

Measuring Mainstream US Cultural Values

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Abstract To determine and describe ‘mainstream US culture’ responses to the Schwartz Values Survey version 57 were collected and analyzed amongst two samples, one from 49 states, disregarding state of residence, and another from 27 US states comparing samples by state, with the 27-state populations representing about 82 % of the total US population. Statistical comparisons indicate that the responses of the samples categorised by the total US and state of residence samples and Schwartz’ ten individual cultural values show a cohesive mainstream US culture of the White, generally middle class population, having high motivational value priorities for self-direction, universalism and benevolence, with lowest priorities for power and achievement. We found significant value priority differences between urban and rural residents, but minimal differences relating to gender.

Keywords Values · Schwartz value survey · American culture · Cultural values · Cultural areas

Introduction

People in all cultures have shared perceptions about the behaviour and belief traits of the typical member of their own

and of typical members of other cultures. Conceptions of culture as a shared meaning system suggest that one can make meaningful and relatively accurate judgments about one’s own culture (Wan et al. 2007). However, seminal studies by McCrae and Terracciano (2006), Terracciano and McCrae (2007) and McCrae et al. (2005) found that there was no correlation between profiles of actual empirically measured within-culture personality traits and people’s perceptions of the typical character of their own country. On this basis, McCrae and Terracciano (2006) argued that such perceptions of national character are illusory, supported by McGrath and Goldberg (2006). The accuracy of perceptions does become stronger with increased intercultural contact (Jussim 2005; McCauley 1995; Triandis and Vassiliou 1967). Employing inaccurate stereotypes leads to misunderstanding, insulting behaviour and often mistreating people from other cultures (McCrae 2001), ignorance of real cultural differences is equally problematic to cross-cultural relations, leading to an unfounded belief that people in other cultures are ‘just like us’.

In this study, we produce through field survey research a portrayal of the set of values of mainstream White culture in the USA. Correctly assessed, aggregate trait profiles can reflect real differences between cultures in mean levels of sets of traits. Though why should citizens of a country care what others think are their stereotypical traits? Though often maligned by the politically correct, stereotypes provide useful classification systems, providing a preliminary basis from which to refine judgments. Nicholson (1998) hypothesises that as an evolutionary process, in order to make sense of a complicated universe, human beings developed prodigious capabilities for quickly sorting and classifying information. In fact, Nicholson reports researchers have found that some non-literate tribes still in existence today have complete taxonomic knowledge of their environment in terms of animal habits and

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plant life. They have systematized their vast and complex world. In the Stone Age, such capabilities were not limited to the natural environment; to prosper in the clan, human beings had to become expert at making judicious alliances. They had to know whom to share food with, for instance, someone who would return the favour when the time came. They had to know what the appearance and behaviour of untrustworthy individuals generally looked like, as it would be foolish to deal with them. Thus, human beings appear to be genetically hardwired to stereotype people based on very small pieces of evidence, mainly their looks and a few readily apparent behaviours. Classification made life simpler and saved time and energy. Every time you had food to share, you did not have to figure out anew who could and could not be trusted. Your classification system told you instantly. Every time a new group came into view, you could pick out the high-status members whom not to alienate. In addition, the faster you made decisions like these, the more likely you were to survive. Sitting around doing calculus, that is, analyzing options and next steps, was not a recipe for a long and fertile life. Therefore, classification before calculus remains with us today. People naturally sort others into in-groups and out-groups from their looks and actions. We subconsciously (and sometimes consciously) label other people, 'She's a snob' or 'He's a flirt'. Managers are not exempt. In fact, research has shown that managers sort their employees into perceived winners and losers as early as 3 weeks after starting to work with them.

While it is true that people are complex and many sided, it is illuminating to know that we seem to be genetically programmed not to see them that way. This perhaps helps to explain why, despite the best efforts of managers, some groups within organizations find it hard to mix. The battle between marketing and manufacturing is as old as marketing and manufacturing. The techies of IT departments often seem to have difficulty getting along with the groups they are supposed to support, and vice versa. Everyone is too busy labelling others as outsiders and dismissing them in the process. In addition, in cross-border interactions, national stereotypes, if reasonably accurate, offer a starting place for developing and enriching our understanding of the opinions, attitudes, beliefs and behaviours of our foreign counterparts and facilitating our engagement.

Members of a culture both reflect its values and can individually modify the values of the culture. A member of a culture observes, digests its meaning and develops attitudes and behaviour as directed. Culture and those members who reflect and affect it construct the social world, composed of ecologies of economics, government and affiliate groups (Griswold 2004: 16). Knowledge of the history of a culture can identify the effects of the culture on behaviour, and how responses to these effects can evoke change. Cultural knowledge is a valuable currency in a society, and the capability for or lack of social mobility is linked to the ability

to demonstrate cultural knowledge. We might find that a job applicant for a position in company management might have competence and experience in the required technical area, but if he or she does not demonstrate cultural knowledge, elimination from the candidate pool can occur. Culture defines appropriate behaviour in the eyes of its members.

The Nation as a Cultural Construct

Many international studies use the nation as a cultural construct. This is considered by some as a fallacy. Minkov and Hofstede (2012) state that they have demonstrated strong evidence for the existence of national cultures; however, inspection of their charts and tables indicate the existence of sub-cultural areas in many countries and areas that overlap national borders. Egri and Ralston (2004), Littrell et al. (2012) and Ralston et al. (1996) find that, for example, China has some as yet unknown number of culture areas where residents of different geographic regions have distinctly different patterns of emphasis on cultural and individual values and managerial leader behaviour preferences.

Minkov (2007) proposes that discrete cultural value dimensions do not exist, but that we can discuss them in the contexts of collections of measures of central tendencies of probably artificial constructs in culture areas around the world. That is, cultural values are continua, from strong acceptance of a value to rejection of the value, and the geographical distribution of values is not uniform within or between nations. Therefore, when we study values and cannot sample complete populations, or even accurately define populations, the values we see in our sample data may not be a complete or accurate reflection of the super-ordinate culture we are intending to describe. Or they may be.

In an analysis of the idea of 'nationalism', Anderson (1991) proposes that imagination plays a role in any conception of nation, involving national leadership, identity, geographic boundary, or ideology, and further, that public and popular literature, as opposed to research and first-hand experience, are often instrumental in creating these notions of national group identity. The existence of a national culture universally in nations is often questioned and the lack frequently demonstrated. As an example, Kroeber (1939/1963, 1944, 1947), Wissler (1917/1957) summarized in the *International Encyclopedia of the Social Sciences* (1968), proposed the idea of *culture areas* as distinct from nations as a unit for comparing societal cultures.

