spiritual world that has similar conditions to those in the physical world
A spiritual world that is a better place than the physical world

After a human dies

The body decomposes since it was just a temporary envelope
The body needs to be preserved so that resurrection can happen
The body needs to be preserved because if the body is damaged, the soul is also damaged
The soul may eventually be resurrected
The dead require proper rituals and assistance to move on
The dead continue to walk unless they are at peace
The soul returns to its divine source
The soul is reincarnated into another body
Consciousness stops existing
Reincarnation has a potential end or release

If a person or an object belongs to a particular group, then

He/she/it shares an underlying essence with other group members
He/she/it shares a superficial external resemblance with other group members
He/she/it shares an invisible link with other group members
Group boundaries are sharp, definite, and fixed
Group boundaries match natural distinctions
Group membership is permanent and does not change across time
Related persons or objects also belong to the same group
He/she/it still has its own unique identity
Some group members are more typical representatives of that group than others

Things in the world behave as they do because

They react to the feelings and desires of humans
They follow their own will and desires
They have an ultimate purpose to fulfill
They work to help humans and preserve the well-being of humans
They have force and energy that they exert
Of a finite number of causes, some of which are not easy to discover
Of physical laws that they obey
They were created that way
Humans perceive them that way

The cause of illness

Can be explained by science
Is divine punishment
Is failing to fulfill one's duties to the group
Is magic or hexes
Is chance
Is emotions, such as anger, sadness, or worry
Is lack of spiritual power
Is lack of magical power
Is the soul being dislodged from the body
Is unknown or unknowable
Is lack of personal control
Is impurities caused by human behavior

Dreams are

The by-product of increased activity in certain brain areas during sleep
A means of gaining insight into oneself and one's world
As real as experiences during waking life
Opportunities to commune with the supernatural world
Experiences of the soul of the sleeper having left the body
A continuation of waking thoughts or a recollection of waking experiences

Opportunities to commune with a different time or place
 A fulfillment of wishes that one may have consciously or unconsciously
 A means to influence the waking world
 A means to predict the future
 A guide to behavior in waking life
 An unsafe condition open to spiritual attacks
 An unsafe condition open to magical attacks
 A means of obtaining power or knowledge

Table 2.

Descriptive Statistics for Pilot Data

Condition	1	2	3
n	95	89	89
Time < 15 m	15 (14.7%)	6 (8.5%)	10 (11.5%)
International & < 15m	6 (40.0%)	1 (16.7%)	3 (30.0 %)
Time > 150 m	7 (6.9%)	6 (8.5%)	7 (8.0%)
Mean Response Time	41.46 (27.03)	45.43 (23.14)	49.19 (26.65)
Mean Acquiescence	2.93 (0.25)	2.93 (0.28)	2.87 (0.31)
Factor 1/Factor 2	1.53	1.16	1.55

Table 3.

List of Indicators Used to Identify Each Factor in Measurement Invariance Tests

Factor 1 – Trust in the World

1. Basically, this world is generally a safe place.
 2. Basically, this world is just, with people generally getting the outcomes they deserve.
 3. Humans everywhere are basically consistent.
 4. Humans everywhere are basically good.
 5. Human societies fundamentally are politically and socially just.
 6. Basically, this world is inherently ordered or organized.
 7. Humans everywhere are basically moral.
 8. *Human behavior tends naturally and inevitably to be fair and just to others.*
-

Factor 2 – Mistrust of the World

1. Humans everywhere are basically irrational.
2. Basically, this world is bad.
3. Humans everywhere are basically untrustworthy.
4. Humans everywhere are basically immoral.
5. Basically, this world is generally a dangerous place.
6. Human behavior tends naturally and inevitably to be unfair and unjust to other people or exploit other people.
7. *Human societies fundamentally are chaotic and disorganized.*
8. Humans everywhere are basically evil.

Factor 3 – Rational explanation

1. Human behavior tends naturally and inevitably to be affected by the social context.
2. Dreams are the by-product of increased activity in certain brain areas during sleep.
3. Human societies fundamentally tend to require behavior to fit group norms and expectations.
4. Human behavior tends naturally and inevitably to seek to maximize pleasure and avoid pain.
5. Human societies fundamentally are organized by humans.
6. Things in the world behave as they do because of physical laws that they obey.
7. The cause of illness can be explained by science.
8. If someone wants an outcome to happen, direct action, by the individual or a group of people, can make it happen.

Factor 4 – Human exceptionality

1. Humans are unique because they have self-awareness.
 2. Humans are unique because they have the ability to bring order to the world.
 3. Humans are unique because they have culture.
-

-
4. Humans are unique because they have life.
 5. Humans are unique because they have the ability to influence the external world.
 6. Humans are unique because they have the ability to create new things.
 7. Humans are unique because they have a soul.
 8. Humans are unique because they have free will.
-

Factor 5 – Agency in the supernatural

1. The most valid way to gain knowledge of reality is to rely on one's own spiritual or mystical experiences.
 2. If someone wants an outcome to happen, the intervention of a non-material force, such as prayer or ritual, can make it happen.
 3. *Beyond the physical world, there is a spiritual world that affects or is capable of affecting the physical world.*
 4. *There is a spiritual world that consists of non-human spirits.*
 5. *There is a spiritual world that can grant requests that are reasonable or possible.*
 6. *Moral rules and moral codes are set by a transcendent source, like a divine being or spirit.*
 7. Basically, this world is the result of a divine or transcendent plan or purpose.
 8. There is a spiritual world that can be ultimately just, so people are rewarded or punished there based on their actions in life.
-

Factor 6 – Mystical spirituality

1. *There is a spiritual world that can give objects special powers as talismans and charms (i.e., objects with the power to bring good fortune).*
 2. *Dreams are experiences of the soul of the sleeper having left the body.*
 3. When moral rules are violated, the consequences are passed on to any reincarnations of the person who violated the rules.
 4. After a human dies, the body needs to be preserved because if the body is damaged, the
-

-
- soul is also damaged.
5. The most valid way to gain knowledge of reality is to rely on divination: fortune telling or trying to predict the future.
 6. Dreams are opportunities to commune (i.e., come in contact) with the supernatural world.
 7. Dreams are a means to predict the future.
 8. *If someone wants an outcome to happen, the intervention of a non-material force, such as magic, can make it happen.*
-

Note: Italicized items were dropped in the process of refining the model.

Table 4.

Fit Indices of Measurement Invariance Tests of Initial Six Factor Structure in non-US Countries

	χ^2	df	RMSEA	CFI	SRMR
<i>Configural</i>					
CFA	5340.07	3195	0.053	0.798	0.076
ESEM	3697.30	2565	0.043	0.893	0.041
<i>Factorial</i>					
CFA	5415.35	3150	0.055	0.779	0.087
ESEM	4450.88	3069	0.046	0.852	0.064
<i>Factorial – Reduced Number of Indicators</i>					
CFA	2897.05	1809	0.050	0.838	0.082
ESEM	2233.40	1647	0.039	0.913	0.056

Table 5.

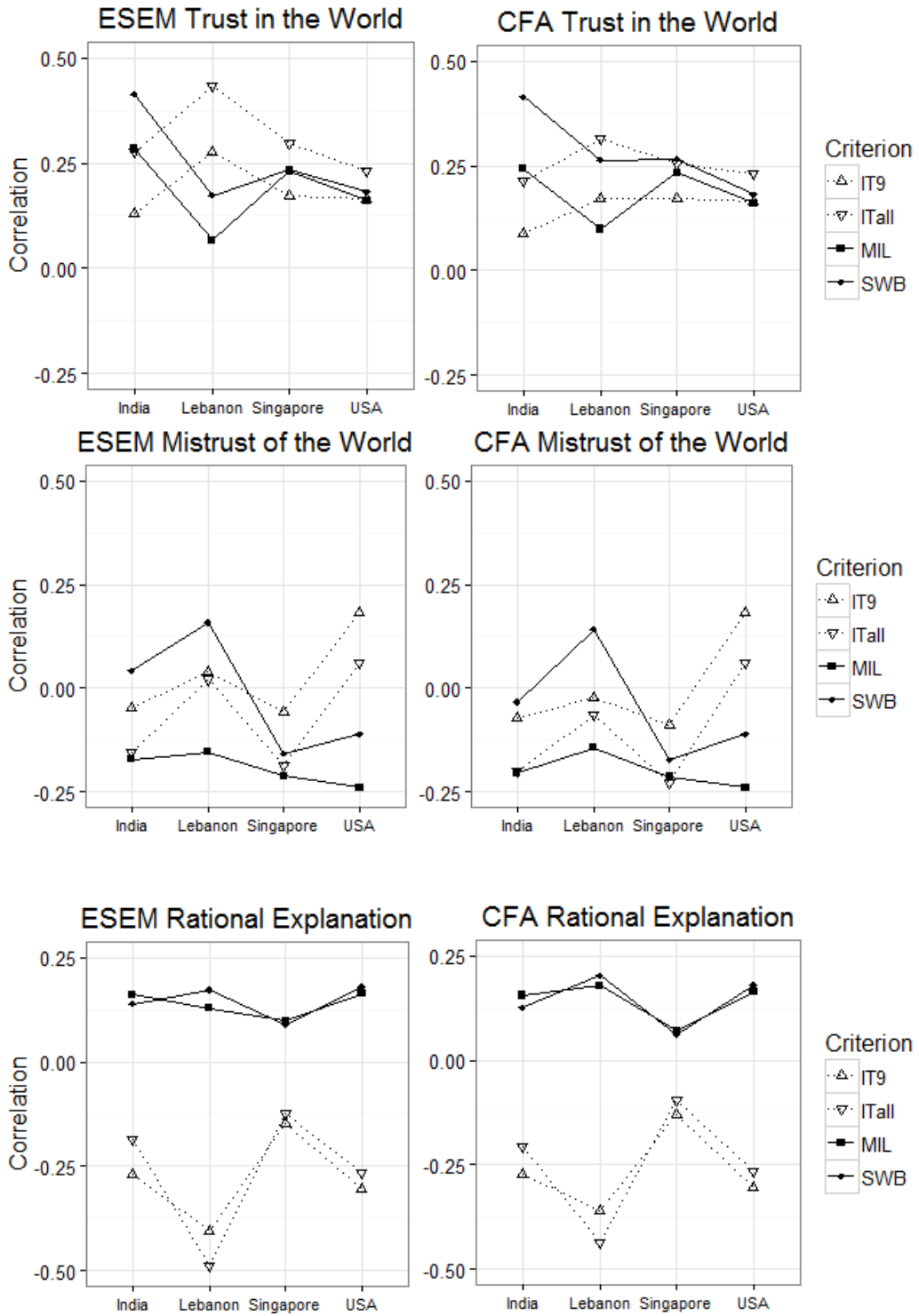
Correlations between Worldview Factor Scores (in ESEM) and External Variables across Countries

Criterion	Factor	India	Lebanon	Singapore	USA
Subjective Well-Being	1	.41 (.000)*	.17 (.016)*	.24 (.001)*	.18 (.000)*

	2	.04 (.498)	.16 (.028)*	-.16 (.023)*	-.11 (.011)*
	3	.14 (.025)*	.17 (.016)*	.09 (.199)	.18 (.000)*
	4	.20 (.002)*	.24 (.001)*	.07 (.325)	.17 (.000)*
	5	.16 (.011)*	.26 (.000)*	.19 (.007)*	.10 (.019)*
	6	.24 (.000)*	.18 (.016)*	.10 (.160)	-.03 (.436)
Meaning in Life	1	.28 (.000)*	.07 (.345)	.23 (.001)*	.16 (.000)*
	2	-.17 (.006)*	-.15 (.030)*	-.21 (.002)*	-.24 (.000)*
	3	.16 (.010)*	.13 (.069)	.10 (.150)	.16 (.000)*
	4	.27 (.000)*	.29 (.000)*	.05 (.430)	.27 (.000)*
	5	.05 (.419)	.32 (.000)*	.24 (.001)*	.20 (.000)*
	6	-.04 (.568)	.05 (.491)	.02 (.775)	-.06 (.197)
Inequality Tolerance (All items)	1	.28 (.000)*	.43 (.000)*	.30 (.000)*	.23 (.000)*
	2	-.16 (.012)*	.02 (.771)	-.19 (.007)*	.06 (.172)
	3	-.19 (.003)*	-.49 (.000)*	-.12 (.077)	-.27 (.000)*
	4	-.08 (.209)	-.07 (.317)	.07 (.304)	.17 (.000)*
	5	-.02 (.779)	.08 (.264)	.12 (.078)	.17 (.000)*
	6	.10 (.114)	.24 (.001)*	.12 (.075)	.21 (.000)*
Inequality Tolerance (9 items)	1	.13 (.038)*	.27 (.000)*	.17 (.013)*	.17 (.000)*
	2	-.05 (.439)	.04 (.577)	-.06 (.392)	.18 (.000)*
	3	-.27 (.000)*	-.41 (.000)*	-.15 (.031)*	-.31 (.000)*
	4	-.14 (.023)*	-.12 (.104)	.05 (.474)	.16 (.000)*
	5	-.01 (.876)	.06 (.400)	.06 (.412)	.17 (.000)*
	6	.10 (.118)	.13 (.079)	.11 (.120)	.24 (.000)*

Note: Correlation coefficient is followed by exact p-value in parentheses.

* indicates significance at $p < .05$.



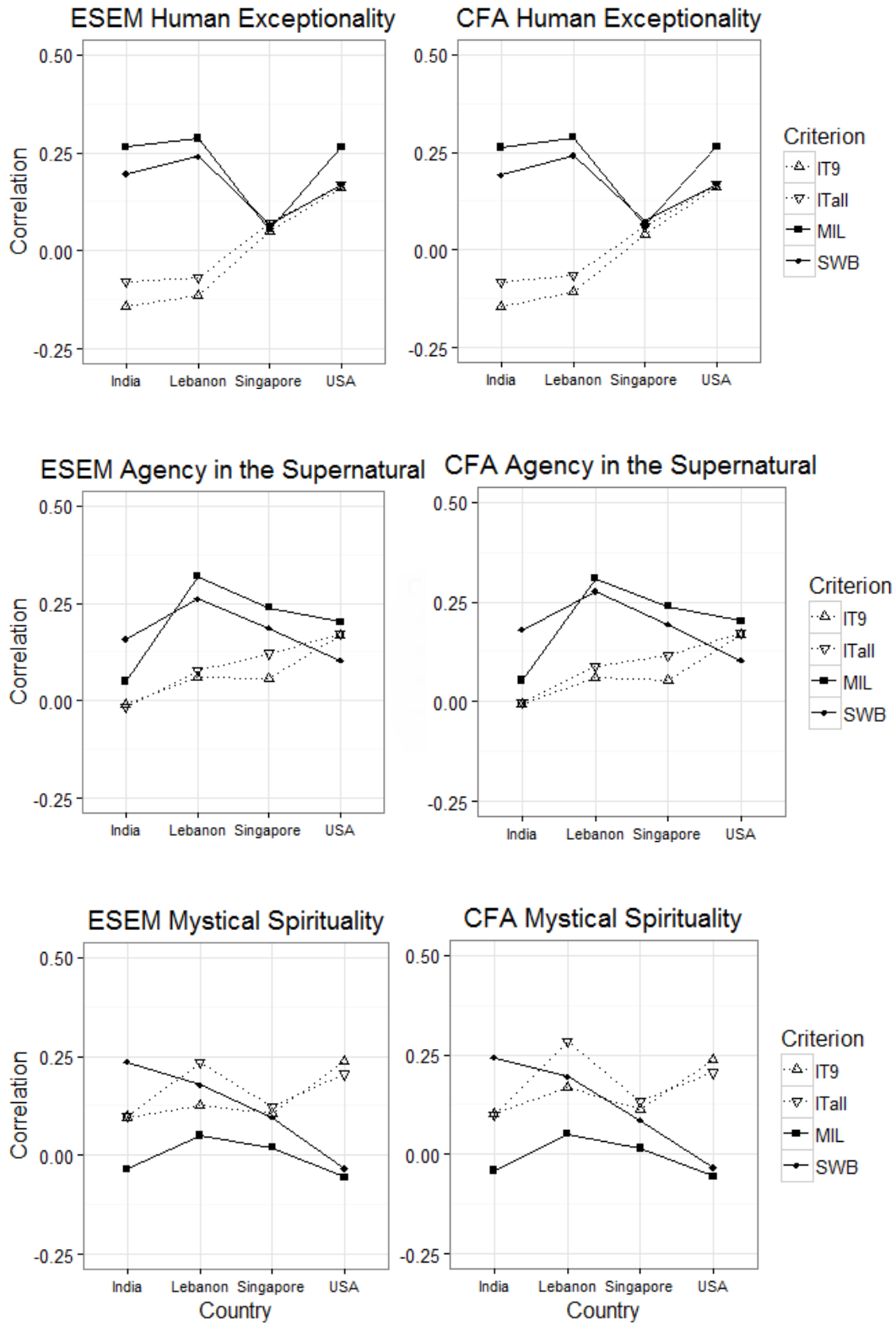


Figure 1.

Correlation of ESEM and CFA Specified Factor Scores with External Criteria

Table 6.

Correlations between Normativity Calculated across All Worldview Items and External Criteria

Criterion	India	Lebanon	Singapore	USA
Subjective Well-Being	-.03 (.688)	.00 (.990)	.03 (.414)	.13 (.002)*
Meaning in Life	.31 (.000)*	.22 (.003)*	.16 (.024)*	.24 (.000)*
Inequality Tolerance (All items)	-.03 (.650)	-.37 (.000)*	-.06 (.366)	-.22 (.000)*
Inequality Tolerance (9 items)	-.02 (.719)	-.16 (.036)*	-.02 (.781)	-.16 (.000)*

Note: Correlation coefficient is followed by exact p-value in parentheses.

* indicates significance at $p < .05$.

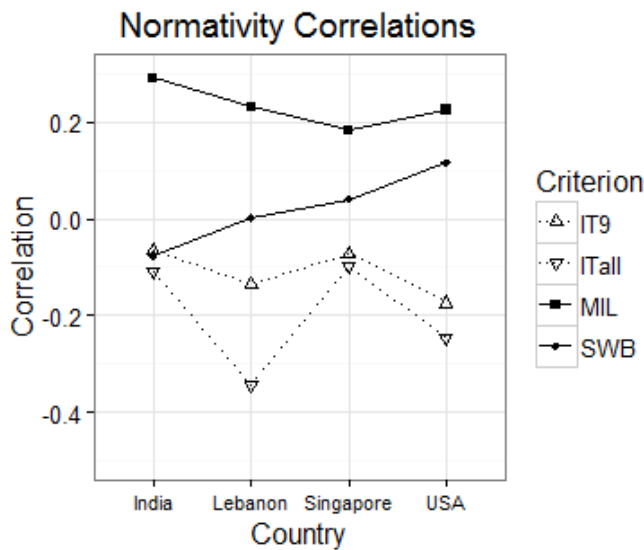


Figure 2.

Normativity Correlations of All Worldview Items and External Criteria

APPENDIX B

Table 7.

Top 10 Loading Items on Each Factor in a Four-Factor EFA in the US Sample

Factor 1	
Item	Loading
If someone wants an outcome to happen, the intervention of a non-material force, such as magic, can make it happen.	0.51
Things in the world behave as they does because of physical laws that they obey.	0.50
The cause of illness can be explained by science.	0.47
Humans everywhere are basically complex.	0.47
Human behavior tends naturally and inevitably to be affected by the social context.	0.47
Human societies fundamentally tend to give power and authority to only some people.	0.47
If someone wants an outcome to happen, there is no effective way to make the desired outcome happen.	0.46
Human behavior tends naturally and inevitably to focus on external qualities and activities, like achievement or possessions.	0.45
Human behavior tends naturally and inevitably to have moral dimensions and implications.	0.45
If someone wants an outcome to happen, direct action, by the individual or a group of people, can make it happen.	0.45
Factor 2	
Item	Loading
The cause of illness is failing to fulfill one's duties to the group.	0.71
The cause of illness is magic or hexes.	0.69
Dreams are an unsafe condition open to spiritual attacks.	0.67
The cause of illness is lack of magical power.	0.67
The cause of illness is impurities caused by human behavior.	0.65
Dreams are a means of obtaining power or knowledge.	0.65
The cause of illness is divine punishment.	0.63
The most valid way to gain knowledge of reality is to rely on Divination.	0.62
The cause of illness is lack of spiritual power.	0.61
After a human dies, the body needs to be preserved because if the body is damaged, the soul is also damaged.	0.61
Factor 3	
Item	Loading

There is a spiritual world that can be contacted by humans for guidance and power.	0.78
There is a spiritual world that can change the world in otherwise impossible ways.	0.78
There is a spiritual world that can grant requests that are reasonable or possible.	0.75
After a human dies, the soul returns to its divine source.	0.74
There is a spiritual world that can be ultimately just, so people are rewarded or punished there based on their actions in life.	0.74
There is a spiritual world that consists of the spirits of people, like those who have died.	0.74
Beyond the physical world, there is nothing.	0.71
There is a spiritual world that consists of one divine being.	0.70
There is a spiritual world that consists of non-human spirits.	0.66
When moral rules are violated, the consequences are unimportant because there are no valid moral rules.	0.66

Factor 4

Item	Loading
Humans are unique because they have motivations.	0.77
Humans are unique because they have intelligence.	0.74
Humans are unique because they have life.	0.74
Humans are unique because they have free will.	0.72
Humans are unique because they have a soul.	0.70
Humans are unique because they have certain emotions, such as love, shame, and contempt.	0.65
Humans are unique because they have the ability to create new things.	0.65
Humans are unique because they have culture.	0.64
Humans are unique because they have the ability to influence the external world.	0.63
Humans are unique because they have the ability to bring to bring order to the world.	0.63

Table 8.

Top 10 Loading Items on Each Factor of a Six-Factor EFA in the US Sample

Factor 1	
Item	Loading
Humans everywhere are basically good.	0.72
Humans everywhere are basically trustworthy.	0.68
Humans everywhere are basically moral.	0.65

Humans everywhere are basically rational.	0.61
Basically, this world is generally a safe place.	0.56
Basically, this world is good.	0.56
Humans everywhere are basically consistent.	0.51
Human societies fundamentally tend to punish criminals for their actions.	0.46
Basically, this world is generally improving.	0.44
Basically, this world is just, with people generally getting the outcomes they deserve.	0.43

Factor 2

Item	Loading
Humans everywhere are basically evil.	0.63
Humans everywhere are basically immoral.	0.59
Humans everywhere are basically untrustworthy.	0.57
Basically, this world is bad.	0.55
Human behavior tends naturally and inevitably to be unfair and unjust to others with people exploiting other people.	0.48
Basically, this world is generally a dangerous place.	0.47
Humans everywhere are basically irrational.	0.42
Human societies fundamentally are politically and socially just.	0.39
Basically, this world is unjust, with people generally getting outcomes they do not deserve.	0.36
Human societies fundamentally are organized so that individuals depend on each other to meet their needs.	0.34

Factor 3

Item	Loading
If someone wants an outcome to happen, the intervention of a non-material force, such as magic, can make it happen.	0.53
Things in the world behave as they do because of physical laws that they obey.	0.52
The cause of illness can be explained by science.	0.49
If someone wants an outcome to happen, there is no effective way to make the desired outcome happen.	0.49
Human behavior tends naturally and inevitably to be affected by the social context.	0.49

Human behavior tends naturally and inevitably to focus on external qualities and activities, like achievement or possessions.	0.48
Dreams are the by-product of increased activity in certain brain areas during sleep.	0.47
If someone wants an outcome to happen, direct action, by the individual or a group of people, can make it happen.	0.47
Humans everywhere are basically complex.	0.47
Human societies fundamentally tend to give power and authority to only some people.	0.47

Factor 4

Item	Loading
Humans are unique because they have motivations.	0.85
Humans are unique because they have intelligence.	0.76
Humans are unique because they have life.	0.75
Humans are unique because they have consciousness.	0.75
Humans are unique because they have free will.	0.74
Humans are unique because they have certain emotions, such as love, shame, and contempt.	0.73
Humans are unique because they have the ability to create new things.	0.71
Humans are unique because they have culture.	0.71
Humans are unique because they have self-awareness.	0.68
Humans are unique because they have the ability to influence the external world.	0.65

Factor 5

Item	Loading
There is a spiritual world that can change the world in otherwise impossible ways.	0.83
There is a spiritual world that can be contacted by humans for guidance and power.	0.79
There is a spiritual world that can be ultimately just, so people are rewarded or punished there based on their actions in life.	0.77
There is a spiritual world that can grant requests that are reasonable or possible.	0.76
Beyond the physical world, there is nothing.	0.69
After a human dies, the soul returns to its divine source.	0.69

There is a spiritual world that consists of one divine being.	0.69
When moral rules are violated, the consequences are unimportant because there are no valid moral rules.	0.66
Basically, this world is the result of a divine or transcendent plan or purpose.	0.64
There is a spiritual world that consists of the spirits of people, like those who have died.	0.63

Factor 6

Item	Loading
After a human dies, reincarnation has a potential end or release.	0.68
After a human dies, the soul is reincarnated into another body.	0.68
After a human dies, the dead continue to walk unless they are at peace.	0.66
The cause of illness is magic or hexes.	0.63
The cause of illness is lack of magical power.	0.62
After a human dies, the body needs to be preserved so that resurrection can happen.	0.61
Dreams are a means of obtaining power or knowledge.	0.61
Dreams are an unsafe condition open to spiritual attacks.	0.61
After a human dies, the body needs to be preserved because if the body is damaged, the soul is also damaged.	0.61
The cause of illness is chance.	0.60

Table 9.

Top 10 Loading Items on Each Factor of an Eight-Factor EFA in the US Sample

Factor 1	
Item	Loading
Humans everywhere are basically good.	0.77
Humans everywhere are basically trustworthy.	0.69
Humans everywhere are basically moral.	0.68
Humans everywhere are basically rational.	0.60
Basically, this world is good.	0.57
Basically, this world is generally a safe place.	0.56
Humans everywhere are basically consistent.	0.51
Basically, this world is generally improving.	0.43
Basically, this world is just, with people generally getting the outcomes they deserve.	0.42
Human societies fundamentally tend to punish criminals for their actions.	0.41

Factor 2

Item	Loading
Humans everywhere are basically evil.	0.70
Humans everywhere are basically immoral.	0.69
Humans everywhere are basically untrustworthy.	0.64
Basically, this world is bad.	0.58
Human behavior tends naturally and inevitably to be unfair and unjust to others with people exploiting other people.	0.55
Basically, this world is generally a dangerous place.	0.54
Humans everywhere are basically irrational.	0.54
Human societies fundamentally are organized by humans.	0.45
Human societies fundamentally are politically and socially just.	0.44
Basically, this world is unjust, with people generally getting outcomes they do not deserve.	0.44

Factor 3

Item	Loading
If someone wants an outcome to happen, the intervention of a non-material force, such as magic, can make it happen.	0.58
Things in the world behave as they do because of physical laws that they obey.	0.55
The cause of illness can be explained by science.	0.54
Human societies fundamentally tend to give power and authority to only some people.	0.52
Human behavior tends naturally and inevitably to focus on external qualities and activities, like achievement or possessions.	0.51
If someone wants an outcome to happen, there is no effective way to make the desired outcome happen.	0.50
Human behavior tends naturally and inevitably to be affected by the social context.	0.49
If someone wants an outcome to happen, direct action, by the individual or a group of people, can make it happen.	0.49
In the relationship between humans and nature, there is damage, and the relationship is in trouble.	0.48
Human behavior tends naturally and inevitably to seek to maximize pleasure and avoid pain.	0.48

Factor 4

Item	Loading
Dreams are an unsafe condition open to magical attacks.	0.56
Dreams are opportunities to commune with the supernatural world.	0.53
Dreams are a means to influence the waking world.	0.52
Dreams are opportunities to commune with a different time or place.	0.51
Dreams are a means of gaining insight into oneself and one's world.	0.50
Dreams are a means to predict the future.	0.49

Dreams are a guide to behavior in waking life.	0.49
Dreams are as real as experiences during waking life.	0.44
Dreams are experiences of the soul of the sleeper having left the body.	0.41
Dreams are a fulfillment of wishes that one may have consciously or unconsciously.	0.40

Factor 5

Item	Loading
Humans are unique because they have motivations.	0.86
Humans are unique because they have intelligence.	0.76
Humans are unique because they have life.	0.75
Humans are unique because they have free will.	0.75
Humans are unique because they have consciousness.	0.75
Humans are unique because they have certain emotions, such as love, shame, and contempt.	0.73
Humans are unique because they have culture.	0.71
Humans are unique because they have the ability to create new things.	0.71
Humans are unique because they have self-awareness.	0.68
Humans are unique because they have the ability to influence the external world.	0.66

Factor 6

Item	Loading
There is a spiritual world that can change the world in otherwise impossible ways.	0.86
There is a spiritual world that can be contacted by humans for guidance and power.	0.81
There is a spiritual world that can be ultimately just, so people are rewarded or punished there based on their actions in life.	0.80
There is a spiritual world that can grant requests that are reasonable or possible.	0.78
There is a spiritual world that consists of one divine being.	0.72
Beyond the physical world, there is nothing.	0.71
After a human dies, the soul returns to its divine source.	0.71
There is a spiritual world that consists of the spirits of people, like those who have died.	0.66
When moral rules are violated, the consequences are unimportant because there are no valid moral rules.	0.66
Basically, this world is the result of a divine or transcendent plan or purpose.	0.65

Factor 7

Item	Loading
After a human dies, the soul is reincarnated into another body.	-0.74

After a human dies, reincarnation has a potential end or release.	-0.74
After a human dies, the dead require proper rituals and assistance to move on.	-0.59
After a human dies, the dead continue to walk unless they are at peace.	-0.58
After a human dies, the body needs to be preserved because if the body is damaged, the soul is also damaged.	-0.54
After a human dies, the body needs to be preserved so that resurrection can happen.	-0.52
After a human dies, the soul may eventually be resurrected.	-0.46
There is a spiritual world that consists of many divine beings.	-0.41
There is a spiritual world that consists of non-human spirits.	-0.39
Moral rules and moral codes are violated by behavior, not by what's in the thoughts or feelings.	-0.37

Factor 8

Item	Loading
The cause of illness is lack of spiritual power.	0.84
The cause of illness is impurities caused by human behavior.	0.83
The cause of illness is magic or hexes.	0.83
The cause of illness is lack of magical power.	0.80
The cause of illness is failing to fulfill one's duties to the group.	0.79
The cause of illness is divine punishment.	0.70
The cause of illness is the soul being dislodged from the body.	0.45
The cause of illness is lack of personal control.	0.39
The cause of illness is unknown or unknowable.	0.39
The cause of illness is impurities caused by human behavior.	0.34

Table 10.

Top 10 Loading Items on Each Factor of a Thirteen-Factor EFA in the US Sample

Factor 1	
Item	Loading
Humans everywhere are basically good.	0.75
Humans everywhere are basically moral.	0.71
Humans everywhere are basically trustworthy.	0.71
Humans everywhere are basically rational.	0.59
Humans everywhere are basically consistent.	0.48
Humans everywhere are basically instinctual.	0.48
Humans everywhere are basically spiritual.	0.46
Humans everywhere are basically complex.	0.41
Basically, this world is good.	0.37

Factor 2	
Item	Loading
Humans everywhere are basically evil.	0.57
Humans everywhere are basically immoral.	0.56
Basically, this world is generally a dangerous place.	0.55
Humans everywhere are basically untrustworthy.	0.54
Basically, this world is bad.	0.52
Humans everywhere are basically irrational.	0.48
Human societies fundamentally are organized by humans.	0.47
Human societies fundamentally are organized so that individuals depend on each other to meet their needs.	0.46
Basically, this world is unjust, with people generally getting outcomes they do not deserve.	0.45
Human societies fundamentally are politically and socially just.	0.43

Factor 3	
Item	Loading
If someone wants an outcome to happen, the intervention of a non-material force, such as magic, can make it happen.	0.56
Things in the world behave as they do because of physical laws that they obey.	0.54
The cause of illness can be explained by science.	0.54
The most valid way to gain knowledge of reality is to rely on rationality.	0.52
If someone wants an outcome to happen, there is no effective way to make the desired outcome happen.	0.51
If someone wants an outcome to happen, direct action, by the individual or a group of people, can make it happen.	0.49
In the relationship between humans and nature, there is damage, and the relationship is in trouble.	0.48
Human behavior tends naturally and inevitably to focus on external qualities and activities, like achievement or possessions.	0.47
Human societies fundamentally tend to give power and authority to only some people.	0.47
Human behavior tends naturally and inevitably to be affected by the social context.	0.46

Factor 4	
Item	Loading
If someone wants an outcome to happen, the intervention of a non-material force, such as prayer or ritual, can make it happen.	0.63
The most valid way to gain knowledge of reality is to rely on authority.	0.62
The most valid way to gain knowledge of reality is to rely on tradition.	0.56

Things in the world behave as they do because of a finite number of causes, some of which are not easy to discover.	0.54
Moral rules and moral codes are applicable only to the way similar others like friends and family members are treated.	0.53
Moral rules and moral codes are not important.	0.52
Human behavior tends naturally and inevitably to be the same regardless of the social situation.	0.48
Basically, this world is balanced so that people who have too much lose it and people who have too little get more.	0.45
Moral rules and moral codes are violated only by intentional behavior, not mistakes or lack of awareness.	0.45
If a person or an object belongs to a particular group, then group boundaries are sharp, definite, and fixed.	0.44

Factor 5

Item	Loading
Humans are unique because they have motivations.	0.77
Humans are unique because they have intelligence.	0.72
Humans are unique because they have certain emotions, such as love, shame, and contempt.	0.71
Humans are unique because they have consciousness.	0.70
Humans are unique because they have free will.	0.70
Humans are unique because they have the ability to create new things.	0.70
Humans are unique because they have culture.	0.70
Humans are unique because they have self-awareness.	0.69
Humans are unique because they have life.	0.63
Humans are unique because they have the ability to influence the external world.	0.61

Factor 6

Item	Loading
The cause of illness is magic or hexes.	0.84
The cause of illness is lack of magical power.	0.80
The cause of illness is impurities caused by human behavior.	0.79
The cause of illness is failing to fulfill one's duties to the group.	0.79
The cause of illness is lack of spiritual power.	0.78
The cause of illness is divine punishment.	0.75
Dreams are an unsafe condition open to spiritual attacks.	0.63
Dreams are a means of obtaining power or knowledge.	0.60
When moral rules are violated, the consequences end when the person who violated the rules dies.	0.56
The most valid way to gain knowledge of reality is to rely on divination.	0.54

Factor 7

Item	Loading
Dreams are an unsafe condition open to magical attacks.	0.69
Dreams are opportunities to commune with the supernatural world.	0.68
Dreams are a means to predict the future.	0.65
Dreams are a means to influence the waking world.	0.63
Dreams are opportunities to commune with a different time or place.	0.62
Dreams are a guide to behavior in waking life.	0.61
Dreams are experiences of the soul of the sleeper having left the body.	0.58
Dreams are as real as experiences during waking life.	0.56
Dreams are an unsafe condition open to spiritual attacks.	0.52
Dreams are a means of gaining insight into oneself and one's world.	0.50

Factor 8

Item	Loading
Things in the world behave as they do because they react to the feelings and desires of humans.	0.61
Things in the world behave as they do because they work to help humans and preserve the well-being of humans.	0.60
Things in the world behave as they do because they have an ultimate purpose to fulfill.	0.53
Things in the world behave as they do because humans perceive them that way.	0.48
Humans are unique because they have life.	0.44
Humans are unique because they have a soul.	0.38
Basically, this world is just, with people generally getting the outcomes they deserve.	0.36
Basically, this world is the result of a divine or transcendent plan or purpose.	0.36
Humans are unique because they have the ability to worship properly.	0.35
Humans are unique because they have motivations.	0.35

Factor 9

Item	Loading
The most valid way to gain knowledge of reality is to rely on one's own spiritual or mystical experiences.	0.29
The cause of illness is chance.	-0.29
Humans everywhere are basically untrustworthy.	0.26
Dreams are a fulfillment of wishes that one may have consciously or unconsciously.	-0.25
The most valid way to gain knowledge of reality is to rely on divination.	0.25
Humans everywhere are basically evil.	0.24

If a person or an object belongs to a particular group, then group membership is permanent and does not change across time.	0.22
Dreams are experiences of the soul of the sleeper having left the body.	0.22
Basically, this world is generally a dangerous place.	-0.21
Moral rules and moral codes are relative, with guidelines that vary by time, culture, or situations.	-0.20

Factor 10

Item	Loading
There is a spiritual world that consists of one divine being.	0.79
There is a spiritual world that consists of the spirits of people, like those who have died.	0.74
After a human dies, the soul returns to its divine source.	0.74
There is a spiritual world that can change the world in otherwise impossible ways.	0.73
There is a spiritual world that can be ultimately just, so people are rewarded or punished there based on their actions in life.	0.72
There is a spiritual world that can be contacted by humans for guidance and power.	0.71
Basically, this world is the result of a divine or transcendent plan or purpose.	0.71
When moral rules are violated, the consequences are unimportant because there are no valid moral rules.	0.71
There is a spiritual world that can grant requests that are reasonable or possible.	0.68
Beyond the physical world, there is nothing.	0.68

Factor 11

Item	Loading
There is a spiritual world that can give objects special powers as talismans and charms.	0.39
There is a spiritual world that consists of one divine being.	-0.38
There is a spiritual world that consists of the spirits of people, like those who have died.	-0.31
Humans are unique because they have the ability to worship properly.	-0.31
Moral rules and moral codes are violated only by intentional behavior, not mistakes or lack of awareness.	0.28
Basically, this world is the result of a divine or transcendent plan or purpose.	-0.27
The most valid way to gain knowledge of reality is to rely on nothing because there are no valid sources of knowledge.	0.27
Beyond the physical world, there is a world of ideals that cannot be experienced with the senses.	0.25

Moral rules and moral codes are necessary.	-0.25
After a human dies, the soul returns to its divine source.	-0.25

Factor 12

Item	Loading
After a human dies, reincarnation has a potential end or release.	0.73
After a human dies, the soul is reincarnated into another body.	0.72
After a human dies, the dead continue to walk unless they are at peace.	0.66
After a human dies, the body needs to be preserved because if the body is damaged, the soul is also damaged.	0.60
After a human dies, the dead require proper rituals and assistance to move on.	0.59
There is a spiritual world that consists of non-human spirits.	0.57
After a human dies, the body needs to be preserved so that resurrection can happen.	0.57
There is a spiritual world that consists of many divine beings.	0.56
There is a spiritual world that can give objects special powers as talismans and charms.	0.51
Moral rules and moral codes are violated by behavior, not by what's in the thoughts or feelings.	0.50

Factor 13

Item	Loading
There is a spiritual world that consists of non-human spirits.	-0.44
There is a spiritual world that consists of many divine beings.	-0.44
Basically, this world is only one of many other worlds that existed or will exist.	-0.32
After a human dies, the soul is reincarnated into another body.	-0.31
Beyond the physical world, there is a spiritual world that affects or is capable of affecting the physical world.	-0.31
After a human dies, reincarnation has a potential end or release.	-0.28
There is a spiritual world that consists of the spirits of people, like those who have died.	-0.26
Basically, this world is just one thing, made up of different aspects of the same thing.	-0.25
Beyond the physical world, there is nothing.	-0.24
Moral rules and moral codes are violated by behavior, not by what's in the thoughts or feelings.	-0.24

APPENDIX C

Note: In the following output, factor indicators are listed under shortened labels rather than complete names. They are, however, listed in the same order as they appear in Table 3 in Appendix A.