Culture and Culture Area

Culture, from a good general definition by UNESCO (2002), is a set of distinctive spiritual, material, intellectual and emotional features of society or a social group; it

encompasses art and literature, lifestyles, ways of living, value systems, traditions and beliefs. UNESCO proposes that cultural identity has been predicated to be a central element of and important condition for self-esteem, functional effectiveness, mental health, quality of life, perception of illness and health-care outcomes. We need to study cultural identity due to increasing multicultural interactions stemming from immigration and increased international travel and cross-border business. UNESCO agrees national culture may not be homogeneous.

The concept of *culture area* in anthropology is a contiguous geographic area comprising a number of societies that possess the same or similar traits or that share a dominant cultural orientation. The culture area concept was refined by Mason (1896), Holmes (1914), (Harris 1968, p. 374) and Robertson (1993); societal cultures can differ and regions within a society can vary, especially within large and complex societies, including nations. The size and diversity of the USA could imply existence of several culture areas, and raises the question of whether there is a *mainstream American culture*. In this study, we will compare individual values using the Schwartz value survey (SVS) across the USA, attempting to identify culture areas and the existence of *mainstream American culture*.

Mainstream US/American Culture

America as part of a label encompasses most of the global hemisphere from the northern tip of North America to the southern tip of South America. We are studying and discussing the USA. In our literature review, we find *America* and *Americans* used to refer to the USA more often than not. Though uncomfortable with the term, we will use it to follow US academic and popular writing tradition, and due to the fact that *Americans* is the most functional and least grammatically awkward term to use to refer to citizens of the USA, than say, USers, USans or USites.

Mainstream American culture is that held in common by the majority of Americans. It is said to be a 'Western culture' (though this is essentially meaningless), largely derived from societal traditions and values of White European immigrants (Adams and Strother-Adams 2001). There are significant influences from many other sources, such as traditions and values of Black slaves brought from Africa (Holloway 2005; Johnson 1999). Later immigration from East Asia and continual immigration from Latin America have influenced mainstream culture. Frequently within the USA immigrants and their descendants retain distinctive 'home-country' cultural characteristics (Adams and Strother-Adams 2001). The strongest influences on American culture came from immigrants from northern European cultures, most prominently from Germany,

Ireland and Britain. The chief early widespread influences came from English and Irish settlers; these immigrants along with colonial ties with Britain led to predominant use of the English language and the English legal system (Adams and Strother-Adams 2001). This mainstream culture is often referred to as 'Anglo-Saxon' Culture. The 2000 US census found that 75.1 % of the US population self-identified as 'White', and 72.4 % in the 2010 census.

A Position on Mainstream American Cultural Values

Judging from our literature review, the paradigm we select for defining mainstream culture is Spindler and Spindler (1990), *The American Cultural Dialogue and Its Transmission*. This study provides insights into the development and change of American culture, and provides the most comprehensive and longitudinal bases for discussion. The Spindlers begin with a description of the data they collected from Stanford University students from the 1950s through the 1990s 'mainstream value orientations' (p. 24). Using 'The Values Projective Technique' (VPT), which they developed from research by anthropologists on American culture (p. 25), and supported by writings of observers of American culture (pp. 42–52), the Spindlers identify certain key features in the US value system that appear constant over time. While changing over the years in the way they are viewed by the majority, these features, including honesty, equality and self-reliance, amongst others, continue to remain a part of the American cultural dialogue (pp. 26–32). It is these values, representative of 'mainstream' America (pp. 32–35), which the Spindlers compare to other ethnic groups along selected lines. Beginning with an examination of the word 'mainstream,' the Spindlers argue that the cultural dialogue revolves around conflicts in the interpretations of what is characteristically thought of as American as represented by a class the Spindlers describe as the *referent ethnicclass*.

Core Mainstream Culture

The referent ethnicclass, composed of the white male, upper-middle class, European, non-ethnic-minority-identified, protestant amalgamation, has dominated positions of power in mainstream American institutions, and has been the yardstick by which the majority of Americans have measured their success and mainstreamness for over 200 years (Spindler and Spindler 1990, pp. 34–35).

Change in the mainstream culture occurs as other ethnic groups within the culture "[make] moves, as individuals, into mainstream cultural patterns and mainstream socio-economic status at the same time that elements of mainstream culture are moving out towards them through the mass media, through personal contact, and even the

packaging of goods that they use” (p. 38). However, frequently this change is along superficial lines. New joiners adopt the trappings but perhaps not the opinions, attitudes, beliefs and values.

Conflict occurs as groups attempt to maintain their individual identities while participating in the cultural dialogue. As the Spindlers see it, “The central tension is not so much between value orientations as between those who are carrying on the central dialogue and those who are excluded from it and who would like to be full participants” (p. 53).

The Spindlers note that there are some problem groups who do not fit easily into their discussion of cultural relations and dialogue, some because they choose not to, and others because they have in some specific way(s) been disenfranchised. One such group, fitting the latter category, to which the Spindlers devote a couple of pages, is women. As the Spindlers see it, the interpretive literature of the American scene, with few exceptions, historically has been written by men who have done so as if women did not exist or where warranting discussion are presented as exceptional. What literature there currently is about women and their roles within society, according to the authors, indicate, “...that women are *in* but not *of* the expressed cultural dialogue” (p. 54). We will investigate gender in analytical comparisons in this study.

Hinterland Culture

In most treatments of American relationships, the country as a whole is cast as though it were now one big urban conglomerate or, historically, one vast rural society. In contrast, the Spindlers develop a concept they term the *hinterland*. They introduce a concept of a *Hinterland Culture*, not especially coterminous with *rural*, in an attempt to understand and explain the intermigration between city and country in America. There are hinterlanders living in the city, and there are many urbanites living in the country. The hinterland does tend to be more rural than urban and in one sense it can be thought of as those vast areas between our great metropolitan centres peopled by individuals who are there for a number of reasons, not the least of which is to escape issues they have with the city. There has always been an intermigration between the city and the country in America, though traditionally in favour of the city. Recently, however, there has been a sizeable migration of city dwellers to the country. What are they looking for? Are there hinterland values, ideologies, expectations, that are not only different from those most common in the city but in partial opposition to them? Do hippies and hillbillies have something in common? Do yuppies, and street people, and drug hustlers, have something in common? Moreover, what about the

stubborn people for whom farming is not merely a way of life but for whom farming is life itself? Are there hard-pressed-small-town values that people try hard to maintain in the face of a flood of alternative views promoted by the mass media? Our data and demographics allow only an urban–suburban–rural comparison; however, a future investigation of *Hinterland Culture* would be worthwhile in advancing values studies.