Configural Invariance

MODEL:

```
F1-F6 by Q49_12 Q49_5 Q39_4 Q39_1 Q47b_4 Q49_17 Q39_14 Q43_10
Q39_8 Q49_22 Q39_10 Q39_15 Q49_11 Q43_11 Q47b_11 Q39_2
Q43_15 Q55_1 Q47a_5 Q43_14 Q47b_1 Q53_7 Q54_1 Q46_1
Q41_3 Q41_7 Q41_12 Q41_13 Q41_9 Q41_6 Q41_1 Q41_10
Q42_9 Q46_2 Q50a_1 Q50b_4 Q50c_4 Q44_4 Q49_1 Q50c_5
Q50c_1 Q55_5 Q45_7 Q51_3 Q42_7 Q55_4 Q55_10 Q46_4 (*1);
[F1-F6@0];
```

MODEL ind:

```
F1-F6 by Q49_12 Q49_5 Q39_4 Q39_1 Q47b_4 Q49_17 Q39_14 Q43_10
Q39_8 Q49_22 Q39_10 Q39_15 Q49_11 Q43_11 Q47b_11 Q39_2
Q43_15 Q55_1 Q47a_5 Q43_14 Q47b_1 Q53_7 Q54_1 Q46_1
Q41_3 Q41_7 Q41_12 Q41_13 Q41_9 Q41_6 Q41_1 Q41_10
Q42_9 Q46_2 Q50a_1 Q50b_4 Q50c_4 Q44_4 Q49_1 Q50c_5
Q50c_1 Q55_5 Q45_7 Q51_3 Q42_7 Q55_4 Q55_10 Q46_4 (*1);
[F1@0 F2@0 F3@0 F4@0 F5@0 F6@0];
[Q49_12 Q49_5 Q39_4 Q39_1 Q47b_4 Q49_17 Q39_14 Q43_10];
[Q39_8 Q49_22 Q39_10 Q39_15 Q49_11 Q43_11 Q47b_11 Q39_2];
[Q43_15 Q55_1 Q47a_5 Q43_14 Q47b_1 Q53_7 Q54_1 Q46_1];
[Q41_3 Q41_7 Q41_12 Q41_13 Q41_9 Q41_6 Q41_1 Q41_10];
[Q42_9 Q46_2 Q50a_1 Q50b_4 Q50c_4 Q44_4 Q49_1 Q50c_5];
[Q50c_1 Q55_5 Q45_7 Q51_3 Q42_7 Q55_4 Q55_10 Q46_4];
```

MODEL sing:

```
F1-F6 by Q49_12 Q49_5 Q39_4 Q39_1 Q47b_4 Q49_17 Q39_14 Q43_10
Q39_8 Q49_22 Q39_10 Q39_15 Q49_11 Q43_11 Q47b_11 Q39_2
Q43_15 Q55_1 Q47a_5 Q43_14 Q47b_1 Q53_7 Q54_1 Q46_1
Q41_3 Q41_7 Q41_12 Q41_13 Q41_9 Q41_6 Q41_1 Q41_10
Q42_9 Q46_2 Q50a_1 Q50b_4 Q50c_4 Q44_4 Q49_1 Q50c_5
Q50c_1 Q55_5 Q45_7 Q51_3 Q42_7 Q55_4 Q55_10 Q46_4 (*1);
[F1@0 F2@0 F3@0 F4@0 F5@0 F6@0];
[Q49_12 Q49_5 Q39_4 Q39_1 Q47b_4 Q49_17 Q39_14 Q43_10];
[Q39_8 Q49_22 Q39_10 Q39_15 Q49_11 Q43_11 Q47b_11 Q39_2];
```


SUMMARY OF ANALYSIS

Number of groups	3
Number of observations	
Group LEB	238
Group IND	263
Group SING	214
Number of dependent variables	48
Number of independent variables	0
Number of continuous latent variables	6
Observed dependent variables	

MODEL FIT INFORMATION

Number of Free Parameters 1107

Loglikelihood

H0 Value -45919.281
H1 Value -44070.632

Information Criteria

Akaike (AIC) 94052.562
Bayesian (BIC) 99114.079
Sample-Size Adjusted BIC 95599.065
($n^* = (n + 2) / 24$)

Chi-Square Test of Model Fit

Value 3697.298
Degrees of Freedom 2565
P-Value 0.0000

Chi-Square Contributions From Each Group

LEB 1258.514
IND 1267.204
SING 1171.579

RMSEA (Root Mean Square Error Of Approximation)

Estimate 0.043
90 Percent C.I. 0.040 0.046
Probability RMSEA \leq .05 1.000

CFI/TLI

CFI	0.893
TLI	0.859

Chi-Square Test of Model Fit for the Baseline Model

Value	14006.597
Degrees of Freedom	3384
P-Value	0.0000

SRMR (Standardized Root Mean Square Residual)

Value	0.041
-------	-------

MODEL RESULTS

		Estimate	S.E.	Est./S.E.	Two-Tailed P-Value
Group LEB					
F1	BY				
	Q49_12	0.528	0.080	6.582	0.000
	Q49_5	0.534	0.089	5.980	0.000
	Q39_4	0.436	0.076	5.755	0.000
	Q39_1	0.490	0.075	6.536	0.000
	Q47B_4	0.439	0.094	4.693	0.000
	Q49_17	0.638	0.092	6.919	0.000
	Q39_14	0.511	0.072	7.093	0.000
	Q43_10	0.372	0.074	5.013	0.000
	Q39_8	0.038	0.062	0.619	0.536

Q49_22	-0.500	0.089	-5.608	0.000
Q39_10	-0.105	0.070	-1.502	0.133
Q39_15	0.054	0.065	0.824	0.410
Q49_11	-0.560	0.086	-6.488	0.000
Q43_11	0.045	0.074	0.614	0.539
Q47B_11	-0.132	0.090	-1.479	0.139
Q39_2	0.023	0.045	0.512	0.609
Q43_15	0.059	0.072	0.818	0.413
Q55_1	-0.067	0.084	-0.793	0.428
Q47A_5	-0.151	0.087	-1.731	0.084
Q43_14	0.031	0.063	0.486	0.627
Q47B_1	-0.062	0.085	-0.729	0.466
Q53_7	0.116	0.089	1.298	0.194
Q54_1	0.048	0.071	0.678	0.498
Q46_1	-0.018	0.082	-0.222	0.824
Q41_3	-0.026	0.063	-0.412	0.681
Q41_7	0.232	0.082	2.833	0.005
Q41_12	-0.112	0.093	-1.203	0.229
Q41_13	0.057	0.079	0.721	0.471
Q41_9	-0.004	0.063	-0.058	0.954
Q41_6	-0.066	0.077	-0.850	0.395
Q41_1	0.099	0.091	1.089	0.276
Q41_10	0.146	0.089	1.636	0.102
Q42_9	0.269	0.094	2.873	0.004
Q46_2	-0.052	0.065	-0.801	0.423
Q50A_1	0.060	0.074	0.809	0.419
Q50B_4	-0.146	0.091	-1.594	0.111
Q50C_4	0.006	0.047	0.134	0.893
Q44_4	0.386	0.084	4.621	0.000
Q49_1	0.159	0.080	1.983	0.047
Q50C_5	-0.016	0.061	-0.255	0.799
Q50C_1	-0.101	0.093	-1.089	0.276
Q55_5	0.131	0.111	1.178	0.239
Q45_7	0.294	0.108	2.719	0.007
Q51_3	0.159	0.102	1.560	0.119

	Q42_7	0.315	0.097	3.236	0.001
	Q55_4	-0.058	0.102	-0.574	0.566
	Q55_10	0.121	0.106	1.143	0.253
	Q46_4	0.162	0.102	1.580	0.114
F2	BY				
	Q49_12	0.018	0.046	0.394	0.694
	Q49_5	0.017	0.062	0.271	0.786
	Q39_4	0.303	0.078	3.901	0.000
	Q39_1	0.102	0.072	1.426	0.154
	Q47B_4	-0.087	0.068	-1.270	0.204
	Q49_17	-0.060	0.068	-0.883	0.377
	Q39_14	0.196	0.076	2.595	0.009
	Q43_10	-0.060	0.066	-0.904	0.366
	Q39_8	0.591	0.068	8.731	0.000
	Q49_22	0.587	0.084	6.988	0.000
	Q39_10	0.868	0.069	12.653	0.000
	Q39_15	0.635	0.068	9.383	0.000
	Q49_11	0.470	0.078	5.987	0.000
	Q43_11	0.422	0.074	5.694	0.000
	Q47B_11	0.355	0.084	4.244	0.000
	Q39_2	0.799	0.066	12.065	0.000
	Q43_15	-0.057	0.062	-0.916	0.360
	Q55_1	0.074	0.073	1.006	0.314
	Q47A_5	-0.012	0.048	-0.245	0.806
	Q43_14	0.071	0.068	1.040	0.298
	Q47B_1	0.079	0.075	1.057	0.291
	Q53_7	0.086	0.078	1.108	0.268
	Q54_1	0.088	0.072	1.220	0.222
	Q46_1	-0.043	0.081	-0.534	0.593
	Q41_3	0.079	0.073	1.084	0.278
	Q41_7	0.060	0.064	0.941	0.347
	Q41_12	-0.075	0.067	-1.110	0.267
	Q41_13	0.027	0.068	0.400	0.689
	Q41_9	0.054	0.075	0.727	0.467

Q41_6	-0.096	0.075	-1.269	0.205
Q41_1	-0.015	0.069	-0.212	0.832
Q41_10	-0.032	0.072	-0.444	0.657
Q42_9	0.018	0.067	0.267	0.789
Q46_2	-0.121	0.072	-1.679	0.093
Q50A_1	0.023	0.063	0.368	0.713
Q50B_4	0.142	0.088	1.623	0.105
Q50C_4	-0.092	0.062	-1.488	0.137
Q44_4	-0.048	0.066	-0.724	0.469
Q49_1	0.069	0.067	1.031	0.302
Q50C_5	-0.024	0.059	-0.414	0.679
Q50C_1	0.060	0.068	0.881	0.378
Q55_5	0.146	0.078	1.864	0.062
Q45_7	0.194	0.088	2.199	0.028
Q51_3	0.290	0.076	3.801	0.000
Q42_7	0.113	0.067	1.701	0.089
Q55_4	-0.030	0.052	-0.566	0.571
Q55_10	0.061	0.069	0.884	0.377
Q46_4	0.194	0.076	2.560	0.010

F3 BY

Q49_12	-0.146	0.094	-1.552	0.121
Q49_5	-0.052	0.088	-0.588	0.557
Q39_4	0.173	0.096	1.804	0.071
Q39_1	0.177	0.095	1.874	0.061
Q47B_4	-0.019	0.055	-0.344	0.731
Q49_17	0.219	0.112	1.952	0.051
Q39_14	0.088	0.093	0.941	0.347
Q43_10	0.042	0.072	0.584	0.559
Q39_8	0.002	0.060	0.036	0.971
Q49_22	0.076	0.087	0.867	0.386
Q39_10	0.020	0.047	0.433	0.665
Q39_15	-0.139	0.081	-1.714	0.087
Q49_11	0.193	0.106	1.828	0.068
Q43_11	-0.013	0.073	-0.182	0.856

Q47B_11	0.063	0.089	0.709	0.478
Q39_2	-0.101	0.075	-1.341	0.180
Q43_15	0.573	0.076	7.509	0.000
Q55_1	0.493	0.085	5.827	0.000
Q47A_5	0.496	0.081	6.122	0.000
Q43_14	0.393	0.082	4.772	0.000
Q47B_1	0.375	0.087	4.323	0.000
Q53_7	0.486	0.083	5.876	0.000
Q54_1	0.442	0.083	5.329	0.000
Q46_1	0.379	0.093	4.096	0.000
Q41_3	0.084	0.091	0.921	0.357
Q41_7	-0.049	0.052	-0.956	0.339
Q41_12	0.281	0.116	2.429	0.015
Q41_13	-0.485	0.124	-3.910	0.000
Q41_9	-0.055	0.083	-0.662	0.508
Q41_6	0.130	0.104	1.251	0.211
Q41_1	-0.287	0.117	-2.452	0.014
Q41_10	0.117	0.098	1.195	0.232
Q42_9	0.084	0.088	0.946	0.344
Q46_2	-0.039	0.062	-0.622	0.534
Q50A_1	0.237	0.090	2.627	0.009
Q50B_4	-0.114	0.094	-1.211	0.226
Q50C_4	0.118	0.076	1.553	0.121
Q44_4	-0.044	0.074	-0.600	0.549
Q49_1	0.122	0.087	1.402	0.161
Q50C_5	-0.028	0.064	-0.438	0.662
Q50C_1	-0.080	0.085	-0.939	0.348
Q55_5	-0.077	0.081	-0.958	0.338
Q45_7	0.041	0.085	0.487	0.626
Q51_3	-0.161	0.097	-1.653	0.098
Q42_7	-0.157	0.094	-1.672	0.095
Q55_4	0.071	0.079	0.893	0.372
Q55_10	0.070	0.079	0.894	0.372
Q46_4	-0.210	0.094	-2.227	0.026

F4	BY				
Q49_12		0.070	0.058	1.207	0.228
Q49_5		-0.088	0.074	-1.188	0.235
Q39_4		0.015	0.053	0.282	0.778
Q39_1		0.097	0.069	1.420	0.156
Q47B_4		0.126	0.069	1.834	0.067
Q49_17		-0.095	0.079	-1.208	0.227
Q39_14		0.103	0.068	1.501	0.133
Q43_10		0.169	0.072	2.358	0.018
Q39_8		0.055	0.063	0.874	0.382
Q49_22		0.081	0.071	1.139	0.255
Q39_10		-0.070	0.056	-1.246	0.213
Q39_15		-0.047	0.058	-0.811	0.418
Q49_11		0.015	0.041	0.367	0.713
Q43_11		0.018	0.069	0.262	0.793
Q47B_11		0.171	0.083	2.069	0.039
Q39_2		-0.065	0.057	-1.149	0.250
Q43_15		-0.008	0.051	-0.166	0.868
Q55_1		-0.152	0.084	-1.813	0.070
Q47A_5		0.125	0.076	1.644	0.100
Q43_14		0.105	0.074	1.422	0.155
Q47B_1		0.003	0.068	0.051	0.959
Q53_7		-0.084	0.080	-1.048	0.295
Q54_1		0.064	0.071	0.904	0.366
Q46_1		0.084	0.088	0.957	0.339
Q41_3		0.606	0.080	7.611	0.000
Q41_7		0.721	0.078	9.196	0.000
Q41_12		0.702	0.084	8.312	0.000
Q41_13		0.955	0.098	9.719	0.000
Q41_9		0.882	0.085	10.382	0.000
Q41_6		0.752	0.081	9.334	0.000
Q41_1		0.850	0.096	8.867	0.000
Q41_10		0.697	0.087	8.060	0.000
Q42_9		0.040	0.071	0.560	0.575
Q46_2		0.069	0.066	1.043	0.297

Q50A_1	-0.019	0.065	-0.296	0.767
Q50B_4	0.019	0.072	0.261	0.794
Q50C_4	-0.056	0.057	-0.975	0.329
Q44_4	0.087	0.074	1.180	0.238
Q49_1	-0.001	0.063	-0.023	0.981
Q50C_5	0.028	0.059	0.471	0.637
Q50C_1	0.044	0.065	0.683	0.495
Q55_5	-0.029	0.064	-0.452	0.651
Q45_7	-0.022	0.076	-0.284	0.776
Q51_3	0.040	0.062	0.646	0.518
Q42_7	-0.005	0.049	-0.112	0.911
Q55_4	0.001	0.057	0.023	0.981
Q55_10	-0.019	0.065	-0.289	0.772
Q46_4	-0.025	0.062	-0.397	0.692

F5 BY

Q49_12	-0.043	0.054	-0.797	0.426
Q49_5	0.177	0.079	2.241	0.025
Q39_4	-0.027	0.054	-0.500	0.617
Q39_1	0.087	0.067	1.309	0.191
Q47B_4	-0.050	0.060	-0.829	0.407
Q49_17	0.047	0.069	0.682	0.495
Q39_14	0.062	0.061	1.024	0.306
Q43_10	0.048	0.067	0.726	0.468
Q39_8	-0.065	0.064	-1.019	0.308
Q49_22	-0.023	0.051	-0.447	0.655
Q39_10	0.005	0.044	0.116	0.908
Q39_15	-0.006	0.053	-0.123	0.902
Q49_11	0.111	0.074	1.485	0.138
Q43_11	-0.041	0.071	-0.580	0.562
Q47B_11	-0.037	0.078	-0.476	0.634
Q39_2	0.066	0.056	1.175	0.240
Q43_15	0.173	0.076	2.280	0.023
Q55_1	-0.050	0.069	-0.723	0.470
Q47A_5	0.144	0.074	1.933	0.053

Q43_14	0.262	0.078	3.374	0.001
Q47B_1	-0.040	0.071	-0.569	0.570
Q53_7	-0.061	0.072	-0.853	0.394
Q54_1	-0.069	0.070	-0.991	0.322
Q46_1	0.027	0.079	0.338	0.735
Q41_3	0.078	0.074	1.047	0.295
Q41_7	0.095	0.073	1.310	0.190
Q41_12	-0.091	0.073	-1.243	0.214
Q41_13	-0.004	0.060	-0.063	0.950
Q41_9	-0.095	0.080	-1.187	0.235
Q41_6	0.006	0.059	0.109	0.913
Q41_1	0.195	0.094	2.066	0.039
Q41_10	0.052	0.076	0.692	0.489
Q42_9	0.265	0.087	3.037	0.002
Q46_2	0.717	0.086	8.351	0.000
Q50A_1	0.737	0.096	7.677	0.000
Q50B_4	0.826	0.097	8.496	0.000
Q50C_4	1.091	0.091	11.929	0.000
Q44_4	0.645	0.082	7.884	0.000
Q49_1	0.888	0.081	10.924	0.000
Q50C_5	1.149	0.084	13.668	0.000
Q50C_1	0.471	0.101	4.663	0.000
Q55_5	0.234	0.105	2.236	0.025
Q45_7	-0.014	0.073	-0.187	0.852
Q51_3	-0.033	0.059	-0.560	0.575
Q42_7	-0.087	0.065	-1.347	0.178
Q55_4	0.094	0.120	0.781	0.435
Q55_10	0.144	0.100	1.439	0.150
Q46_4	0.079	0.072	1.103	0.270
F6				
BY				
Q49_12	0.171	0.098	1.750	0.080
Q49_5	0.145	0.111	1.299	0.194
Q39_4	-0.003	0.057	-0.048	0.962
Q39_1	0.086	0.079	1.086	0.278

Q47B_4	0.367	0.093	3.956	0.000
Q49_17	0.108	0.112	0.966	0.334
Q39_14	0.011	0.053	0.203	0.839
Q43_10	0.038	0.082	0.466	0.641
Q39_8	0.022	0.063	0.345	0.730
Q49_22	0.110	0.091	1.206	0.228
Q39_10	-0.119	0.077	-1.556	0.120
Q39_15	0.062	0.074	0.832	0.405
Q49_11	0.057	0.070	0.813	0.416
Q43_11	0.050	0.079	0.642	0.521
Q47B_11	0.030	0.085	0.356	0.721
Q39_2	-0.050	0.058	-0.850	0.396
Q43_15	-0.069	0.077	-0.893	0.372
Q55_1	-0.006	0.075	-0.086	0.932
Q47A_5	-0.020	0.057	-0.346	0.729
Q43_14	-0.118	0.087	-1.354	0.176
Q47B_1	-0.167	0.097	-1.731	0.083
Q53_7	-0.030	0.075	-0.404	0.687
Q54_1	-0.307	0.089	-3.460	0.001
Q46_1	0.046	0.091	0.503	0.615
Q41_3	-0.227	0.093	-2.447	0.014
Q41_7	-0.207	0.086	-2.394	0.017
Q41_12	0.150	0.092	1.632	0.103
Q41_13	0.036	0.080	0.446	0.656
Q41_9	0.037	0.082	0.449	0.654
Q41_6	0.041	0.077	0.532	0.594
Q41_1	-0.057	0.086	-0.664	0.507
Q41_10	-0.034	0.086	-0.403	0.687
Q42_9	0.338	0.099	3.405	0.001
Q46_2	0.221	0.105	2.099	0.036
Q50A_1	0.196	0.116	1.691	0.091
Q50B_4	0.154	0.120	1.283	0.199
Q50C_4	0.174	0.120	1.441	0.150
Q44_4	-0.057	0.078	-0.731	0.465
Q49_1	-0.046	0.067	-0.683	0.495

	Q50C_5	-0.069	0.102	-0.679	0.497
	Q50C_1	0.560	0.108	5.165	0.000
	Q55_5	0.668	0.099	6.779	0.000
	Q45_7	0.339	0.107	3.156	0.002
	Q51_3	0.377	0.106	3.542	0.000
	Q42_7	0.414	0.101	4.081	0.000
	Q55_4	0.985	0.101	9.748	0.000
	Q55_10	0.620	0.094	6.571	0.000
	Q46_4	0.390	0.105	3.705	0.000
F2	WITH				
	F1	0.219	0.067	3.260	0.001
F3	WITH				
	F1	-0.157	0.077	-2.042	0.041
	F2	0.074	0.067	1.102	0.270
F4	WITH				
	F1	0.169	0.070	2.411	0.016
	F2	0.025	0.071	0.354	0.723
	F3	0.187	0.078	2.399	0.016
F5	WITH				
	F1	0.174	0.073	2.374	0.018
	F2	0.066	0.072	0.917	0.359
	F3	0.095	0.079	1.200	0.230
	F4	0.319	0.065	4.888	0.000
F6	WITH				
	F1	0.263	0.070	3.764	0.000
	F2	0.277	0.065	4.235	0.000
	F3	-0.220	0.073	-3.004	0.003
	F4	0.084	0.080	1.049	0.294
	F5	0.243	0.073	3.335	0.001

Group IND

F1	BY				
Q49_12		0.437	0.150	2.907	0.004
Q49_5		0.119	0.119	1.001	0.317
Q39_4		0.662	0.100	6.648	0.000
Q39_1		0.736	0.092	8.027	0.000
Q47B_4		0.333	0.139	2.398	0.016
Q49_17		0.240	0.129	1.857	0.063
Q39_14		0.981	0.083	11.847	0.000
Q43_10		0.311	0.096	3.258	0.001
Q39_8		-0.022	0.074	-0.300	0.764
Q49_22		-0.257	0.123	-2.090	0.037
Q39_10		-0.154	0.092	-1.687	0.092
Q39_15		0.090	0.084	1.072	0.284
Q49_11		-0.251	0.144	-1.747	0.081
Q43_11		-0.231	0.094	-2.451	0.014
Q47B_11		-0.063	0.111	-0.571	0.568
Q39_2		0.033	0.082	0.401	0.688
Q43_15		-0.003	0.060	-0.050	0.960
Q55_1		-0.048	0.066	-0.731	0.465
Q47A_5		-0.121	0.086	-1.403	0.161
Q43_14		0.018	0.063	0.287	0.774
Q47B_1		0.055	0.070	0.787	0.431
Q53_7		-0.003	0.084	-0.035	0.972
Q54_1		0.011	0.077	0.139	0.890
Q46_1		-0.060	0.081	-0.740	0.459
Q41_3		0.032	0.059	0.535	0.593
Q41_7		0.102	0.082	1.241	0.215
Q41_12		0.163	0.073	2.246	0.025
Q41_13		-0.053	0.063	-0.848	0.397
Q41_9		0.077	0.071	1.080	0.280
Q41_6		0.072	0.061	1.173	0.241
Q41_1		0.040	0.067	0.592	0.554

Q41_10	-0.082	0.064	-1.283	0.200
Q42_9	-0.200	0.107	-1.867	0.062
Q46_2	0.054	0.082	0.659	0.510
Q50A_1	0.025	0.082	0.309	0.757
Q50B_4	0.053	0.096	0.553	0.580
Q50C_4	0.034	0.075	0.449	0.653
Q44_4	-0.011	0.082	-0.134	0.893
Q49_1	-0.106	0.094	-1.129	0.259
Q50C_5	0.030	0.075	0.392	0.695
Q50C_1	0.124	0.088	1.419	0.156
Q55_5	-0.060	0.094	-0.643	0.520
Q45_7	0.108	0.105	1.034	0.301
Q51_3	0.037	0.073	0.512	0.609
Q42_7	-0.045	0.069	-0.653	0.514
Q55_4	0.172	0.110	1.560	0.119
Q55_10	0.073	0.096	0.760	0.447
Q46_4	0.146	0.110	1.329	0.184

F2 BY

Q49_12	-0.215	0.134	-1.602	0.109
Q49_5	0.034	0.087	0.395	0.693
Q39_4	0.167	0.109	1.531	0.126
Q39_1	-0.100	0.089	-1.122	0.262
Q47B_4	-0.191	0.129	-1.479	0.139
Q49_17	-0.247	0.108	-2.290	0.022
Q39_14	0.027	0.063	0.439	0.661
Q43_10	-0.048	0.073	-0.657	0.511
Q39_8	0.761	0.079	9.670	0.000
Q49_22	0.635	0.086	7.364	0.000
Q39_10	0.749	0.082	9.125	0.000
Q39_15	0.754	0.080	9.421	0.000
Q49_11	0.783	0.097	8.057	0.000
Q43_11	0.437	0.087	4.999	0.000
Q47B_11	0.470	0.100	4.716	0.000
Q39_2	0.845	0.075	11.206	0.000

Q43_15	0.070	0.064	1.086	0.278
Q55_1	-0.071	0.073	-0.972	0.331
Q47A_5	-0.088	0.075	-1.178	0.239
Q43_14	0.106	0.070	1.526	0.127
Q47B_1	0.174	0.069	2.527	0.011
Q53_7	-0.037	0.072	-0.514	0.607
Q54_1	-0.043	0.072	-0.607	0.544
Q46_1	0.016	0.066	0.241	0.810
Q41_3	-0.020	0.052	-0.379	0.705
Q41_7	0.044	0.062	0.706	0.480
Q41_12	-0.093	0.060	-1.558	0.119
Q41_13	0.068	0.073	0.936	0.349
Q41_9	0.117	0.066	1.779	0.075
Q41_6	0.007	0.043	0.175	0.861
Q41_1	-0.073	0.073	-1.000	0.317
Q41_10	-0.022	0.042	-0.530	0.596
Q42_9	0.043	0.086	0.505	0.614
Q46_2	0.031	0.072	0.426	0.670
Q50A_1	0.166	0.131	1.266	0.205
Q50B_4	0.204	0.095	2.144	0.032
Q50C_4	-0.042	0.066	-0.643	0.520
Q44_4	-0.078	0.079	-0.992	0.321
Q49_1	-0.021	0.070	-0.306	0.760
Q50C_5	0.036	0.068	0.533	0.594
Q50C_1	-0.032	0.069	-0.469	0.639
Q55_5	0.086	0.107	0.803	0.422
Q45_7	0.184	0.120	1.532	0.125
Q51_3	0.302	0.104	2.908	0.004
Q42_7	0.097	0.112	0.870	0.384
Q55_4	0.184	0.116	1.591	0.112
Q55_10	0.138	0.113	1.217	0.224
Q46_4	0.238	0.118	2.020	0.043
F3				
BY				
Q49_12	-0.021	0.072	-0.288	0.774

Q49_5	0.192	0.092	2.074	0.038
Q39_4	-0.051	0.064	-0.799	0.424
Q39_1	0.154	0.077	1.998	0.046
Q47B_4	0.161	0.105	1.529	0.126
Q49_17	0.145	0.092	1.568	0.117
Q39_14	-0.014	0.054	-0.263	0.793
Q43_10	0.148	0.077	1.918	0.055
Q39_8	-0.035	0.069	-0.509	0.611
Q49_22	-0.012	0.058	-0.200	0.841
Q39_10	0.032	0.064	0.504	0.614
Q39_15	0.027	0.059	0.451	0.652
Q49_11	-0.027	0.065	-0.415	0.678
Q43_11	0.002	0.074	0.026	0.979
Q47B_11	0.128	0.099	1.295	0.195
Q39_2	0.043	0.063	0.677	0.498
Q43_15	0.425	0.065	6.533	0.000
Q55_1	0.452	0.088	5.136	0.000
Q47A_5	0.311	0.084	3.724	0.000
Q43_14	0.507	0.071	7.113	0.000
Q47B_1	0.314	0.067	4.659	0.000
Q53_7	0.296	0.084	3.536	0.000
Q54_1	0.300	0.075	4.015	0.000
Q46_1	0.461	0.078	5.879	0.000
Q41_3	0.399	0.086	4.630	0.000
Q41_7	0.382	0.105	3.657	0.000
Q41_12	0.318	0.083	3.814	0.000
Q41_13	-0.048	0.073	-0.665	0.506
Q41_9	0.490	0.085	5.777	0.000
Q41_6	0.396	0.074	5.328	0.000
Q41_1	-0.083	0.082	-1.016	0.309
Q41_10	0.204	0.087	2.333	0.020
Q42_9	0.147	0.096	1.529	0.126
Q46_2	0.032	0.073	0.438	0.661
Q50A_1	-0.055	0.096	-0.574	0.566
Q50B_4	-0.019	0.090	-0.210	0.834

Q50C_4	-0.017	0.061	-0.274	0.784
Q44_4	-0.201	0.096	-2.089	0.037
Q49_1	0.257	0.089	2.875	0.004
Q50C_5	0.029	0.064	0.463	0.643
Q50C_1	-0.157	0.093	-1.684	0.092
Q55_5	-0.092	0.091	-1.009	0.313
Q45_7	-0.235	0.105	-2.246	0.025
Q51_3	-0.208	0.091	-2.288	0.022
Q42_7	-0.189	0.106	-1.781	0.075
Q55_4	0.047	0.070	0.672	0.502
Q55_10	0.004	0.068	0.054	0.957
Q46_4	-0.291	0.105	-2.767	0.006

F4 BY

Q49_12	-0.036	0.064	-0.561	0.574
Q49_5	0.165	0.091	1.809	0.071
Q39_4	0.168	0.078	2.167	0.030
Q39_1	-0.008	0.046	-0.180	0.857
Q47B_4	0.155	0.107	1.451	0.147
Q49_17	0.185	0.092	2.017	0.044
Q39_14	0.043	0.054	0.786	0.432
Q43_10	0.186	0.077	2.419	0.016
Q39_8	-0.003	0.061	-0.054	0.957
Q49_22	0.167	0.069	2.435	0.015
Q39_10	-0.028	0.057	-0.499	0.618
Q39_15	-0.013	0.053	-0.245	0.806
Q49_11	0.087	0.071	1.231	0.218
Q43_11	0.121	0.081	1.502	0.133
Q47B_11	-0.036	0.092	-0.394	0.693
Q39_2	-0.051	0.062	-0.821	0.412
Q43_15	0.097	0.064	1.502	0.133
Q55_1	-0.049	0.061	-0.813	0.416
Q47A_5	0.242	0.077	3.125	0.002
Q43_14	0.058	0.063	0.909	0.363
Q47B_1	0.079	0.066	1.210	0.226

Q53_7	-0.017	0.065	-0.266	0.790
Q54_1	-0.117	0.072	-1.631	0.103
Q46_1	0.187	0.077	2.427	0.015
Q41_3	0.020	0.049	0.403	0.687
Q41_7	-0.022	0.057	-0.395	0.693
Q41_12	0.021	0.047	0.455	0.649
Q41_13	0.087	0.077	1.131	0.258
Q41_9	-0.080	0.061	-1.307	0.191
Q41_6	-0.092	0.055	-1.693	0.090
Q41_1	0.372	0.090	4.148	0.000
Q41_10	0.000	0.039	0.004	0.997
Q42_9	0.579	0.093	6.210	0.000
Q46_2	0.716	0.079	9.099	0.000
Q50A_1	-0.460	0.105	-4.366	0.000
Q50B_4	0.636	0.091	7.022	0.000
Q50C_4	1.107	0.084	13.102	0.000
Q44_4	0.695	0.090	7.715	0.000
Q49_1	0.567	0.082	6.953	0.000
Q50C_5	1.002	0.091	11.049	0.000
Q50C_1	1.012	0.090	11.252	0.000
Q55_5	0.537	0.108	4.961	0.000
Q45_7	0.024	0.075	0.326	0.744
Q51_3	0.004	0.059	0.061	0.951
Q42_7	0.389	0.103	3.769	0.000
Q55_4	0.633	0.106	5.978	0.000
Q55_10	0.483	0.105	4.615	0.000
Q46_4	0.040	0.080	0.503	0.615
F5	BY			
Q49_12	0.034	0.064	0.522	0.602
Q49_5	0.015	0.081	0.184	0.854
Q39_4	0.123	0.079	1.559	0.119
Q39_1	0.106	0.075	1.403	0.161
Q47B_4	-0.035	0.079	-0.437	0.662
Q49_17	0.045	0.067	0.674	0.500

Q39_14	-0.031	0.055	-0.559	0.576
Q43_10	0.085	0.071	1.197	0.231
Q39_8	0.162	0.079	2.049	0.040
Q49_22	-0.122	0.068	-1.792	0.073
Q39_10	0.080	0.069	1.162	0.245
Q39_15	-0.126	0.072	-1.747	0.081
Q49_11	-0.031	0.058	-0.536	0.592
Q43_11	0.073	0.077	0.947	0.344
Q47B_11	-0.056	0.094	-0.601	0.548
Q39_2	-0.001	0.057	-0.013	0.990
Q43_15	0.028	0.058	0.478	0.633
Q55_1	-0.149	0.082	-1.826	0.068
Q47A_5	0.038	0.073	0.523	0.601
Q43_14	0.054	0.070	0.772	0.440
Q47B_1	-0.026	0.061	-0.419	0.675
Q53_7	0.000	0.070	0.006	0.995
Q54_1	0.001	0.068	0.020	0.984
Q46_1	-0.002	0.064	-0.034	0.973
Q41_3	0.506	0.078	6.521	0.000
Q41_7	0.618	0.092	6.681	0.000
Q41_12	0.508	0.074	6.850	0.000
Q41_13	1.048	0.086	12.207	0.000
Q41_9	0.394	0.085	4.633	0.000
Q41_6	0.373	0.072	5.177	0.000
Q41_1	0.923	0.090	10.251	0.000
Q41_10	0.718	0.071	10.057	0.000
Q42_9	0.118	0.089	1.325	0.185
Q46_2	0.048	0.071	0.683	0.495
Q50A_1	-0.008	0.074	-0.103	0.918
Q50B_4	-0.010	0.082	-0.127	0.899
Q50C_4	-0.025	0.061	-0.408	0.683
Q44_4	0.133	0.082	1.617	0.106
Q49_1	0.065	0.077	0.854	0.393
Q50C_5	0.087	0.075	1.164	0.244
Q50C_1	-0.129	0.083	-1.555	0.120

Q55_5	-0.043	0.073	-0.587	0.557
Q45_7	0.029	0.079	0.368	0.713
Q51_3	0.070	0.070	1.007	0.314
Q42_7	0.042	0.063	0.663	0.507
Q55_4	-0.139	0.081	-1.728	0.084
Q55_10	-0.124	0.082	-1.510	0.131
Q46_4	0.053	0.083	0.639	0.523
F6				
BY				
Q49_12	0.447	0.137	3.264	0.001
Q49_5	0.271	0.133	2.037	0.042
Q39_4	0.075	0.109	0.688	0.492
Q39_1	0.067	0.089	0.752	0.452
Q47B_4	0.437	0.129	3.391	0.001
Q49_17	0.385	0.117	3.287	0.001
Q39_14	-0.068	0.078	-0.876	0.381
Q43_10	0.184	0.104	1.764	0.078
Q39_8	-0.025	0.088	-0.281	0.779
Q49_22	-0.013	0.079	-0.171	0.864
Q39_10	0.146	0.109	1.335	0.182
Q39_15	0.084	0.103	0.818	0.413
Q49_11	-0.094	0.107	-0.872	0.383
Q43_11	0.149	0.106	1.408	0.159
Q47B_11	-0.006	0.114	-0.054	0.957
Q39_2	0.048	0.082	0.582	0.561
Q43_15	-0.063	0.076	-0.819	0.413
Q55_1	0.300	0.104	2.893	0.004
Q47A_5	0.065	0.087	0.753	0.451
Q43_14	-0.052	0.079	-0.655	0.512
Q47B_1	-0.013	0.069	-0.182	0.856
Q53_7	0.223	0.095	2.340	0.019
Q54_1	0.021	0.084	0.252	0.801
Q46_1	-0.018	0.091	-0.196	0.845
Q41_3	-0.048	0.066	-0.722	0.470
Q41_7	0.003	0.068	0.037	0.970