Individualism/Collectivism, Openness-to-Change/ Conservationism

The Spindlers note that Americans are a transient people, finding that in California schools where they have worked, more than half of the children in elementary schools have not resided in the school district for more than 1 year. Indeed, many have lived there for less than 1 year. Promotions, occupational changes, changes in fortune dictate that the family pull up whatever roots it has put down and move once again to a new town and a new neighbourhood. Much has been written about the trauma of such separations from one’s community, particularly for children whose peer relationships are disturbed. These moves may not be as upsetting as they are sometimes portrayed; however, because Americans are able to replace friends relatively easily. They find similar neighbourhood networks, peer groups and even to some extent similar personal identities when they arrive in a new community. The principle of *replaceable parts* seems to be operating. If one moves into a new neighbourhood very much like the old one, into a suburb of about the same status as the old one, perhaps even a little better, one finds the same kinds of people there. If children and youth go to similar kinds of schools, drawing from similar kinds of school districts as the ones that they left, they too will find friends quite similar to the ones they left behind, although sometimes it is more difficult for children than adults.

This transient quality of life does, however, have some consequences. One’s commitments to other people are unlikely to be maintained at a deep level under these circumstances. If friendships can be replaced, then friendship may not mean as much as it did, or at least could. One’s own identity can be influenced by the casual attitudes of others and the lack of truly intimate relationships. We would expect also that one’s interest in the maintenance of the community would shrink and there would be a tendency for more emphasis on one’s own self-interest as no community is even semi-permanent. The eternally transient quality of American life may therefore result in a kind of marginalization that is reflected in one’s relationships with virtually all social institutions, groups, other individuals and perhaps even work.

Resistance to Change

We have long heard in contemporary society in the US of young adults and minors who have opted for rural communes, a return to the farm, or a refusal to move for purposes of promotion. Where it was unheard of a few years ago for an individual, particularly a male breadwinner, to refuse a promotion that would entail moving the family, today this is not so uncommon. Sometimes flexible arrangements in breadwinning make it possible for a shift in responsibilities both domestic and economic to occur, that will allow the family to stay in one place for longer times, e.g. long enough to permit the children to grow up. This is hard to verify, but regardless, in general, the transient quality of American life seems to be a permanent feature to which Americans have to adapt.

Changes in Value Orientations

Some value orientations that were strong in 1952 have undergone considerable change over the decades that data were collected by the Spindlers (p. 28). For example, in 1952 through about 1964, the major response to an incomplete sentence item, 'the future is', was 'exciting', 'challenging', 'hopeful', 'a time of opportunity'. The sentence completions were overwhelmingly optimistic and optimism about the future was considered by the anthropological writers on American culture of that time and previously as being a salient and consistent American cultural characteristic.

In the 1990s, there were two kinds of response to this incomplete sentence that were not there in significant numbers in 1952 to 1964 (p. 28). They are: (1) 'the future is before us', or 'The future is unknown'. These responses are non-committal. Respondents acknowledge that the future is coming but they refrain from either a positive and optimistic or a negative appraisal of its characteristics and (2) a negative, pessimistic response: 'the future is threatening', 'the future is uncertain', 'the future is ending'. Frequently, as respondents elaborate their response they define the future as uncertain because of the possibilities of nuclear war or the terminal pollution of our living environment. The optimism of the earlier period eroded. The optimistic view of the future is, however, still a significant category. In the 1990s about 40 % of all who responded fell into this category. In the 1950s and early 1960s it was closer to 80 %. The reliability of such reports is problematic, for example the Rasmussen Reports (2012) survey for 09 August 2012 indicates that 49 % of likely US voters think America's best days are in the past. Thirty-two percent think the country's best days still lie ahead. Another 19 % are not sure. The survey for 11 Sept 2012 indicated 47 % of

voters think America's best days are still ahead, and 37 % of likely US voters believe America's best days are in the past. Sixteen percent are not sure. (The sample is random but demographically weighted: http://www.rasmussenreports.com/public_content/about_us/methodology.) Pew, Gallup, and Rasmussen offer a wealth of data from which a diligent researcher with plenty of time might successfully mine into information to correlate with other information possibly affecting this opinion. The short-term volatility would seem to call into question any long-term statement.

Mainstream Cultural Values

We will investigate value relationships from our data compared to Spindler and Spindler (1990) conclusions using Schwartz's Universal Theory of Individual Human Values (1992, 1994). For Schwartz *values* are principles that guide our lives (Schwartz 1992, 1994; Schwartz and Sagiv 1995); they are designed to lead us towards our ideal world, transcend specific situations, guide selection or evaluation of behaviour and events, and each individual and society orders them by relative importance.

Schwartz proposed ten types of individual, within-country values that are held in some degree by individuals in single cultures and are defined as motivating goals. The theory also postulates a structure of more or less bi-polar relations amongst the value types, along with a continuous relationship between adjacent values around a circumplex. (For a more detailed discussion, see Schwartz 1992, 1994, 2004, 2006; Schwartz and Bilsky 1987, 1990.)

Schwartz derived a typology of the different contents of values, arguing that in order to cope with their ecology in a social context, groups and individuals cognitively transform the necessities inherent in human existence and express them in the language of specific values about which they can then communicate. Specifically, values represent, in the form of conscious goals, responses to three universal requirements with which all individuals and societies must cope: needs of individuals as biological organisms, requisites of coordinated social interaction and requirements for the survival and smooth functioning of groups.

Schwartz developed ten motivationally distinct types of individual values, using his three universal requirements. For example, the motivational type labelled *conformity* was derived from the prerequisite of group survival, and effective and efficient group interaction, which prescribes that individuals restrain or inhibit actions that might harm others in the group. In addition, the motivational type *self-direction* was derived from organismic needs [needs relating to the organism (person) taken as a whole], needs for mastery, and from the interaction requirements of

autonomy and independence (detailed explanations are in Schwartz and Bilsky 1987, 1990; Schwartz 1992). Each of the ten basic values can be characterized by describing its central motivational goal, quoted near verbatim from Schwartz (n.d.):

1. *Self-direction* Independent thought and action: choosing, creating, exploring.
2. *Stimulation* Excitement, novelty and challenge in life.
3. *Hedonism* Pleasure and sensuous gratification for oneself.
4. *Achievement* Personal success through demonstrating competence according to social standards.
5. *Power* Social status and prestige, control or dominance over people and resources.
6. *Security* Safety, harmony and stability of society, of relationships and of self.
7. *Conformity* Restraint of actions, inclinations and impulses likely to upset or harm others and violate social expectations or norms.
8. *Tradition* Respect, commitment and acceptance of the customs and ideas that traditional culture or religion provide the self. (Tradition and conformity values are especially close motivationally because they share the goal of subordinating the self in favour of socially imposed expectations. They differ primarily in the objects to which one subordinates the self. Conformity entails subordination to persons with whom one is in frequent interaction—parents, teachers or bosses. Tradition entails subordination to more abstract objects—religious and cultural customs and ideas. As a corollary, conformity values exhort responsiveness to current, possibly changing expectations. Tradition values demand responsiveness to immutable expectations set down in the past. The theory retains the distinction between these two values based on empirical findings.)
9. *Benevolence* Preserving and enhancing the welfare of those with whom one is in frequent personal contact, the *in-group*. Benevolence and conformity values both promote cooperative and supportive social relations. However, benevolence values provide an internalised motivation base for such behaviour. In contrast, conformity values promote cooperation in order to avoid negative outcomes for the self.
10. *Universalism* Understanding, appreciation, tolerance and protection for the welfare of all people and for nature. (This contrasts with the in-group focus of Benevolence values.)

Schwartz proposes that the ten individual values can be represented in a Multi-dimensional Scaling Smallest Space Analysis model depicted in Fig. 1.

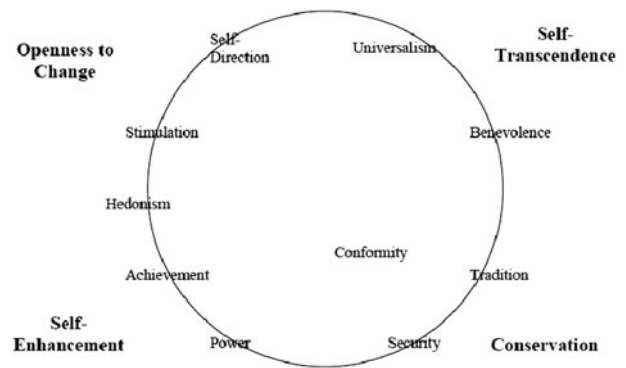


Fig. 1 Theoretical relationships of Schwartz' individual value dimensions within cultures

Hypotheses

A first useful step in our analysis is to identify the characteristic value orientations that we think of as mainstream. We use the Spindlers *core American values* as five major value orientations, though they regard these tendencies as only suggestive, not definitive, corresponding SVS values are noted:

Spindlers <i>core American values</i>	Schwartz' individual value dimensions
1 <i>Freedom of speech</i> (and other forms of personal freedom)	<i>Self-direction</i> —independent thought and action: choosing, creating, exploring
2 <i>The rights of the individual</i> (to be an individual and act in his or her own behalf)	<i>Self-direction</i> —independent thought and action: choosing, creating, exploring and a relatively low score on <i>conformity</i>
3 <i>Equality</i> (as equality of opportunity and including sexual equality)	<i>Universalism</i> —understanding, appreciation, tolerance and protection for the welfare of all people and for nature
4 <i>The desirability of achievement attained by hard work</i> (and the belief that anyone can achieve success if he or she works hard enough)	<i>Achievement</i> —personal success through demonstrating competence according to social standards
5 <i>Social mobility</i> (the assumption that anyone can improve social status because the social structure is open and hard work will get you there)	<i>Achievement</i> —personal success through demonstrating competence according to social standards

Democracy, as a word, is rarely used by the Spindlers' research respondents, but upon discussion it turns out that respondents think of those characteristic features listed below as constituting democracy. Less frequently

mentioned, though still by what the Spindlers identify as “a significant number of respondents”, include:

Spindlers core American values	Schwartz’ individual values
7 A belief in the <i>efficacy of American technology and its ability to solve even the problems it creates</i> ; the desirability of a free market with no restraints placed upon it for any reasons except possibly those connected with environmental destruction	<i>Power</i> —social status and prestige, control or dominance over people and resources; and <i>Achievement</i> —personal success through demonstrating competence according to social standards
8 <i>The value placed upon private business, closely related to the strong belief in the rights of the individual</i>	<i>Self-direction</i> —independent thought and action: choosing, creating, exploring
9 <i>Independence</i> is frequently mentioned, but seems to be subsumed by the value placed upon the individual and his or her rights. The individual has a right to be independent of constraints placed by higher authority but also to be independent	<i>Self-direction</i> —independent thought and action: choosing, creating, exploring
10 <i>Respect for others</i> is frequently listed, usually in a context of either individuality or equality	<i>Benevolence</i> —preserving and enhancing the welfare of those with whom one is in frequent personal contact, the <i>in-group</i> , and <i>Universalism</i> —understanding, appreciation, tolerance and protection for the welfare of all people and for nature
11 <i>Competition</i> . When competition is mentioned it is within the context of individuality, freedom and equality	<i>Power</i> —social status and prestige, control or dominance over people and resources; and <i>Achievement</i> —personal success through demonstrating competence according to social standards

Values Hypotheses

Hypothesis-Mainstream Ranks Using the Spindlers’ model, USA mainstream culture is expected to have relatively higher Schwartz individual value dimension means for:

- Self-direction
- Achievement
- Power
- Benevolence

- Perhaps universalism, indicated in concern for others but not clearly evident from the literature as to whether the concern spreads beyond the in-group.

The Spindlers note that it is interesting that there is no significant association between expression of the value orientations and one’s definition of one’s self as a member of a minority or an ethnic group. As for other group differences, there are some tendencies for male and female respondents to profile a little differently on *respect for others*, which females mention more frequently, and *equality*, particularly sexual equality, which females also mention more frequently.

Ethnolinguistic Fractionalisation

A construct termed *ethnolinguistic fractionalisation* is defined by the *Atlas Narodov Mira* (Telberg 1965) of the State Geological Committee of the USSR in 1964. The construct refers to the likelihood that someone met at random in a culture area will speak a particular language and be of a specific ethnicity. In our case, we investigate individual value fractionalisation, the likelihood that the values of someone met at random in the USA will not differ significantly on a set of theoretical individual value dimensions. As an example, an indicator of the fractionalisation of cultural values in the USA is the response of voters in national elections. In Fig. 2, we see a cartogram of the votes by county in the 2006 House of Representatives congressional elections and the 2004 presidential election, with red for Republican and blue for Democratic majorities.