Q41_12		-0.020	0.059	-0.343	0.732
Q41_13		0.224	0.132	1.695	0.090
Q41_9		0.023	0.062	0.369	0.712
Q41_6		-0.043	0.058	-0.746	0.456
Q41_1		-0.060	0.099	-0.606	0.545
Q41_10		0.094	0.072	1.300	0.194
Q42_9		0.087	0.121	0.718	0.473
Q46_2		-0.068	0.099	-0.685	0.493
Q50A_1		0.560	0.132	4.252	0.000
Q50B_4		0.015	0.109	0.141	0.888
Q50C_4		-0.104	0.121	-0.858	0.391
Q44_4		0.159	0.119	1.340	0.180
Q49_1		0.034	0.096	0.353	0.724
Q50C_5		-0.283	0.126	-2.243	0.025
Q50C_1		0.078	0.106	0.739	0.460
Q55_5		0.495	0.141	3.501	0.000
Q45_7		0.403	0.137	2.945	0.003
Q51_3		0.362	0.120	3.020	0.003
Q42_7		0.549	0.124	4.418	0.000
Q55_4		0.400	0.153	2.620	0.009
Q55_10		0.414	0.140	2.955	0.003
Q46_4		0.289	0.145	2.000	0.046
F2	WITH				
F1		-0.158	0.071	-2.214	0.027
F3	WITH				
F1		0.180	0.077	2.347	0.019
F2		-0.142	0.073	-1.940	0.052
F4	WITH				
F1		0.246	0.069	3.595	0.000
F2		0.218	0.077	2.819	0.005
F3		0.004	0.075	0.056	0.955

F5	WITH				
F1		0.330	0.070	4.741	0.000
F2		-0.065	0.081	-0.798	0.425
F3		0.228	0.069	3.290	0.001
F4		0.210	0.071	2.954	0.003
F6	WITH				
F1		0.275	0.073	3.748	0.000
F2		0.243	0.092	2.648	0.008
F3		-0.080	0.078	-1.025	0.305
F4		0.331	0.082	4.035	0.000
F5		0.112	0.106	1.061	0.289

Group SING

F1	BY				
Q49_12		0.676	0.098	6.868	0.000
Q49_5		0.485	0.105	4.614	0.000
Q39_4		0.469	0.094	4.978	0.000
Q39_1		0.718	0.098	7.346	0.000
Q47B_4		0.488	0.107	4.565	0.000
Q49_17		0.295	0.095	3.118	0.002
Q39_14		0.761	0.121	6.301	0.000
Q43_10		0.510	0.120	4.256	0.000
Q39_8		0.050	0.096	0.525	0.599
Q49_22		-0.200	0.167	-1.200	0.230
Q39_10		0.006	0.055	0.110	0.913
Q39_15		0.008	0.057	0.149	0.882
Q49_11		-0.288	0.115	-2.504	0.012
Q43_11		-0.050	0.144	-0.346	0.730
Q47B_11		-0.052	0.090	-0.577	0.564
Q39_2		-0.070	0.098	-0.717	0.474
Q43_15		0.167	0.228	0.729	0.466
Q55_1		0.177	0.203	0.872	0.383
Q47A_5		0.039	0.141	0.274	0.784
Q43_14		0.125	0.223	0.560	0.575
Q47B_1		0.048	0.148	0.325	0.745
Q53_7		0.141	0.211	0.670	0.503
Q54_1		0.111	0.180	0.614	0.539
Q46_1		0.149	0.124	1.201	0.230
Q41_3		-0.080	0.067	-1.188	0.235
Q41_7		0.134	0.124	1.084	0.278
Q41_12		0.053	0.111	0.476	0.634
Q41_13		0.123	0.208	0.593	0.553
Q41_9		0.010	0.084	0.121	0.904
Q41_6		0.060	0.070	0.862	0.389
Q41_1		-0.080	0.147	-0.543	0.587
Q41_10		-0.054	0.066	-0.829	0.407

Q42_9	0.098	0.162	0.605	0.545
Q46_2	0.077	0.193	0.399	0.690
Q50A_1	-0.004	0.082	-0.043	0.965
Q50B_4	-0.026	0.073	-0.356	0.722
Q50C_4	-0.087	0.072	-1.211	0.226
Q44_4	0.116	0.224	0.517	0.605
Q49_1	0.144	0.149	0.962	0.336
Q50C_5	-0.034	0.065	-0.525	0.600
Q50C_1	-0.063	0.078	-0.811	0.417
Q55_5	0.065	0.098	0.666	0.505
Q45_7	0.022	0.088	0.246	0.806
Q51_3	0.073	0.111	0.655	0.513
Q42_7	0.053	0.116	0.460	0.645
Q55_4	0.140	0.090	1.544	0.123
Q55_10	-0.014	0.079	-0.177	0.860
Q46_4	0.173	0.159	1.083	0.279
F2	BY			
Q49_12	-0.176	0.130	-1.358	0.175
Q49_5	0.078	0.097	0.811	0.418
Q39_4	0.065	0.086	0.762	0.446
Q39_1	-0.168	0.125	-1.341	0.180
Q47B_4	0.118	0.098	1.202	0.229
Q49_17	-0.049	0.083	-0.598	0.550
Q39_14	-0.161	0.127	-1.270	0.204
Q43_10	-0.129	0.114	-1.125	0.261
Q39_8	0.458	0.088	5.180	0.000
Q49_22	0.638	0.086	7.447	0.000
Q39_10	0.850	0.072	11.793	0.000
Q39_15	0.693	0.068	10.250	0.000
Q49_11	0.427	0.105	4.078	0.000
Q43_11	0.495	0.092	5.383	0.000
Q47B_11	0.498	0.084	5.939	0.000
Q39_2	0.663	0.075	8.889	0.000
Q43_15	0.031	0.055	0.558	0.577

Q55_1	0.036	0.062	0.574	0.566
Q47A_5	0.002	0.062	0.026	0.979
Q43_14	0.076	0.066	1.143	0.253
Q47B_1	-0.028	0.064	-0.444	0.657
Q53_7	0.076	0.074	1.037	0.300
Q54_1	-0.085	0.078	-1.085	0.278
Q46_1	-0.033	0.069	-0.484	0.628
Q41_3	-0.059	0.060	-0.980	0.327
Q41_7	0.059	0.069	0.854	0.393
Q41_12	0.076	0.068	1.123	0.261
Q41_13	-0.040	0.077	-0.520	0.603
Q41_9	0.067	0.070	0.961	0.336
Q41_6	0.004	0.058	0.066	0.947
Q41_1	-0.032	0.060	-0.528	0.598
Q41_10	-0.047	0.060	-0.787	0.431
Q42_9	0.055	0.076	0.722	0.470
Q46_2	0.024	0.066	0.371	0.711
Q50A_1	-0.028	0.059	-0.470	0.639
Q50B_4	-0.035	0.064	-0.544	0.586
Q50C_4	0.018	0.047	0.377	0.706
Q44_4	0.346	0.093	3.714	0.000
Q49_1	0.095	0.077	1.229	0.219
Q50C_5	-0.159	0.071	-2.247	0.025
Q50C_1	-0.187	0.103	-1.824	0.068
Q55_5	0.133	0.090	1.473	0.141
Q45_7	-0.041	0.085	-0.483	0.629
Q51_3	0.140	0.082	1.710	0.087
Q42_7	0.053	0.068	0.769	0.442
Q55_4	0.097	0.091	1.069	0.285
Q55_10	0.104	0.086	1.216	0.224
Q46_4	0.063	0.075	0.837	0.402
F3				
BY				
Q49_12	0.029	0.065	0.437	0.662
Q49_5	0.016	0.078	0.200	0.842

Q39_4	0.011	0.070	0.150	0.881
Q39_1	-0.032	0.063	-0.515	0.607
Q47B_4	0.165	0.084	1.951	0.051
Q49_17	0.134	0.085	1.580	0.114
Q39_14	0.007	0.062	0.112	0.911
Q43_10	0.103	0.086	1.203	0.229
Q39_8	-0.150	0.087	-1.725	0.084
Q49_22	0.072	0.073	0.996	0.319
Q39_10	-0.073	0.061	-1.196	0.232
Q39_15	-0.009	0.050	-0.177	0.860
Q49_11	0.031	0.075	0.415	0.678
Q43_11	-0.045	0.074	-0.603	0.547
Q47B_11	0.001	0.075	0.017	0.986
Q39_2	0.066	0.066	1.006	0.315
Q43_15	0.114	0.080	1.437	0.151
Q55_1	-0.004	0.059	-0.065	0.948
Q47A_5	0.105	0.069	1.517	0.129
Q43_14	0.074	0.069	1.068	0.285
Q47B_1	0.027	0.065	0.416	0.677
Q53_7	-0.001	0.066	-0.020	0.984
Q54_1	-0.071	0.078	-0.911	0.362
Q46_1	0.083	0.073	1.147	0.251
Q41_3	0.891	0.076	11.647	0.000
Q41_7	0.745	0.084	8.892	0.000
Q41_12	0.673	0.077	8.738	0.000
Q41_13	0.875	0.101	8.704	0.000
Q41_9	0.835	0.081	10.245	0.000
Q41_6	0.768	0.077	9.950	0.000
Q41_1	0.771	0.085	9.017	0.000
Q41_10	0.865	0.077	11.181	0.000
Q42_9	0.137	0.085	1.623	0.105
Q46_2	-0.020	0.065	-0.309	0.757
Q50A_1	0.052	0.066	0.788	0.431
Q50B_4	0.006	0.065	0.097	0.922
Q50C_4	-0.012	0.050	-0.237	0.813

Q44_4	-0.003	0.058	-0.056	0.955
Q49_1	0.097	0.074	1.309	0.190
Q50C_5	-0.010	0.048	-0.218	0.827
Q50C_1	0.019	0.051	0.366	0.715
Q55_5	0.011	0.066	0.174	0.862
Q45_7	0.042	0.083	0.502	0.615
Q51_3	0.093	0.068	1.375	0.169
Q42_7	0.121	0.071	1.720	0.085
Q55_4	-0.005	0.068	-0.073	0.942
Q55_10	-0.043	0.072	-0.605	0.545
Q46_4	-0.107	0.076	-1.398	0.162

F4 BY

Q49_12	-0.040	0.079	-0.508	0.612
Q49_5	0.054	0.085	0.632	0.528
Q39_4	-0.090	0.080	-1.130	0.259
Q39_1	0.117	0.082	1.416	0.157
Q47B_4	0.012	0.071	0.177	0.860
Q49_17	-0.009	0.081	-0.110	0.912
Q39_14	-0.009	0.065	-0.138	0.890
Q43_10	0.031	0.084	0.370	0.712
Q39_8	0.043	0.080	0.539	0.590
Q49_22	0.072	0.071	1.015	0.310
Q39_10	-0.037	0.052	-0.712	0.476
Q39_15	0.101	0.062	1.628	0.104
Q49_11	-0.074	0.081	-0.913	0.361
Q43_11	0.000	0.069	0.002	0.998
Q47B_11	0.015	0.073	0.212	0.832
Q39_2	-0.027	0.057	-0.468	0.639
Q43_15	0.008	0.058	0.138	0.890
Q55_1	-0.025	0.063	-0.394	0.694
Q47A_5	0.015	0.064	0.232	0.817
Q43_14	-0.009	0.055	-0.173	0.863
Q47B_1	0.060	0.067	0.890	0.374
Q53_7	0.011	0.067	0.163	0.870

Q54_1	-0.166	0.081	-2.053	0.040
Q46_1	-0.027	0.068	-0.399	0.690
Q41_3	-0.052	0.056	-0.925	0.355
Q41_7	-0.029	0.059	-0.491	0.623
Q41_12	0.080	0.066	1.209	0.227
Q41_13	0.138	0.104	1.326	0.185
Q41_9	-0.039	0.061	-0.649	0.516
Q41_6	-0.145	0.072	-2.004	0.045
Q41_1	0.410	0.086	4.763	0.000
Q41_10	0.081	0.066	1.233	0.217
Q42_9	0.677	0.088	7.665	0.000
Q46_2	0.970	0.089	10.949	0.000
Q50A_1	0.706	0.085	8.276	0.000
Q50B_4	0.662	0.084	7.854	0.000
Q50C_4	0.735	0.088	8.384	0.000
Q44_4	0.843	0.097	8.663	0.000
Q49_1	0.864	0.085	10.149	0.000
Q50C_5	0.717	0.092	7.769	0.000
Q50C_1	0.064	0.072	0.898	0.369
Q55_5	0.043	0.069	0.630	0.529
Q45_7	-0.071	0.084	-0.851	0.395
Q51_3	-0.208	0.070	-2.959	0.003
Q42_7	-0.018	0.051	-0.346	0.729
Q55_4	0.102	0.082	1.244	0.213
Q55_10	0.089	0.078	1.139	0.255
Q46_4	0.351	0.087	4.059	0.000
F5				
BY				
Q49_12	-0.132	0.313	-0.420	0.674
Q49_5	-0.072	0.202	-0.358	0.720
Q39_4	0.026	0.150	0.174	0.862
Q39_1	0.072	0.290	0.250	0.803
Q47B_4	0.102	0.256	0.398	0.691
Q49_17	-0.043	0.141	-0.303	0.762
Q39_14	0.111	0.337	0.328	0.743

Q43_10	-0.164	0.242	-0.679	0.497
Q39_8	-0.025	0.081	-0.310	0.757
Q49_22	-0.159	0.160	-0.998	0.319
Q39_10	0.081	0.083	0.980	0.327
Q39_15	0.057	0.064	0.885	0.376
Q49_11	0.130	0.162	0.803	0.422
Q43_11	0.309	0.109	2.821	0.005
Q47B_11	0.114	0.099	1.155	0.248
Q39_2	-0.054	0.085	-0.635	0.525
Q43_15	0.398	0.174	2.290	0.022
Q55_1	0.357	0.109	3.278	0.001
Q47A_5	0.263	0.081	3.238	0.001
Q43_14	0.400	0.133	3.022	0.003
Q47B_1	0.278	0.080	3.455	0.001
Q53_7	0.380	0.122	3.123	0.002
Q54_1	0.248	0.105	2.354	0.019
Q46_1	0.160	0.122	1.303	0.193
Q41_3	-0.002	0.055	-0.036	0.971
Q41_7	0.174	0.131	1.323	0.186
Q41_12	0.218	0.109	1.996	0.046
Q41_13	-0.329	0.144	-2.283	0.022
Q41_9	0.128	0.096	1.336	0.181
Q41_6	-0.008	0.085	-0.089	0.929
Q41_1	-0.125	0.098	-1.275	0.202
Q41_10	0.002	0.059	0.027	0.978
Q42_9	-0.062	0.085	-0.724	0.469
Q46_2	-0.065	0.126	-0.520	0.603
Q50A_1	0.329	0.153	2.143	0.032
Q50B_4	0.256	0.156	1.637	0.102
Q50C_4	0.302	0.249	1.213	0.225
Q44_4	-0.135	0.096	-1.413	0.158
Q49_1	0.019	0.052	0.357	0.721
Q50C_5	0.307	0.247	1.239	0.215
Q50C_1	0.117	0.266	0.441	0.659
Q55_5	-0.067	0.120	-0.558	0.577

Q45_7	0.042	0.140	0.302	0.763
Q51_3	-0.208	0.107	-1.955	0.051
Q42_7	-0.181	0.129	-1.405	0.160
Q55_4	0.018	0.090	0.203	0.839
Q55_10	0.005	0.125	0.037	0.970
Q46_4	-0.131	0.132	-0.991	0.322
F6				
BY				
Q49_12	0.034	0.077	0.440	0.660
Q49_5	0.082	0.092	0.886	0.376
Q39_4	0.244	0.088	2.764	0.006
Q39_1	0.006	0.060	0.097	0.923
Q47B_4	-0.102	0.087	-1.175	0.240
Q49_17	0.103	0.090	1.141	0.254
Q39_14	0.019	0.063	0.298	0.766
Q43_10	0.064	0.096	0.671	0.502
Q39_8	0.124	0.093	1.330	0.184
Q49_22	0.073	0.085	0.853	0.393
Q39_10	-0.011	0.050	-0.225	0.822
Q39_15	-0.052	0.060	-0.867	0.386
Q49_11	0.070	0.094	0.743	0.458
Q43_11	0.112	0.117	0.960	0.337
Q47B_11	0.036	0.082	0.440	0.660
Q39_2	0.050	0.068	0.730	0.466
Q43_15	-0.193	0.126	-1.536	0.125
Q55_1	0.063	0.107	0.583	0.560
Q47A_5	-0.047	0.090	-0.519	0.604
Q43_14	-0.107	0.120	-0.890	0.374
Q47B_1	0.020	0.091	0.214	0.830
Q53_7	-0.028	0.104	-0.271	0.786
Q54_1	0.110	0.099	1.113	0.266
Q46_1	-0.031	0.081	-0.381	0.703
Q41_3	0.076	0.066	1.155	0.248
Q41_7	0.066	0.083	0.792	0.428
Q41_12	-0.049	0.083	-0.595	0.552

Q41_13		-0.002	0.093	-0.020	0.984
Q41_9		-0.030	0.072	-0.421	0.673
Q41_6		0.035	0.066	0.533	0.594
Q41_1		-0.062	0.071	-0.871	0.384
Q41_10		0.082	0.070	1.170	0.242
Q42_9		0.027	0.073	0.365	0.715
Q46_2		0.049	0.084	0.586	0.558
Q50A_1		0.207	0.159	1.297	0.195
Q50B_4		0.145	0.140	1.034	0.301
Q50C_4		0.388	0.156	2.480	0.013
Q44_4		-0.065	0.068	-0.960	0.337
Q49_1		-0.092	0.092	-1.008	0.313
Q50C_5		0.453	0.160	2.837	0.005
Q50C_1		0.846	0.098	8.668	0.000
Q55_5		0.505	0.087	5.824	0.000
Q45_7		0.578	0.096	6.016	0.000
Q51_3		0.429	0.098	4.363	0.000
Q42_7		0.490	0.084	5.830	0.000
Q55_4		0.550	0.094	5.830	0.000
Q55_10		0.467	0.088	5.293	0.000
Q46_4		0.439	0.087	5.048	0.000
F2	WITH				
F1		-0.017	0.097	-0.177	0.859
F3	WITH				
F1		0.332	0.071	4.690	0.000
F2		0.082	0.077	1.067	0.286
F4	WITH				
F1		0.090	0.115	0.789	0.430
F2		0.101	0.074	1.358	0.175
F3		0.134	0.082	1.627	0.104