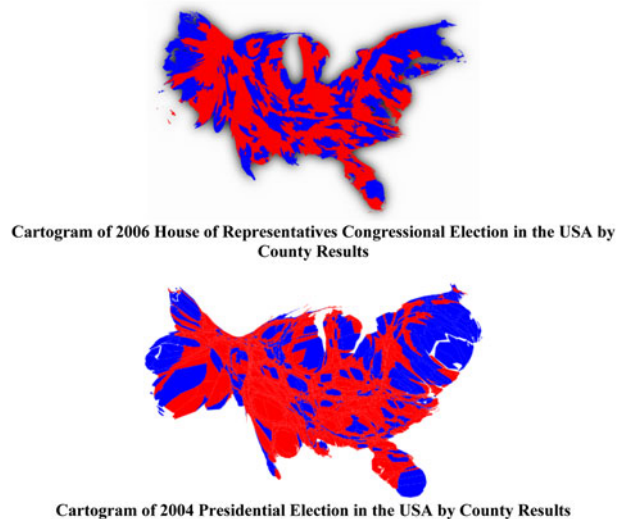


Fig. 2 Cartograms of US election results. A cartogram is a map in which the sizes of geographic regions have been rescaled according to their population. Cartograms in this article are from <http://www-personal.umich.edu/~mejn/election/2006/>, ©2006 M. E. J. Newman, used with his permission

The county cartogram indicates striking differences between urban and rural values as reflected by voter preferences. These results indicate the existence of urban–rural culture areas in the USA, and lead us to hypotheses to test that relate specifically to the sub-population of White, non-Hispanic adults.

Hypothesis-National Culture The United States has a homogeneous *mainstream national culture* as indicated by patterns of individual cultural values that do not vary significantly by geographic region, operationalised by state boundaries.

Hypothesis-Culture Areas These exist in the USA as indicated by different patterns of individual cultural values operationalised by the SVS with states as boundaries.

Newman (2006) also identifies an urban–rural divide in values expressed by differences in urban–rural differences in national voting patterns. Newman’s cartogram in Fig. 1 depicts this divide. As we have demographic data identifying urban, suburban, and rural residence, we propose the hypothesis:

Hypothesis-Urban–Rural There will be significant differences in value dimension priorities amongst urban, suburban and rural residents in the USA.

Gender Hypotheses

Schwartz and Rubel (2005) assessed sex differences in the importance of the 10 basic values dimensions for 127 samples in 70 countries ($N = 77,528$). The results indicate that men attribute consistently more importance than women do to power, stimulation, hedonism, achievement and self-direction values; the reverse is true for benevolence and universalism values and less consistently for security values. The sexes do not differ on tradition and conformity values. Sex differences are small (median difference = 0.15; maximum difference = 0.32 (for power) and typically explain less variance than age and much less than culture. Culture moderates all sex differences and sample type and measurement instrument have minor influences. These results suggest the existence of sex differences in values in the USA, and lead us to the hypothesis:

Hypothesis-Sex Differences There will be significant sex differences in dimension means for individual cultural values amongst genders for White USA residents, with values operationalised by the SVS; men will attribute consistently more importance than women do to power, stimulation, hedonism, achievement and self-direction values; with the reverse for benevolence and universalism values and less consistently for security values. The sexes do not differ on tradition and conformity values

Method

In the interpretation of the analyses, we have a fortuitous situation of the authors having extensive US and non-US academic and work experience, providing unique perspectives in assessing the credibility of the outcomes of the analyses. The first author spent the majority of her life in the Republic of Ireland and working in France and Britain, and the past 18 years as a student and university professor in the US in California. The second author spent the majority of his adult life in the US, and thereafter extended periods working in China, Switzerland, Germany, and a decade in New Zealand. For details of the methodology see Doran (2007). The method employed in this study was field survey research using an internet web-based survey.

Data Collection

Data was gathered by collecting responses from a pool of potential subjects provided by four online retailers selling teas, coffee beans, crafts, toys, scarves, purses and jewellery. The web-based survey was comprised of the SVS and a set of demographic questions. Invitations to participate were emailed by the online retailers. Porter and Donthu (2006) report that ~68 % of American adults use the Internet; they found that Internet users were younger, more highly educated, White and wealthier individuals, that is, makers and carriers of mainstream American culture. Older, less educated, minority members, have lower average per capita income and have lower internet usage rates. The US Census Bureau estimates of usage by state aggregated for the nation for 2007 are (<http://www.census.gov/population/www/socdemo/computer/2007.html>):

- Percent of individuals who accesses the internet from some location in or outside home: 63.7
- Percent of individuals who live in a household with internet access: 67.4.

Our data collection yielded 543 valid surveys. After preliminary analysis 440 subjects were identified as White non-Hispanics. Complete data for all variables is not available for every subject, and as we employed SPSS® pair-wise elimination for missing data, cell means vary amongst analyses.

Representativeness of our Data

The final sample consisted of residents of 49 states (excluding South Dakota due to no responses) and the District of Columbia. Our sub-sample for this study consists of those self-identifying as White non-Hispanic. Using a sample derived from online customer lists is a reasonable approach, as in the census data above we see that the

majority of respondents to the US census indicate access to the internet.

The demographic category statistics are shown in Table 1. Compared with the *CIA World Factbook* data the sample percentages are representative of the USA, with the exception that rural residents are somewhat overrepresented, 25 % in our sample, 18 % in the *Factbook* data. This is not a debilitating difference, and could stem from the sampling of people who shop online; rural residents may tend to purchase goods online more frequently than urban and suburban residents do. Our data corresponds closely to that of Horrigan and Murray (2006), who found 24 % of rural adults living outside of Metropolitan Statistical Areas had broadband internet in their homes.

Compared to the *Factbook* data, females are overrepresented in our sample, 59 %, whereas the *Factbook* indicates about a 50–50 split.

The *CIA World Factbooks* do not include separate listing for Hispanic because the US Census Bureau considers Hispanic to mean persons of Spanish/Hispanic/Latino

Table 1 Demographic categories of the white non-Hispanic sample

Variable	Category	N	Percent
Sex	Female	292	58.5 %
	Male	203	40.7
Age	Rather not say	3	0.6
	17 and below	1	0.2 %
	18–30	180	36.4
Median	31–40	113	22.9
	41–50	93	18.8
	51–69	75	15.2
	61–70	27	5.5
	Over 70	5	1.0
Residence	Rural	106	24.8
	Suburban	174	40.7
	Urban	147	34.4
Education	Less than H.S. Diploma	2	0.4 %
	High School Diploma/GED	30	6.0
	Some college	134	27.0
	Bachelor's degree	223	44.9
	Master's degree	77	15.5
	Doctorate/professional	31	6.2
Income	Under US\$10 K p.a.	25	5.6
	Min. US\$10 K p.a.	26	5.8
	Min. US\$20 K p.a.	44	9.8
	Min. US\$30 K p.a.	60	13.4
	Min. US\$40 K p.a.	98	21.9
	Min. US\$75 K p.a.	65	14.5
	Min. US\$100 K p.a.	59	13.2
	Over US\$150 K p.a.	40	8.9

origin including those of Mexican, Cuban, Puerto Rican, Dominican Republic, Spanish and Central or South American origin living in the US who may be of any race or ethnic group (white, black, Asian, etc.); about 15.1 % of the total US population was Hispanic in 2007. The expectations for US samples derived from the *CIA World Factbook* (2007, 2010, 2011, the *Factbooks* are archived at http://www.theodora.com/wfb/abc_world_fact_book.html, note: 2007 estimates appear across several *Factbooks*):

- Ethnicity: White 79.96 %, Black 12.85 %, Asian 4.43 %, Amerindian and Alaska native 0.97 %, native Hawaiian and other Pacific islander 0.18 %, two or more races 1.61 % (July 2007 estimate).
- Religions: Protestant 51.3 %, Roman Catholic 23.9 %, Mormon 1.7 %, other Christian 1.6 %, Jewish 1.7 %, Buddhist 0.7 %, Muslim 0.6 %, other or unspecified 2.5 %, unaffiliated 12.1 %, none 4 % (2007 estimate).
- Age structure for a working age adult sample: about a 5–1 ratio of 15–64 years compared to 65 years and over.
- Median age: total: 36.9 years
- Urbanization: urban population: 82 % of total population (2010)
- Rate of urbanization: 1.2 % annual rate of change, moving rural to urban (2010 estimate)
- Sex ratio: 15–64 years: 1 male/female; 65 years and over: 0.75 male/female, total population: 0.97 male/female (2011 estimate)

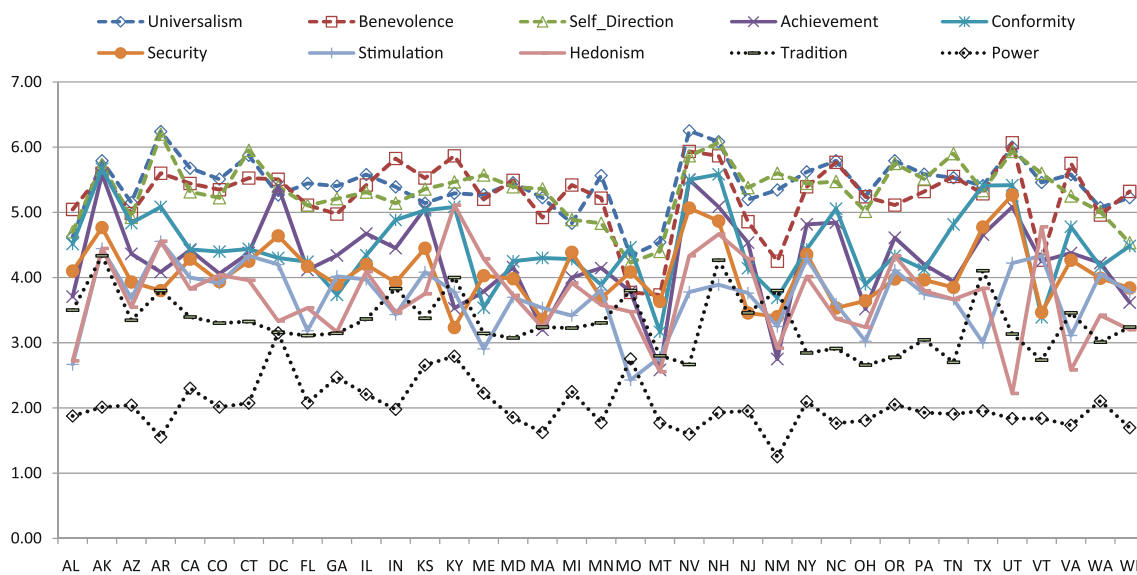
Comparisons with our data in Table 1 indicate our sample is adequately representative of the adult, White, non-Hispanic population in the USA.

Analysis and Results

The SVS, is based on self-reports, and such instruments are considered to be potentially vulnerable to the bias known as socially desirable responding (Paulhus 1991). That is, responses may reflect not only the importance of each value to the respondent but also the respondent's tendency to give answers that make him or her look good. Schwartz et al. (1997) assessed the susceptibility of the SVS to a desirability response tendency and found using very large samples there were low positive indications of socially desirable responding, but concluded the effect was weak. Lönnqvist et al. (2007) compared samples directed to intentionally fake socially desirable responses and those providing honest self-appraisals, and were unable to differentiate between responses of the two samples. To minimize individual bias effects on scores Schwartz (2009) proposes standardizing SVS scores by converting item scores to within-subject deviation scores, which he labels

Table 2 Table depicting descriptive statistics and tests of between-subjects effects with state as source

	Mean	SD	Min	Max	df	Mean square	F	Sig.	Partial eta squared
cBenevolence	0.89	0.71	-3.84	3.04	35	0.63	1.27	0.142	0.092
cUniversalism	0.89	0.91	-2.66	3.09	35	1.47	1.90	0.002**	0.132
cSelf-direction	0.82	0.76	-2.6	2.8	35	0.61	1.06	0.379	0.078
cConformity	0.11	0.92	-2.92	4.16	35	1.31	1.62	0.015*	0.115
cAchievement	0.08	0.89	-4.15	4.16	35	0.99	1.29	0.132	0.093
cSecurity	-0.11	0.79	-2.48	2.22	35	0.97	1.67	0.011*	0.118
cStimulation	-0.51	1.17	-3.86	2.42	35	1.01	0.73	0.873	0.055
cHedonism	-0.62	1.15	-4.79	2.96	35	1.55	1.21	0.200	0.088
cTradition	-0.84	1.04	-4.39	2.23	35	1.64	1.59	0.020*	0.113
cPower	-1.75	0.97	-4.37	3.33	35	1.22	1.35	0.092	0.098

* $p < 0.05$, ** $p < 0.005$ **Fig. 3** Within state comparisons of value dimension scores for states with $N > 2$

centring, using the subjects mean item score, called MRAT (mean rating); those scores will be used in this analysis and indicated by a *c* at the beginning of the variable label.