F5	WITH				
F1		0.053	0.083	0.635	0.526
F2		0.036	0.114	0.313	0.754
F3		0.059	0.111	0.531	0.595
F4		0.030	0.081	0.366	0.714

F6	WITH				
F1		0.153	0.083	1.840	0.066
F2		0.212	0.097	2.195	0.028
F3		0.132	0.076	1.745	0.081
F4		0.249	0.085	2.913	0.004
F5		0.005	0.109	0.047	0.962

Factorial Invariance (Optimized)

MODEL:

F1-F6 by Q49_12 Q39_4 Q39_1 Q47b_4 Q49_17
 Q39_8 Q49_22 Q39_10 Q39_15 Q49_11 Q39_2
 Q43_15 Q55_1 Q47a_5 Q43_14 Q47b_1 Q53_7 Q54_1 Q46_1
 Q41_3 Q41_7 Q41_12 Q41_9 Q41_6 Q41_1 Q41_10
 Q42_9 Q46_2 Q50b_4 Q49_1 Q50c_5
 Q55_5 Q45_7 Q51_3 Q55_4 Q55_10 (*1);
 [F1-F6@0];

MODEL ind:

[F1@0 F2@0 F3@0 F4@0 F5@0 F6@0];
 [Q49_12 Q39_4 Q39_1 Q47b_4 Q49_17];
 [Q39_8 Q49_22 Q39_10 Q39_15 Q49_11 Q39_2];
 [Q43_15 Q55_1 Q47a_5 Q43_14 Q47b_1 Q53_7 Q54_1 Q46_1];
 [Q41_3 Q41_7 Q41_12 Q41_9 Q41_6 Q41_1 Q41_10];
 [Q42_9 Q46_2 Q50b_4 Q49_1 Q50c_5];
 [Q55_5 Q45_7 Q51_3 Q55_4 Q55_10];

MODEL sing:

[F1@0 F2@0 F3@0 F4@0 F5@0 F6@0];
 [Q49_12 Q39_4 Q39_1 Q47b_4 Q49_17];
 [Q39_8 Q49_22 Q39_10 Q39_15 Q49_11 Q39_2];
 [Q43_15 Q55_1 Q47a_5 Q43_14 Q47b_1 Q53_7 Q54_1 Q46_1];
 [Q41_3 Q41_7 Q41_12 Q41_9 Q41_6 Q41_1 Q41_10];
 [Q42_9 Q46_2 Q50b_4 Q49_1 Q50c_5];
 [Q55_5 Q45_7 Q51_3 Q55_4 Q55_10];

SUMMARY OF ANALYSIS

Number of groups	3
Number of observations	
Group LEB	238
Group IND	263
Group SING	214
Number of dependent variables	36
Number of independent variables	0
Number of continuous latent variables	6
Observed dependent variables	

MODEL FIT INFORMATION

Number of Free Parameters 459

Loglikelihood

H0 Value -34756.765
H1 Value -33640.067

Information Criteria

Akaike (AIC) 70431.530
Bayesian (BIC) 72530.208
Sample-Size Adjusted BIC 71072.763
($n^* = (n + 2) / 24$)

Chi-Square Test of Model Fit

Value 2233.397
Degrees of Freedom 1647
P-Value 0.0000

Chi-Square Contributions From Each Group

LEB 754.355
IND 772.162
SING 706.880

RMSEA (Root Mean Square Error Of Approximation)

Estimate 0.039
90 Percent C.I. 0.034 0.043
Probability RMSEA \leq .05 1.000

CFI/TLI

CFI	0.913
TLI	0.900

Chi-Square Test of Model Fit for the Baseline Model

Value	8595.364
Degrees of Freedom	1890
P-Value	0.0000

SRMR (Standardized Root Mean Square Residual)

Value	0.056
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MODEL RESULTS

	Estimate	S.E.	Est./S.E.	Two-Tailed P-Value
Group LEB				
F1				
BY				
Q49_12	0.640	0.219	2.921	0.003
Q39_4	0.423	0.175	2.414	0.016
Q39_1	0.514	0.174	2.953	0.003
Q47B_4	0.458	0.180	2.548	0.011
Q49_17	0.442	0.177	2.498	0.012
Q39_8	0.025	0.042	0.610	0.542
Q49_22	-0.461	0.102	-4.495	0.000
Q39_10	-0.098	0.046	-2.139	0.032
Q39_15	0.062	0.054	1.133	0.257

Q49_11	-0.586	0.134	-4.366	0.000
Q39_2	-0.008	0.043	-0.186	0.852
Q43_15	-0.017	0.043	-0.393	0.695
Q55_1	-0.011	0.042	-0.272	0.786
Q47A_5	-0.067	0.054	-1.238	0.216
Q43_14	0.025	0.040	0.626	0.531
Q47B_1	-0.052	0.047	-1.106	0.269
Q53_7	0.106	0.056	1.897	0.058
Q54_1	0.028	0.043	0.643	0.521
Q46_1	-0.021	0.046	-0.457	0.648
Q41_3	-0.049	0.052	-0.940	0.347
Q41_7	0.111	0.051	2.163	0.031
Q41_12	-0.015	0.038	-0.385	0.700
Q41_9	0.011	0.040	0.284	0.776
Q41_6	-0.056	0.044	-1.268	0.205
Q41_1	0.032	0.044	0.734	0.463
Q41_10	-0.003	0.039	-0.068	0.946
Q42_9	0.080	0.071	1.127	0.260
Q46_2	-0.006	0.038	-0.146	0.884
Q50B_4	-0.043	0.049	-0.872	0.383
Q49_1	0.058	0.043	1.350	0.177
Q50C_5	-0.031	0.041	-0.765	0.444
Q55_5	0.029	0.125	0.235	0.814
Q45_7	0.182	0.129	1.413	0.158
Q51_3	0.138	0.113	1.227	0.220
Q55_4	-0.013	0.128	-0.102	0.919
Q55_10	0.016	0.108	0.145	0.885
F2				
BY				
Q49_12	0.026	0.051	0.504	0.614
Q39_4	0.228	0.055	4.119	0.000
Q39_1	-0.013	0.040	-0.316	0.752
Q47B_4	0.026	0.049	0.531	0.595
Q49_17	-0.010	0.047	-0.218	0.828
Q39_8	0.647	0.055	11.798	0.000

Q49_22	0.499	0.064	7.751	0.000
Q39_10	0.781	0.056	13.949	0.000
Q39_15	0.736	0.053	13.780	0.000
Q49_11	0.387	0.072	5.386	0.000
Q39_2	0.790	0.056	14.033	0.000
Q43_15	-0.018	0.035	-0.511	0.610
Q55_1	-0.019	0.038	-0.494	0.621
Q47A_5	-0.036	0.039	-0.929	0.353
Q43_14	0.055	0.039	1.414	0.157
Q47B_1	0.030	0.040	0.742	0.458
Q53_7	0.080	0.045	1.778	0.075
Q54_1	-0.018	0.039	-0.455	0.649
Q46_1	-0.054	0.045	-1.204	0.229
Q41_3	0.009	0.034	0.252	0.801
Q41_7	0.078	0.043	1.818	0.069
Q41_12	-0.070	0.040	-1.753	0.080
Q41_9	0.093	0.046	2.022	0.043
Q41_6	-0.028	0.035	-0.779	0.436
Q41_1	-0.039	0.038	-1.021	0.307
Q41_10	0.008	0.035	0.233	0.816
Q42_9	0.087	0.050	1.732	0.083
Q46_2	-0.052	0.039	-1.312	0.189
Q50B_4	0.060	0.047	1.291	0.197
Q49_1	0.057	0.037	1.517	0.129
Q50C_5	-0.056	0.041	-1.372	0.170
Q55_5	0.055	0.042	1.319	0.187
Q45_7	0.203	0.057	3.549	0.000
Q51_3	0.310	0.049	6.323	0.000
Q55_4	-0.052	0.036	-1.428	0.153
Q55_10	0.035	0.037	0.966	0.334
F3				
BY				
Q49_12	-0.007	0.043	-0.156	0.876
Q39_4	0.040	0.045	0.880	0.379
Q39_1	0.099	0.054	1.849	0.064

Q47B_4	0.109	0.055	1.984	0.047
Q49_17	0.003	0.045	0.056	0.955
Q39_8	-0.003	0.040	-0.065	0.948
Q49_22	0.056	0.050	1.126	0.260
Q39_10	-0.040	0.036	-1.110	0.267
Q39_15	-0.061	0.038	-1.609	0.108
Q49_11	0.024	0.037	0.644	0.520
Q39_2	-0.013	0.034	-0.369	0.712
Q43_15	0.037	0.041	0.908	0.364
Q55_1	-0.048	0.044	-1.083	0.279
Q47A_5	0.080	0.045	1.787	0.074
Q43_14	0.076	0.044	1.714	0.087
Q47B_1	-0.021	0.041	-0.515	0.607
Q53_7	-0.039	0.044	-0.892	0.372
Q54_1	-0.025	0.042	-0.597	0.550
Q46_1	0.058	0.048	1.217	0.224
Q41_3	0.742	0.058	12.782	0.000
Q41_7	0.774	0.060	12.932	0.000
Q41_12	0.684	0.056	12.109	0.000
Q41_9	0.811	0.063	12.792	0.000
Q41_6	0.754	0.059	12.724	0.000
Q41_1	0.739	0.069	10.745	0.000
Q41_10	0.791	0.061	12.914	0.000
Q42_9	0.067	0.052	1.293	0.196
Q46_2	0.007	0.037	0.190	0.849
Q50B_4	-0.060	0.049	-1.221	0.222
Q49_1	0.024	0.039	0.608	0.543
Q50C_5	0.008	0.038	0.203	0.839
Q55_5	0.002	0.035	0.060	0.952
Q45_7	-0.036	0.053	-0.674	0.501
Q51_3	0.045	0.041	1.110	0.267
Q55_4	0.005	0.033	0.147	0.883
Q55_10	-0.053	0.042	-1.248	0.212

F4	BY				
Q49_12		-0.051	0.067	-0.759	0.448
Q39_4		0.177	0.071	2.501	0.012
Q39_1		0.186	0.075	2.495	0.013
Q47B_4		0.008	0.050	0.156	0.876
Q49_17		0.163	0.074	2.208	0.027
Q39_8		-0.037	0.047	-0.793	0.428
Q49_22		0.023	0.048	0.482	0.630
Q39_10		0.123	0.054	2.276	0.023
Q39_15		-0.059	0.044	-1.342	0.180
Q49_11		0.210	0.086	2.448	0.014
Q39_2		-0.016	0.037	-0.441	0.659
Q43_15		0.566	0.059	9.525	0.000
Q55_1		0.536	0.061	8.731	0.000
Q47A_5		0.458	0.058	7.941	0.000
Q43_14		0.511	0.059	8.663	0.000
Q47B_1		0.443	0.059	7.518	0.000
Q53_7		0.489	0.061	7.983	0.000
Q54_1		0.530	0.061	8.750	0.000
Q46_1		0.423	0.062	6.799	0.000
Q41_3		0.059	0.052	1.123	0.262
Q41_7		0.021	0.044	0.484	0.629
Q41_12		0.172	0.057	2.997	0.003
Q41_9		-0.006	0.040	-0.151	0.880
Q41_6		0.029	0.043	0.669	0.503
Q41_1		-0.275	0.076	-3.616	0.000
Q41_10		-0.082	0.055	-1.479	0.139
Q42_9		-0.066	0.060	-1.093	0.274
Q46_2		-0.116	0.064	-1.810	0.070
Q50B_4		0.030	0.044	0.666	0.505
Q49_1		0.065	0.056	1.176	0.240
Q50C_5		0.049	0.048	1.016	0.310
Q55_5		-0.117	0.061	-1.909	0.056
Q45_7		-0.042	0.061	-0.693	0.488
Q51_3		-0.173	0.058	-2.987	0.003

	Q55_4	0.012	0.039	0.307	0.759
	Q55_10	-0.007	0.043	-0.155	0.877
F5	BY				
	Q49_12	-0.012	0.044	-0.261	0.794
	Q39_4	-0.026	0.046	-0.576	0.565
	Q39_1	0.076	0.055	1.393	0.164
	Q47B_4	0.010	0.051	0.207	0.836
	Q49_17	0.019	0.054	0.352	0.725
	Q39_8	0.074	0.053	1.376	0.169
	Q49_22	0.017	0.044	0.398	0.691
	Q39_10	-0.029	0.038	-0.768	0.443
	Q39_15	0.076	0.044	1.711	0.087
	Q49_11	-0.020	0.031	-0.641	0.522
	Q39_2	0.014	0.037	0.372	0.710
	Q43_15	0.116	0.062	1.871	0.061
	Q55_1	-0.100	0.062	-1.606	0.108
	Q47A_5	0.129	0.059	2.200	0.028
	Q43_14	0.140	0.061	2.288	0.022
	Q47B_1	0.062	0.055	1.140	0.254
	Q53_7	-0.045	0.050	-0.899	0.369
	Q54_1	-0.107	0.064	-1.665	0.096
	Q46_1	0.065	0.059	1.110	0.267
	Q41_3	0.048	0.045	1.057	0.290
	Q41_7	0.009	0.039	0.220	0.826
	Q41_12	0.003	0.040	0.086	0.932
	Q41_9	-0.101	0.057	-1.766	0.077
	Q41_6	-0.119	0.053	-2.227	0.026
	Q41_1	0.315	0.073	4.314	0.000
	Q41_10	0.055	0.049	1.129	0.259
	Q42_9	0.525	0.068	7.720	0.000
	Q46_2	0.867	0.067	12.967	0.000
	Q50B_4	0.779	0.073	10.607	0.000
	Q49_1	0.891	0.076	11.803	0.000
	Q50C_5	0.953	0.078	12.222	0.000

	Q55_5	0.059	0.047	1.256	0.209
	Q45_7	-0.011	0.057	-0.197	0.844
	Q51_3	-0.093	0.051	-1.826	0.068
	Q55_4	0.056	0.055	1.018	0.309
	Q55_10	0.109	0.057	1.926	0.054
F6	BY				
	Q49_12	0.128	0.586	0.219	0.827
	Q39_4	0.157	0.401	0.391	0.695
	Q39_1	0.096	0.462	0.207	0.836
	Q47B_4	0.224	0.431	0.520	0.603
	Q49_17	0.195	0.420	0.465	0.642
	Q39_8	-0.055	0.055	-0.984	0.325
	Q49_22	0.125	0.403	0.311	0.756
	Q39_10	0.009	0.080	0.115	0.909
	Q39_15	-0.034	0.067	-0.513	0.608
	Q49_11	0.182	0.513	0.355	0.722
	Q39_2	-0.008	0.041	-0.186	0.853
	Q43_15	-0.078	0.057	-1.374	0.169
	Q55_1	0.114	0.057	2.010	0.044
	Q47A_5	-0.052	0.081	-0.644	0.519
	Q43_14	-0.089	0.054	-1.660	0.097
	Q47B_1	-0.011	0.065	-0.168	0.866
	Q53_7	-0.008	0.093	-0.084	0.933
	Q54_1	-0.097	0.061	-1.596	0.110
	Q46_1	0.041	0.057	0.726	0.468
	Q41_3	-0.102	0.079	-1.291	0.197
	Q41_7	-0.037	0.091	-0.408	0.683
	Q41_12	0.029	0.049	0.596	0.551
	Q41_9	-0.008	0.046	-0.183	0.855
	Q41_6	0.007	0.070	0.098	0.922
	Q41_1	0.029	0.052	0.566	0.571
	Q41_10	0.013	0.045	0.288	0.774
	Q42_9	0.107	0.106	1.013	0.311
	Q46_2	0.043	0.050	0.843	0.399

	Q50B_4	0.081	0.066	1.222	0.222
	Q49_1	-0.114	0.080	-1.418	0.156
	Q50C_5	0.025	0.044	0.559	0.576
	Q55_5	0.777	0.103	7.553	0.000
	Q45_7	0.312	0.202	1.543	0.123
	Q51_3	0.278	0.160	1.736	0.083
	Q55_4	0.981	0.087	11.296	0.000
	Q55_10	0.704	0.085	8.288	0.000
F2	WITH				
	F1	0.205	0.157	1.308	0.191
F3	WITH				
	F1	0.152	0.080	1.896	0.058
	F2	-0.023	0.074	-0.311	0.756
F4	WITH				
	F1	-0.268	0.228	-1.176	0.240
	F2	0.050	0.073	0.694	0.488
	F3	0.217	0.071	3.049	0.002
F5	WITH				
	F1	0.158	0.290	0.547	0.585
	F2	0.068	0.072	0.953	0.341
	F3	0.352	0.069	5.066	0.000
	F4	0.114	0.072	1.578	0.115
F6	WITH				
	F1	0.331	0.621	0.533	0.594
	F2	0.345	0.067	5.130	0.000
	F3	0.092	0.082	1.117	0.264
	F4	-0.236	0.080	-2.956	0.003
	F5	0.423	0.066	6.371	0.000

Group IND

F1	BY				
Q49_12		0.640	0.219	2.921	0.003
Q39_4		0.423	0.175	2.414	0.016
Q39_1		0.514	0.174	2.953	0.003
Q47B_4		0.458	0.180	2.548	0.011
Q49_17		0.442	0.177	2.498	0.012
Q39_8		0.025	0.042	0.610	0.542
Q49_22		-0.461	0.102	-4.495	0.000
Q39_10		-0.098	0.046	-2.139	0.032
Q39_15		0.062	0.054	1.133	0.257
Q49_11		-0.586	0.134	-4.366	0.000
Q39_2		-0.008	0.043	-0.186	0.852
Q43_15		-0.017	0.043	-0.393	0.695
Q55_1		-0.011	0.042	-0.272	0.786
Q47A_5		-0.067	0.054	-1.238	0.216
Q43_14		0.025	0.040	0.626	0.531
Q47B_1		-0.052	0.047	-1.106	0.269
Q53_7		0.106	0.056	1.897	0.058
Q54_1		0.028	0.043	0.643	0.521
Q46_1		-0.021	0.046	-0.457	0.648
Q41_3		-0.049	0.052	-0.940	0.347
Q41_7		0.111	0.051	2.163	0.031
Q41_12		-0.015	0.038	-0.385	0.700
Q41_9		0.011	0.040	0.284	0.776
Q41_6		-0.056	0.044	-1.268	0.205
Q41_1		0.032	0.044	0.734	0.463
Q41_10		-0.003	0.039	-0.068	0.946
Q42_9		0.080	0.071	1.127	0.260
Q46_2		-0.006	0.038	-0.146	0.884
Q50B_4		-0.043	0.049	-0.872	0.383
Q49_1		0.058	0.043	1.350	0.177
Q50C_5		-0.031	0.041	-0.765	0.444
Q55_5		0.029	0.125	0.235	0.814