We select states as a reasonable surrogate for *culture area* in the USA, realizing that even within states sub-areas exist, e.g. north, central and south Florida, New York City and other in New York, and the several regions in California. In the most liberal interpretation of sufficient cell size for analyses, we use states with an N of at least three, yielding 37 states and the District of Columbia. A multivariate analysis of variance with Games-Howell post hoc pair-wise comparisons indicates the significant effects observed in Table 2 and Figs. 3 and 4 are in the benevolence, self-direction, conformity and achievement dimensions. Using Games-Howell post hoc analyses and inspecting the state means and the grand mean for the states, universalism, benevolence and self-direction generally have higher means than other dimensions among the

states. For conformity and achievement, there are significant differences amongst the means for states, with conformity or achievement moving into the top three. Conformity, achievement and security comprise a second tier in the rankings of state dimension means, followed by a third tier of stimulation, hedonism and tradition, with power clearly as the dimension with the lowest means. Individual comparisons amongst states are likely to be confounded by extreme variation in sample sizes.

In Table 2, we see the interesting situation of the values having the highest grand means also having significant differences amongst the states. The significant effects for states apparently stem from outlier state means rather than a general dispersion of scores. We were not able to identify reasons for the outlier means from the demographic data we collected. This indicates a need for further research by those interested in unique state characteristics.

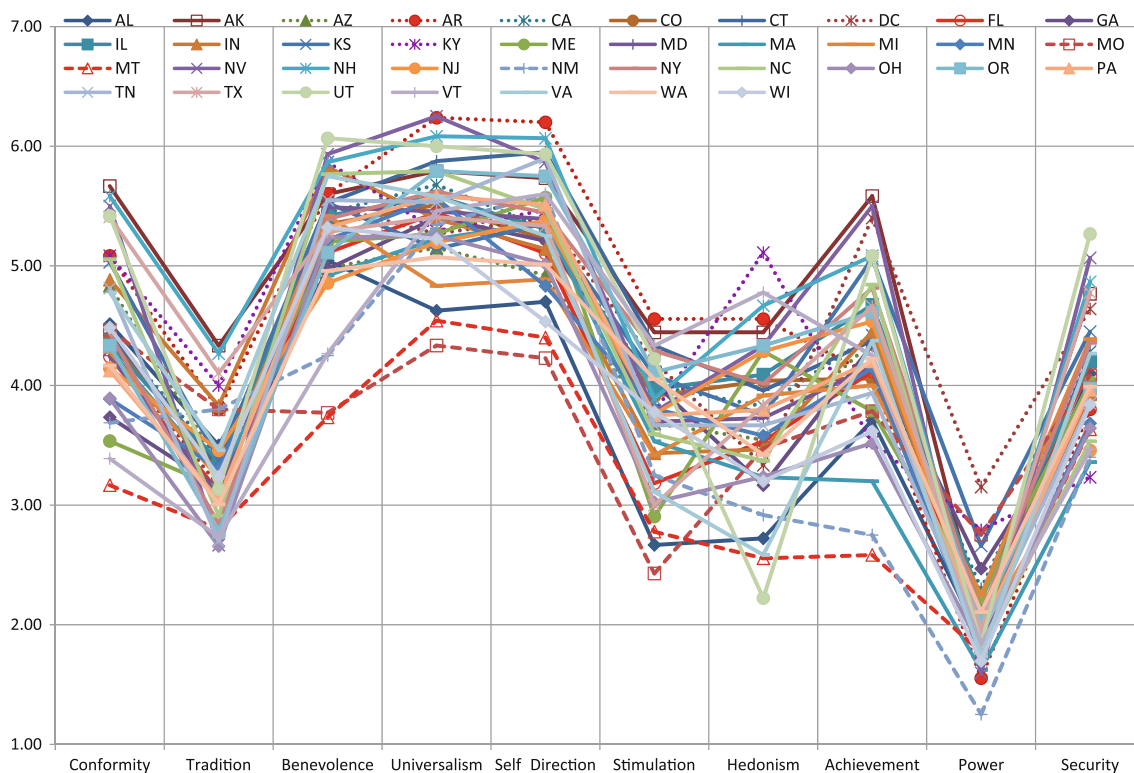


Fig. 4 Between state comparisons of value dimension scores for states with $N > 2$

Results Using our Total Sample

Ignoring state of residence, we ran an analysis of the means using a one-sample t test, see Table 3, which indicates that the centred means for benevolence, universalism and self-direction are highest and are not significantly different from one another. The remaining means are significantly different stepwise down to the lowest, which is power. This outcome indicates that mainstream American culture is individualist yet highly concerned about the welfare of in-groups and for humanity in general. Power having the lowest mean by a considerable amount indicates an Egalitarian culture.

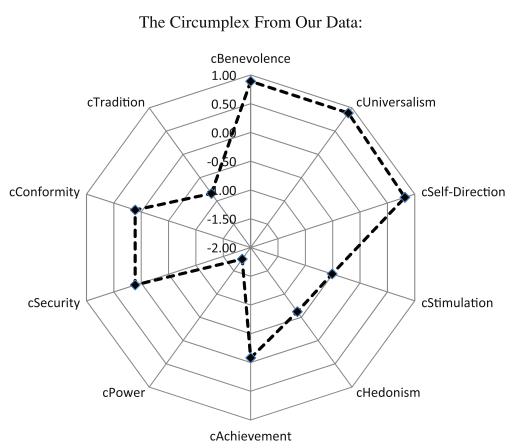
The information provided by Schwartz and Rubel (2005) and Newman (personal communication, 2006) in Fig. 5 indicate that we can expect an urban–rural divide. Table 4 shows multivariate analysis of variance results for comparisons of state of residence, sex and urban/suburban/rural residence location. We see significant urban–rural differences, with the suburban sample more similar to the rural sample. Further investigation depicted in Table 5 indicates that the significance level is due to two extreme outliers, California and Tennessee, with the means for the remaining states in the sample not significantly different. The difference could be related to the large difference in sample size increasing the variance in California and decreasing it in Tennessee.

The results in Table 6 indicate differential effects in differences between values related to demographic variables of gender and residence location. However, if we inspect Tables 6 and 7, the dimension mean rankings ordered by size for the categories, we see a strongly consistent pattern of value rankings, indicating a consistent ordering of cultural value dimension importance for this sample across demographic variables.