	Q45_7	0.182	0.129	1.413	0.158
	Q51_3	0.138	0.113	1.227	0.220
	Q55_4	-0.013	0.128	-0.102	0.919
	Q55_10	0.016	0.108	0.145	0.885
F2	BY				
	Q49_12	0.026	0.051	0.504	0.614
	Q39_4	0.228	0.055	4.119	0.000
	Q39_1	-0.013	0.040	-0.316	0.752
	Q47B_4	0.026	0.049	0.531	0.595
	Q49_17	-0.010	0.047	-0.218	0.828
	Q39_8	0.647	0.055	11.798	0.000
	Q49_22	0.499	0.064	7.751	0.000
	Q39_10	0.781	0.056	13.949	0.000
	Q39_15	0.736	0.053	13.780	0.000
	Q49_11	0.387	0.072	5.386	0.000
	Q39_2	0.790	0.056	14.033	0.000
	Q43_15	-0.018	0.035	-0.511	0.610
	Q55_1	-0.019	0.038	-0.494	0.621
	Q47A_5	-0.036	0.039	-0.929	0.353
	Q43_14	0.055	0.039	1.414	0.157
	Q47B_1	0.030	0.040	0.742	0.458
	Q53_7	0.080	0.045	1.778	0.075
	Q54_1	-0.018	0.039	-0.455	0.649
	Q46_1	-0.054	0.045	-1.204	0.229
	Q41_3	0.009	0.034	0.252	0.801
	Q41_7	0.078	0.043	1.818	0.069
	Q41_12	-0.070	0.040	-1.753	0.080
	Q41_9	0.093	0.046	2.022	0.043
	Q41_6	-0.028	0.035	-0.779	0.436
	Q41_1	-0.039	0.038	-1.021	0.307
	Q41_10	0.008	0.035	0.233	0.816
	Q42_9	0.087	0.050	1.732	0.083
	Q46_2	-0.052	0.039	-1.312	0.189
	Q50B_4	0.060	0.047	1.291	0.197

	Q49_1	0.057	0.037	1.517	0.129
	Q50C_5	-0.056	0.041	-1.372	0.170
	Q55_5	0.055	0.042	1.319	0.187
	Q45_7	0.203	0.057	3.549	0.000
	Q51_3	0.310	0.049	6.323	0.000
	Q55_4	-0.052	0.036	-1.428	0.153
	Q55_10	0.035	0.037	0.966	0.334
F3	BY				
	Q49_12	-0.007	0.043	-0.156	0.876
	Q39_4	0.040	0.045	0.880	0.379
	Q39_1	0.099	0.054	1.849	0.064
	Q47B_4	0.109	0.055	1.984	0.047
	Q49_17	0.003	0.045	0.056	0.955
	Q39_8	-0.003	0.040	-0.065	0.948
	Q49_22	0.056	0.050	1.126	0.260
	Q39_10	-0.040	0.036	-1.110	0.267
	Q39_15	-0.061	0.038	-1.609	0.108
	Q49_11	0.024	0.037	0.644	0.520
	Q39_2	-0.013	0.034	-0.369	0.712
	Q43_15	0.037	0.041	0.908	0.364
	Q55_1	-0.048	0.044	-1.083	0.279
	Q47A_5	0.080	0.045	1.787	0.074
	Q43_14	0.076	0.044	1.714	0.087
	Q47B_1	-0.021	0.041	-0.515	0.607
	Q53_7	-0.039	0.044	-0.892	0.372
	Q54_1	-0.025	0.042	-0.597	0.550
	Q46_1	0.058	0.048	1.217	0.224
	Q41_3	0.742	0.058	12.782	0.000
	Q41_7	0.774	0.060	12.932	0.000
	Q41_12	0.684	0.056	12.109	0.000
	Q41_9	0.811	0.063	12.792	0.000
	Q41_6	0.754	0.059	12.724	0.000
	Q41_1	0.739	0.069	10.745	0.000
	Q41_10	0.791	0.061	12.914	0.000

Q42_9	0.067	0.052	1.293	0.196
Q46_2	0.007	0.037	0.190	0.849
Q50B_4	-0.060	0.049	-1.221	0.222
Q49_1	0.024	0.039	0.608	0.543
Q50C_5	0.008	0.038	0.203	0.839
Q55_5	0.002	0.035	0.060	0.952
Q45_7	-0.036	0.053	-0.674	0.501
Q51_3	0.045	0.041	1.110	0.267
Q55_4	0.005	0.033	0.147	0.883
Q55_10	-0.053	0.042	-1.248	0.212
F4				
BY				
Q49_12	-0.051	0.067	-0.759	0.448
Q39_4	0.177	0.071	2.501	0.012
Q39_1	0.186	0.075	2.495	0.013
Q47B_4	0.008	0.050	0.156	0.876
Q49_17	0.163	0.074	2.208	0.027
Q39_8	-0.037	0.047	-0.793	0.428
Q49_22	0.023	0.048	0.482	0.630
Q39_10	0.123	0.054	2.276	0.023
Q39_15	-0.059	0.044	-1.342	0.180
Q49_11	0.210	0.086	2.448	0.014
Q39_2	-0.016	0.037	-0.441	0.659
Q43_15	0.566	0.059	9.525	0.000
Q55_1	0.536	0.061	8.731	0.000
Q47A_5	0.458	0.058	7.941	0.000
Q43_14	0.511	0.059	8.663	0.000
Q47B_1	0.443	0.059	7.518	0.000
Q53_7	0.489	0.061	7.983	0.000
Q54_1	0.530	0.061	8.750	0.000
Q46_1	0.423	0.062	6.799	0.000
Q41_3	0.059	0.052	1.123	0.262
Q41_7	0.021	0.044	0.484	0.629
Q41_12	0.172	0.057	2.997	0.003
Q41_9	-0.006	0.040	-0.151	0.880

Q41_6	0.029	0.043	0.669	0.503
Q41_1	-0.275	0.076	-3.616	0.000
Q41_10	-0.082	0.055	-1.479	0.139
Q42_9	-0.066	0.060	-1.093	0.274
Q46_2	-0.116	0.064	-1.810	0.070
Q50B_4	0.030	0.044	0.666	0.505
Q49_1	0.065	0.056	1.176	0.240
Q50C_5	0.049	0.048	1.016	0.310
Q55_5	-0.117	0.061	-1.909	0.056
Q45_7	-0.042	0.061	-0.693	0.488
Q51_3	-0.173	0.058	-2.987	0.003
Q55_4	0.012	0.039	0.307	0.759
Q55_10	-0.007	0.043	-0.155	0.877

F5 BY

Q49_12	-0.012	0.044	-0.261	0.794
Q39_4	-0.026	0.046	-0.576	0.565
Q39_1	0.076	0.055	1.393	0.164
Q47B_4	0.010	0.051	0.207	0.836
Q49_17	0.019	0.054	0.352	0.725
Q39_8	0.074	0.053	1.376	0.169
Q49_22	0.017	0.044	0.398	0.691
Q39_10	-0.029	0.038	-0.768	0.443
Q39_15	0.076	0.044	1.711	0.087
Q49_11	-0.020	0.031	-0.641	0.522
Q39_2	0.014	0.037	0.372	0.710
Q43_15	0.116	0.062	1.871	0.061
Q55_1	-0.100	0.062	-1.606	0.108
Q47A_5	0.129	0.059	2.200	0.028
Q43_14	0.140	0.061	2.288	0.022
Q47B_1	0.062	0.055	1.140	0.254
Q53_7	-0.045	0.050	-0.899	0.369
Q54_1	-0.107	0.064	-1.665	0.096
Q46_1	0.065	0.059	1.110	0.267
Q41_3	0.048	0.045	1.057	0.290

Q41_7	0.009	0.039	0.220	0.826
Q41_12	0.003	0.040	0.086	0.932
Q41_9	-0.101	0.057	-1.766	0.077
Q41_6	-0.119	0.053	-2.227	0.026
Q41_1	0.315	0.073	4.314	0.000
Q41_10	0.055	0.049	1.129	0.259
Q42_9	0.525	0.068	7.720	0.000
Q46_2	0.867	0.067	12.967	0.000
Q50B_4	0.779	0.073	10.607	0.000
Q49_1	0.891	0.076	11.803	0.000
Q50C_5	0.953	0.078	12.222	0.000
Q55_5	0.059	0.047	1.256	0.209
Q45_7	-0.011	0.057	-0.197	0.844
Q51_3	-0.093	0.051	-1.826	0.068
Q55_4	0.056	0.055	1.018	0.309
Q55_10	0.109	0.057	1.926	0.054

F6 BY

Q49_12	0.128	0.586	0.219	0.827
Q39_4	0.157	0.401	0.391	0.695
Q39_1	0.096	0.462	0.207	0.836
Q47B_4	0.224	0.431	0.520	0.603
Q49_17	0.195	0.420	0.465	0.642
Q39_8	-0.055	0.055	-0.984	0.325
Q49_22	0.125	0.403	0.311	0.756
Q39_10	0.009	0.080	0.115	0.909
Q39_15	-0.034	0.067	-0.513	0.608
Q49_11	0.182	0.513	0.355	0.722
Q39_2	-0.008	0.041	-0.186	0.853
Q43_15	-0.078	0.057	-1.374	0.169
Q55_1	0.114	0.057	2.010	0.044
Q47A_5	-0.052	0.081	-0.644	0.519
Q43_14	-0.089	0.054	-1.660	0.097
Q47B_1	-0.011	0.065	-0.168	0.866
Q53_7	-0.008	0.093	-0.084	0.933

Q54_1		-0.097	0.061	-1.596	0.110
Q46_1		0.041	0.057	0.726	0.468
Q41_3		-0.102	0.079	-1.291	0.197
Q41_7		-0.037	0.091	-0.408	0.683
Q41_12		0.029	0.049	0.596	0.551
Q41_9		-0.008	0.046	-0.183	0.855
Q41_6		0.007	0.070	0.098	0.922
Q41_1		0.029	0.052	0.566	0.571
Q41_10		0.013	0.045	0.288	0.774
Q42_9		0.107	0.106	1.013	0.311
Q46_2		0.043	0.050	0.843	0.399
Q50B_4		0.081	0.066	1.222	0.222
Q49_1		-0.114	0.080	-1.418	0.156
Q50C_5		0.025	0.044	0.559	0.576
Q55_5		0.777	0.103	7.553	0.000
Q45_7		0.312	0.202	1.543	0.123
Q51_3		0.278	0.160	1.736	0.083
Q55_4		0.981	0.087	11.296	0.000
Q55_10		0.704	0.085	8.288	0.000
F2	WITH				
F1		-0.356	0.424	-0.839	0.401
F3	WITH				
F1		0.502	0.202	2.488	0.013
F2		-0.108	0.084	-1.292	0.196
F4	WITH				
F1		0.221	0.111	1.992	0.046
F2		-0.028	0.077	-0.364	0.716
F3		0.423	0.080	5.287	0.000
F5	WITH				
F1		0.135	0.461	0.292	0.770
F2		0.225	0.083	2.692	0.007
F3		0.264	0.076	3.472	0.001
F4		0.156	0.082	1.915	0.055
F6	WITH				
F1		0.224	0.827	0.271	0.786
F2		0.462	0.138	3.341	0.001
F3		0.047	0.114	0.415	0.678
F4		0.073	0.099	0.734	0.463
F5		0.602	0.109	5.523	0.000

Group SING

F1	BY				
Q49_12		0.640	0.219	2.921	0.003
Q39_4		0.423	0.175	2.414	0.016
Q39_1		0.514	0.174	2.953	0.003
Q47B_4		0.458	0.180	2.548	0.011
Q49_17		0.442	0.177	2.498	0.012
Q39_8		0.025	0.042	0.610	0.542
Q49_22		-0.461	0.102	-4.495	0.000
Q39_10		-0.098	0.046	-2.139	0.032
Q39_15		0.062	0.054	1.133	0.257
Q49_11		-0.586	0.134	-4.366	0.000
Q39_2		-0.008	0.043	-0.186	0.852
Q43_15		-0.017	0.043	-0.393	0.695
Q55_1		-0.011	0.042	-0.272	0.786
Q47A_5		-0.067	0.054	-1.238	0.216
Q43_14		0.025	0.040	0.626	0.531
Q47B_1		-0.052	0.047	-1.106	0.269
Q53_7		0.106	0.056	1.897	0.058
Q54_1		0.028	0.043	0.643	0.521
Q46_1		-0.021	0.046	-0.457	0.648
Q41_3		-0.049	0.052	-0.940	0.347
Q41_7		0.111	0.051	2.163	0.031
Q41_12		-0.015	0.038	-0.385	0.700
Q41_9		0.011	0.040	0.284	0.776
Q41_6		-0.056	0.044	-1.268	0.205
Q41_1		0.032	0.044	0.734	0.463
Q41_10		-0.003	0.039	-0.068	0.946
Q42_9		0.080	0.071	1.127	0.260
Q46_2		-0.006	0.038	-0.146	0.884
Q50B_4		-0.043	0.049	-0.872	0.383
Q49_1		0.058	0.043	1.350	0.177
Q50C_5		-0.031	0.041	-0.765	0.444
Q55_5		0.029	0.125	0.235	0.814

	Q45_7	0.182	0.129	1.413	0.158
	Q51_3	0.138	0.113	1.227	0.220
	Q55_4	-0.013	0.128	-0.102	0.919
	Q55_10	0.016	0.108	0.145	0.885
F2	BY				
	Q49_12	0.026	0.051	0.504	0.614
	Q39_4	0.228	0.055	4.119	0.000
	Q39_1	-0.013	0.040	-0.316	0.752
	Q47B_4	0.026	0.049	0.531	0.595
	Q49_17	-0.010	0.047	-0.218	0.828
	Q39_8	0.647	0.055	11.798	0.000
	Q49_22	0.499	0.064	7.751	0.000
	Q39_10	0.781	0.056	13.949	0.000
	Q39_15	0.736	0.053	13.780	0.000
	Q49_11	0.387	0.072	5.386	0.000
	Q39_2	0.790	0.056	14.033	0.000
	Q43_15	-0.018	0.035	-0.511	0.610
	Q55_1	-0.019	0.038	-0.494	0.621
	Q47A_5	-0.036	0.039	-0.929	0.353
	Q43_14	0.055	0.039	1.414	0.157
	Q47B_1	0.030	0.040	0.742	0.458
	Q53_7	0.080	0.045	1.778	0.075
	Q54_1	-0.018	0.039	-0.455	0.649
	Q46_1	-0.054	0.045	-1.204	0.229
	Q41_3	0.009	0.034	0.252	0.801
	Q41_7	0.078	0.043	1.818	0.069
	Q41_12	-0.070	0.040	-1.753	0.080
	Q41_9	0.093	0.046	2.022	0.043
	Q41_6	-0.028	0.035	-0.779	0.436
	Q41_1	-0.039	0.038	-1.021	0.307
	Q41_10	0.008	0.035	0.233	0.816
	Q42_9	0.087	0.050	1.732	0.083
	Q46_2	-0.052	0.039	-1.312	0.189
	Q50B_4	0.060	0.047	1.291	0.197

	Q49_1	0.057	0.037	1.517	0.129
	Q50C_5	-0.056	0.041	-1.372	0.170
	Q55_5	0.055	0.042	1.319	0.187
	Q45_7	0.203	0.057	3.549	0.000
	Q51_3	0.310	0.049	6.323	0.000
	Q55_4	-0.052	0.036	-1.428	0.153
	Q55_10	0.035	0.037	0.966	0.334
F3	BY				
	Q49_12	-0.007	0.043	-0.156	0.876
	Q39_4	0.040	0.045	0.880	0.379
	Q39_1	0.099	0.054	1.849	0.064
	Q47B_4	0.109	0.055	1.984	0.047
	Q49_17	0.003	0.045	0.056	0.955
	Q39_8	-0.003	0.040	-0.065	0.948
	Q49_22	0.056	0.050	1.126	0.260
	Q39_10	-0.040	0.036	-1.110	0.267
	Q39_15	-0.061	0.038	-1.609	0.108
	Q49_11	0.024	0.037	0.644	0.520
	Q39_2	-0.013	0.034	-0.369	0.712
	Q43_15	0.037	0.041	0.908	0.364
	Q55_1	-0.048	0.044	-1.083	0.279
	Q47A_5	0.080	0.045	1.787	0.074
	Q43_14	0.076	0.044	1.714	0.087
	Q47B_1	-0.021	0.041	-0.515	0.607
	Q53_7	-0.039	0.044	-0.892	0.372
	Q54_1	-0.025	0.042	-0.597	0.550
	Q46_1	0.058	0.048	1.217	0.224
	Q41_3	0.742	0.058	12.782	0.000
	Q41_7	0.774	0.060	12.932	0.000
	Q41_12	0.684	0.056	12.109	0.000
	Q41_9	0.811	0.063	12.792	0.000
	Q41_6	0.754	0.059	12.724	0.000
	Q41_1	0.739	0.069	10.745	0.000
	Q41_10	0.791	0.061	12.914	0.000

Q42_9	0.067	0.052	1.293	0.196
Q46_2	0.007	0.037	0.190	0.849
Q50B_4	-0.060	0.049	-1.221	0.222
Q49_1	0.024	0.039	0.608	0.543
Q50C_5	0.008	0.038	0.203	0.839
Q55_5	0.002	0.035	0.060	0.952
Q45_7	-0.036	0.053	-0.674	0.501
Q51_3	0.045	0.041	1.110	0.267
Q55_4	0.005	0.033	0.147	0.883
Q55_10	-0.053	0.042	-1.248	0.212

F4 BY

Q49_12	-0.051	0.067	-0.759	0.448
Q39_4	0.177	0.071	2.501	0.012
Q39_1	0.186	0.075	2.495	0.013
Q47B_4	0.008	0.050	0.156	0.876
Q49_17	0.163	0.074	2.208	0.027
Q39_8	-0.037	0.047	-0.793	0.428
Q49_22	0.023	0.048	0.482	0.630
Q39_10	0.123	0.054	2.276	0.023
Q39_15	-0.059	0.044	-1.342	0.180
Q49_11	0.210	0.086	2.448	0.014
Q39_2	-0.016	0.037	-0.441	0.659
Q43_15	0.566	0.059	9.525	0.000
Q55_1	0.536	0.061	8.731	0.000
Q47A_5	0.458	0.058	7.941	0.000
Q43_14	0.511	0.059	8.663	0.000
Q47B_1	0.443	0.059	7.518	0.000
Q53_7	0.489	0.061	7.983	0.000
Q54_1	0.530	0.061	8.750	0.000
Q46_1	0.423	0.062	6.799	0.000
Q41_3	0.059	0.052	1.123	0.262
Q41_7	0.021	0.044	0.484	0.629
Q41_12	0.172	0.057	2.997	0.003
Q41_9	-0.006	0.040	-0.151	0.880

Q41_6	0.029	0.043	0.669	0.503
Q41_1	-0.275	0.076	-3.616	0.000
Q41_10	-0.082	0.055	-1.479	0.139
Q42_9	-0.066	0.060	-1.093	0.274
Q46_2	-0.116	0.064	-1.810	0.070
Q50B_4	0.030	0.044	0.666	0.505
Q49_1	0.065	0.056	1.176	0.240
Q50C_5	0.049	0.048	1.016	0.310
Q55_5	-0.117	0.061	-1.909	0.056
Q45_7	-0.042	0.061	-0.693	0.488
Q51_3	-0.173	0.058	-2.987	0.003
Q55_4	0.012	0.039	0.307	0.759
Q55_10	-0.007	0.043	-0.155	0.877
F5				
BY				
Q49_12	-0.012	0.044	-0.261	0.794
Q39_4	-0.026	0.046	-0.576	0.565
Q39_1	0.076	0.055	1.393	0.164
Q47B_4	0.010	0.051	0.207	0.836
Q49_17	0.019	0.054	0.352	0.725
Q39_8	0.074	0.053	1.376	0.169
Q49_22	0.017	0.044	0.398	0.691
Q39_10	-0.029	0.038	-0.768	0.443
Q39_15	0.076	0.044	1.711	0.087
Q49_11	-0.020	0.031	-0.641	0.522
Q39_2	0.014	0.037	0.372	0.710
Q43_15	0.116	0.062	1.871	0.061
Q55_1	-0.100	0.062	-1.606	0.108
Q47A_5	0.129	0.059	2.200	0.028
Q43_14	0.140	0.061	2.288	0.022
Q47B_1	0.062	0.055	1.140	0.254
Q53_7	-0.045	0.050	-0.899	0.369
Q54_1	-0.107	0.064	-1.665	0.096
Q46_1	0.065	0.059	1.110	0.267
Q41_3	0.048	0.045	1.057	0.290

Q41_7	0.009	0.039	0.220	0.826
Q41_12	0.003	0.040	0.086	0.932
Q41_9	-0.101	0.057	-1.766	0.077
Q41_6	-0.119	0.053	-2.227	0.026
Q41_1	0.315	0.073	4.314	0.000
Q41_10	0.055	0.049	1.129	0.259
Q42_9	0.525	0.068	7.720	0.000
Q46_2	0.867	0.067	12.967	0.000
Q50B_4	0.779	0.073	10.607	0.000
Q49_1	0.891	0.076	11.803	0.000
Q50C_5	0.953	0.078	12.222	0.000
Q55_5	0.059	0.047	1.256	0.209
Q45_7	-0.011	0.057	-0.197	0.844
Q51_3	-0.093	0.051	-1.826	0.068
Q55_4	0.056	0.055	1.018	0.309
Q55_10	0.109	0.057	1.926	0.054
F6				
BY				
Q49_12	0.128	0.586	0.219	0.827
Q39_4	0.157	0.401	0.391	0.695
Q39_1	0.096	0.462	0.207	0.836
Q47B_4	0.224	0.431	0.520	0.603
Q49_17	0.195	0.420	0.465	0.642
Q39_8	-0.055	0.055	-0.984	0.325
Q49_22	0.125	0.403	0.311	0.756
Q39_10	0.009	0.080	0.115	0.909
Q39_15	-0.034	0.067	-0.513	0.608
Q49_11	0.182	0.513	0.355	0.722
Q39_2	-0.008	0.041	-0.186	0.853
Q43_15	-0.078	0.057	-1.374	0.169
Q55_1	0.114	0.057	2.010	0.044
Q47A_5	-0.052	0.081	-0.644	0.519
Q43_14	-0.089	0.054	-1.660	0.097
Q47B_1	-0.011	0.065	-0.168	0.866
Q53_7	-0.008	0.093	-0.084	0.933

Q54_1		-0.097	0.061	-1.596	0.110
Q46_1		0.041	0.057	0.726	0.468
Q41_3		-0.102	0.079	-1.291	0.197
Q41_7		-0.037	0.091	-0.408	0.683
Q41_12		0.029	0.049	0.596	0.551
Q41_9		-0.008	0.046	-0.183	0.855
Q41_6		0.007	0.070	0.098	0.922
Q41_1		0.029	0.052	0.566	0.571
Q41_10		0.013	0.045	0.288	0.774
Q42_9		0.107	0.106	1.013	0.311
Q46_2		0.043	0.050	0.843	0.399
Q50B_4		0.081	0.066	1.222	0.222
Q49_1		-0.114	0.080	-1.418	0.156
Q50C_5		0.025	0.044	0.559	0.576
Q55_5		0.777	0.103	7.553	0.000
Q45_7		0.312	0.202	1.543	0.123
Q51_3		0.278	0.160	1.736	0.083
Q55_4		0.981	0.087	11.296	0.000
Q55_10		0.704	0.085	8.288	0.000
F2	WITH				
F1		-0.187	0.172	-1.090	0.276
F3	WITH				
F1		0.306	0.100	3.053	0.002
F2		0.127	0.085	1.492	0.136
F4	WITH				
F1		0.194	0.095	2.049	0.040
F2		0.020	0.070	0.288	0.773
F3		0.184	0.083	2.219	0.027
F5	WITH				
F1		0.097	0.185	0.526	0.599
F2		0.110	0.082	1.352	0.176
F3		0.230	0.093	2.471	0.013
F4		0.049	0.092	0.531	0.596
F6	WITH				
F1		0.033	0.541	0.061	0.951
F2		0.201	0.092	2.188	0.029
F3		0.168	0.096	1.762	0.078
F4		0.071	0.075	0.945	0.345
F5		0.253	0.087	2.907	0.004

STANDARDIZED MODEL RESULTS

STDYX Standardization

		Estimate	S.E.	Est./S.E.	Two-Tailed P-Value
Group LEB					
F1	BY				
	Q49_12	0.666	0.227	2.930	0.003
	Q39_4	0.426	0.176	2.415	0.016
	Q39_1	0.540	0.183	2.950	0.003
	Q47B_4	0.461	0.181	2.549	0.011
	Q49_17	0.415	0.167	2.480	0.013
	Q39_8	0.025	0.042	0.612	0.541
	Q49_22	-0.433	0.094	-4.603	0.000
	Q39_10	-0.096	0.045	-2.117	0.034
	Q39_15	0.060	0.053	1.137	0.256
	Q49_11	-0.568	0.126	-4.509	0.000
	Q39_2	-0.008	0.042	-0.186	0.852
	Q43_15	-0.018	0.045	-0.394	0.694
	Q55_1	-0.011	0.041	-0.272	0.786
	Q47A_5	-0.074	0.059	-1.243	0.214
	Q43_14	0.025	0.039	0.624	0.532
	Q47B_1	-0.052	0.047	-1.109	0.267
	Q53_7	0.107	0.057	1.892	0.058
	Q54_1	0.029	0.045	0.641	0.522
	Q46_1	-0.020	0.043	-0.458	0.647
	Q41_3	-0.043	0.046	-0.944	0.345
	Q41_7	0.097	0.045	2.148	0.032
	Q41_12	-0.013	0.034	-0.386	0.700
	Q41_9	0.009	0.033	0.284	0.777
	Q41_6	-0.051	0.040	-1.272	0.203

Q41_1	0.024	0.032	0.734	0.463
Q41_10	-0.002	0.032	-0.068	0.946
Q42_9	0.071	0.063	1.124	0.261
Q46_2	-0.005	0.032	-0.146	0.884
Q50B_4	-0.033	0.038	-0.871	0.384
Q49_1	0.048	0.036	1.349	0.177
Q50C_5	-0.024	0.032	-0.766	0.444
Q55_5	0.025	0.107	0.235	0.814
Q45_7	0.163	0.115	1.414	0.157
Q51_3	0.136	0.110	1.229	0.219
Q55_4	-0.011	0.105	-0.102	0.919
Q55_10	0.014	0.097	0.145	0.885
F2				
BY				
Q49_12	0.027	0.053	0.505	0.614
Q39_4	0.229	0.055	4.191	0.000
Q39_1	-0.013	0.042	-0.316	0.752
Q47B_4	0.026	0.049	0.533	0.594
Q49_17	-0.010	0.044	-0.218	0.828
Q39_8	0.650	0.043	15.265	0.000
Q49_22	0.470	0.060	7.834	0.000
Q39_10	0.768	0.038	20.130	0.000
Q39_15	0.717	0.036	20.055	0.000
Q49_11	0.375	0.070	5.354	0.000
Q39_2	0.773	0.036	21.619	0.000
Q43_15	-0.019	0.037	-0.510	0.610
Q55_1	-0.019	0.038	-0.495	0.621
Q47A_5	-0.039	0.042	-0.930	0.352
Q43_14	0.054	0.038	1.415	0.157
Q47B_1	0.030	0.040	0.743	0.458
Q53_7	0.080	0.045	1.788	0.074
Q54_1	-0.018	0.040	-0.456	0.649
Q46_1	-0.050	0.042	-1.205	0.228
Q41_3	0.008	0.030	0.252	0.801
Q41_7	0.068	0.038	1.817	0.069

Q41_12	-0.061	0.035	-1.755	0.079
Q41_9	0.078	0.038	2.022	0.043
Q41_6	-0.025	0.032	-0.779	0.436
Q41_1	-0.028	0.028	-1.026	0.305
Q41_10	0.007	0.030	0.233	0.816
Q42_9	0.076	0.044	1.729	0.084
Q46_2	-0.043	0.033	-1.313	0.189
Q50B_4	0.047	0.036	1.292	0.196
Q49_1	0.047	0.031	1.516	0.130
Q50C_5	-0.043	0.031	-1.378	0.168
Q55_5	0.047	0.035	1.320	0.187
Q45_7	0.183	0.051	3.601	0.000
Q51_3	0.304	0.046	6.568	0.000
Q55_4	-0.042	0.030	-1.425	0.154
Q55_10	0.032	0.033	0.968	0.333

F3 BY

Q49_12	-0.007	0.045	-0.156	0.876
Q39_4	0.040	0.046	0.879	0.379
Q39_1	0.104	0.057	1.843	0.065
Q47B_4	0.110	0.056	1.978	0.048
Q49_17	0.002	0.043	0.056	0.955
Q39_8	-0.003	0.041	-0.065	0.948
Q49_22	0.053	0.047	1.122	0.262
Q39_10	-0.039	0.035	-1.114	0.265
Q39_15	-0.059	0.037	-1.618	0.106
Q49_11	0.023	0.036	0.642	0.521
Q39_2	-0.012	0.033	-0.369	0.712
Q43_15	0.038	0.042	0.907	0.364
Q55_1	-0.048	0.044	-1.083	0.279
Q47A_5	0.087	0.049	1.782	0.075
Q43_14	0.075	0.044	1.706	0.088
Q47B_1	-0.021	0.041	-0.515	0.607
Q53_7	-0.040	0.044	-0.895	0.371
Q54_1	-0.026	0.043	-0.599	0.549

Q46_1	0.054	0.045	1.216	0.224
Q41_3	0.651	0.039	16.651	0.000
Q41_7	0.679	0.040	17.152	0.000
Q41_12	0.604	0.042	14.410	0.000
Q41_9	0.674	0.043	15.600	0.000
Q41_6	0.684	0.043	15.830	0.000
Q41_1	0.541	0.045	12.080	0.000
Q41_10	0.663	0.040	16.441	0.000
Q42_9	0.059	0.045	1.296	0.195
Q46_2	0.006	0.031	0.190	0.849
Q50B_4	-0.046	0.038	-1.223	0.221
Q49_1	0.020	0.032	0.609	0.543
Q50C_5	0.006	0.030	0.203	0.839
Q55_5	0.002	0.030	0.061	0.952
Q45_7	-0.032	0.048	-0.674	0.500
Q51_3	0.044	0.040	1.110	0.267
Q55_4	0.004	0.027	0.147	0.883
Q55_10	-0.047	0.038	-1.249	0.212
F4	BY			
Q49_12	-0.053	0.069	-0.763	0.446
Q39_4	0.178	0.072	2.465	0.014
Q39_1	0.195	0.079	2.467	0.014
Q47B_4	0.008	0.050	0.156	0.876
Q49_17	0.153	0.070	2.177	0.030
Q39_8	-0.037	0.047	-0.794	0.427
Q49_22	0.022	0.045	0.482	0.630
Q39_10	0.121	0.053	2.291	0.022
Q39_15	-0.058	0.043	-1.339	0.181
Q49_11	0.203	0.082	2.474	0.013
Q39_2	-0.016	0.036	-0.441	0.659
Q43_15	0.587	0.052	11.294	0.000
Q55_1	0.531	0.054	9.805	0.000
Q47A_5	0.503	0.057	8.825	0.000
Q43_14	0.507	0.050	10.143	0.000

Q47B_1	0.441	0.054	8.190	0.000
Q53_7	0.491	0.056	8.736	0.000
Q54_1	0.544	0.054	10.056	0.000
Q46_1	0.393	0.054	7.253	0.000
Q41_3	0.051	0.046	1.121	0.262
Q41_7	0.019	0.039	0.484	0.628
Q41_12	0.152	0.051	2.987	0.003
Q41_9	-0.005	0.034	-0.151	0.880
Q41_6	0.026	0.039	0.669	0.503
Q41_1	-0.201	0.055	-3.666	0.000
Q41_10	-0.068	0.046	-1.489	0.136
Q42_9	-0.058	0.053	-1.098	0.272
Q46_2	-0.098	0.054	-1.814	0.070
Q50B_4	0.023	0.034	0.668	0.504
Q49_1	0.054	0.046	1.178	0.239
Q50C_5	0.038	0.037	1.018	0.309
Q55_5	-0.099	0.052	-1.925	0.054
Q45_7	-0.038	0.055	-0.697	0.486
Q51_3	-0.169	0.056	-3.046	0.002
Q55_4	0.010	0.032	0.307	0.759
Q55_10	-0.006	0.039	-0.155	0.877
F5				
BY				
Q49_12	-0.012	0.046	-0.261	0.794
Q39_4	-0.027	0.046	-0.576	0.565
Q39_1	0.080	0.057	1.398	0.162
Q47B_4	0.011	0.051	0.207	0.836
Q49_17	0.018	0.051	0.352	0.725
Q39_8	0.074	0.054	1.381	0.167
Q49_22	0.016	0.041	0.398	0.690
Q39_10	-0.029	0.037	-0.768	0.442
Q39_15	0.074	0.043	1.711	0.087
Q49_11	-0.019	0.030	-0.642	0.521
Q39_2	0.014	0.037	0.372	0.710
Q43_15	0.120	0.064	1.876	0.061

Q55_1	-0.099	0.062	-1.602	0.109
Q47A_5	0.142	0.064	2.221	0.026
Q43_14	0.139	0.061	2.286	0.022
Q47B_1	0.062	0.054	1.145	0.252
Q53_7	-0.045	0.050	-0.897	0.370
Q54_1	-0.109	0.066	-1.666	0.096
Q46_1	0.061	0.055	1.113	0.266
Q41_3	0.042	0.040	1.059	0.290
Q41_7	0.007	0.034	0.220	0.826
Q41_12	0.003	0.035	0.086	0.932
Q41_9	-0.084	0.048	-1.764	0.078
Q41_6	-0.108	0.048	-2.237	0.025
Q41_1	0.230	0.052	4.429	0.000
Q41_10	0.046	0.041	1.134	0.257
Q42_9	0.462	0.053	8.779	0.000
Q46_2	0.730	0.041	17.706	0.000
Q50B_4	0.604	0.049	12.318	0.000
Q49_1	0.737	0.049	14.977	0.000
Q50C_5	0.740	0.047	15.804	0.000
Q55_5	0.050	0.040	1.261	0.207
Q45_7	-0.010	0.051	-0.197	0.844
Q51_3	-0.091	0.050	-1.835	0.067
Q55_4	0.045	0.044	1.027	0.305
Q55_10	0.098	0.051	1.939	0.053
F6				
BY				
Q49_12	0.133	0.609	0.219	0.827
Q39_4	0.158	0.403	0.392	0.695
Q39_1	0.100	0.484	0.208	0.836
Q47B_4	0.226	0.434	0.521	0.602
Q49_17	0.183	0.393	0.466	0.642
Q39_8	-0.055	0.056	-0.987	0.324
Q49_22	0.118	0.378	0.312	0.755
Q39_10	0.009	0.079	0.115	0.909
Q39_15	-0.033	0.065	-0.513	0.608

Q49_11	0.177	0.496	0.356	0.722	
Q39_2	-0.007	0.040	-0.186	0.853	
Q43_15	-0.081	0.059	-1.380	0.168	
Q55_1	0.113	0.056	2.004	0.045	
Q47A_5	-0.057	0.089	-0.645	0.519	
Q43_14	-0.089	0.053	-1.668	0.095	
Q47B_1	-0.011	0.065	-0.168	0.866	
Q53_7	-0.008	0.093	-0.084	0.933	
Q54_1	-0.099	0.062	-1.597	0.110	
Q46_1	0.038	0.053	0.725	0.468	
Q41_3	-0.089	0.069	-1.287	0.198	
Q41_7	-0.033	0.080	-0.408	0.683	
Q41_12	0.026	0.043	0.594	0.552	
Q41_9	-0.007	0.038	-0.183	0.855	
Q41_6	0.006	0.063	0.098	0.922	
Q41_1	0.021	0.038	0.567	0.571	
Q41_10	0.011	0.038	0.288	0.774	
Q42_9	0.094	0.093	1.012	0.312	
Q46_2	0.036	0.042	0.843	0.399	
Q50B_4	0.063	0.051	1.222	0.222	
Q49_1	-0.094	0.066	-1.421	0.155	
Q50C_5	0.019	0.034	0.560	0.575	
Q55_5	0.661	0.080	8.299	0.000	
Q45_7	0.280	0.181	1.550	0.121	
Q51_3	0.273	0.157	1.744	0.081	
Q55_4	0.800	0.059	13.588	0.000	
Q55_10	0.634	0.070	9.121	0.000	
F2	WITH				
F1		0.205	0.157	1.308	0.191
F3	WITH				
F1		0.152	0.080	1.896	0.058
F2		-0.023	0.074	-0.311	0.756

F4	WITH				
F1		-0.268	0.228	-1.176	0.240
F2		0.050	0.073	0.694	0.488
F3		0.217	0.071	3.049	0.002
F5	WITH				
F1		0.158	0.290	0.547	0.585
F2		0.068	0.072	0.953	0.341
F3		0.352	0.069	5.066	0.000
F4		0.114	0.072	1.578	0.115
F6	WITH				
F1		0.331	0.621	0.533	0.594
F2		0.345	0.067	5.130	0.000
F3		0.092	0.082	1.117	0.264
F4		-0.236	0.080	-2.956	0.003
F5		0.423	0.066	6.371	0.000

APPENDIX D

Table 11.

Arithmetic Means and Standard Deviations of Factor Indicators Grouped by Factor

Factor	F1 - TiW		F2 - MoW		F3 - RE_x	
Country	M	SD	M	SD	M	SD
Lebanon	2.49	1.00	2.64	1.09	3.80	1.00
Singapore	3.29	1.19	2.27	1.18	3.91	0.98
India	3.07	1.13	2.74	1.16	4.20	0.93
USA	2.85	1.15	2.60	1.16	3.91	1.02
Factor	F4 - HE_x		F5 - AiS		F6 - MSp	
Country	M	SD	M	SD	M	SD
Lebanon	3.48	1.21	2.90	1.26	2.23	1.17
Singapore	4.06	1.11	3.17	1.26	2.46	1.30
India	3.84	1.19	2.98	1.26	2.20	1.09
USA	3.50	1.29	2.56	1.22	2.15	1.12

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