Table 3 Descriptive statistics for ranked dimension means for white, non-Hispanic sample using centred scores (prefix c)

Dimension	Mean	SD	Skewness	Kurtosis	Min	Max
cBenevolence	0.89	0.71	-0.68	3.74	-3.84	3.04
cUniversalism	0.89	0.91	-0.64	0.70	-2.66	3.09
cSelf-direction	0.82*	0.76	-0.25	0.40	-2.60	2.80
cConformity	0.11*	0.92	-0.07	0.80	-2.92	4.16
cAchievement	0.08*	0.89	-0.08	1.31	-4.15	4.16
cSecurity	-0.11*	0.79	-0.09	-0.01	-2.48	2.22
cStimulation	-0.51*	1.17	0.06	-0.22	-3.86	2.42
cHedonism	-0.62*	1.15	-0.18	0.12	-4.79	2.96
cTradition	-0.84*	1.04	-0.16	0.30	-4.39	2.23
cPower	-1.75	0.97	0.63	2.09	-4.37	3.33

* Adjacent means significantly different, $p < 0.05$, one-sample t test



The Circumplex in Schwartz' Theoretical Model:

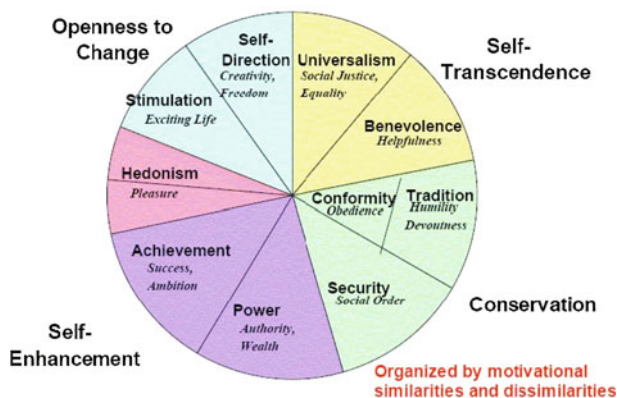


Fig. 5 Centred mean scores for dimensions on SVS model chart for US White sample

Table 4 ANOVA tests of between-subjects effects income × state of residence

	Sum of squares	df	Mean square	F	Sig.
Between groups	280.682	35	8.019	1.808	.004 ^a
Within groups	1725.473	389	4.436		
Total	2006.155	424			

^a This significant effect is due to only one significant difference between the mean incomes in California and Tennessee

Correlations of age, education and income with the value dimensions, shown in Table 7 indicate strong face validity with stereotypical, prototypical expectations:

- For age: significantly positively correlated with conformity, tradition and security, and significantly negatively correlated with stimulation and hedonism, conforming to the prototypical values of older and younger Americans.
- For education: significantly positively correlated with universalism, and significantly negatively correlated with conformity, tradition, hedonism and security.
- For income: significantly positively correlated with power and achievement, and significantly negatively correlated with universalism and self-direction.

Age, education and income are all significantly positively correlated; see Table 8. Analyses of variance testing effects of state of residence on age, education, and income found no significant differences for age and income. In Table 6, we see the analysis of variance testing for effects on state of residence on income, where we find a significant difference among the states. A Games-Howell post hoc test of state × income effects indicated only one significant difference in average income reported, between California and Tennessee. Tennessee has a small sample *N*, California large. The 95 % lower and upper bounds do not overlap. California has a minimum score of 1 and a maximum of 9, while Tennessee's is 4 and 5. The standard deviation of California's income is 4 times the size of Tennessee. Inspecting the average income levels for states in our sample, Washington DC, Kansas and California have exceptionally high average income per state, and Tennessee, Utah, Washington, Indiana, New Hampshire, Oregon, Alaska, Maine, New Mexico and Kentucky have exceptionally low average incomes per state.

Correlations between our reported average per capita income by state for 2007 and per capita personal income averages by state were moderate and significant using the US Bureau of the Census data for 1990 ($r = 0.399$, $p = 0.014$), for 2010 ($r = 0.362$, $p = 0.28$), and 2006 data from the US Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business* ($r = 0.399$, $p = 0.014$, equal to the, 1990 census data). These results indicate that our income data are representative of the USA on a state-by-state basis.

In Table 5, we see the analysis of variance tests for effects of location of residence on value dimension means:

Table 5 Games-Howell post hoc test results of comparisons of between-subjects effects income × state of residence

	<i>N</i>	Percent	Valid percent	<i>N</i>	Mean	<i>SD</i>	<i>SE</i>	95 % Lower bound	95 % Upper bound	Min	Max
California	68	14.3	14.3	61	6.52	1.98	0.25	6.02	7.03	1	9
Tennessee	4	.8	.8	4	4.75	0.50	0.25	3.95	5.55	4	5

Table 6 ANOVA tests of between-subjects effects for urban, suburban and rural residence

	Rank	Rural mean	Rank	Suburban mean	Rank	Urban mean	Rural SD	Suburban SD	Urban SD	df	Mean square	F	Sig.	Partial eta squared	Games-Howell analysis
cUniversalism	1	0.90	1	1.01	1	1.22	0.95	0.73	0.75	2	3.21	5.03	0.007	.024	Urban mean sig. higher than others ^c
cBenevolence	2	0.86	2	0.90	2	0.89	0.83	0.69	0.72	2	0.06	0.10	.903	.000	
cSelf-direction	3	0.82	3	0.86	3	0.82	0.79	0.78	0.71	2	0.10	0.18	.838	.001	
cConformity	4	0.18	4	0.00	5	-0.19	1.09	0.92	0.83	2	4.15	4.70	0.010	.022	Urban mean sig. lower than others ^a
cAchievement	5	-0.17	5	-0.05	4	-0.17	0.94	0.90	0.93	2	0.68	0.81	.448	.004	
cSecurity	6	-0.22	6	-0.24	6	-0.52	0.81	0.84	0.76	2	3.91	6.05	0.003	.029	Urban mean sig. lower than others ^d
cHedonism	7	-0.80		-0.81	8	-0.61	1.22	1.31	1.01	2	1.76	1.24	.289	.006	
cStimulation	8	-0.82	78	-0.66	7	-0.56	1.33	1.23	1.22	2	2.10	1.34	.263	.006	
cTradition	9	-0.90	8	-1.18	9	-1.27	1.05	1.05	1.06	2	4.31	3.86	0.022	.018	Rural mean sig. higher than others ^b
cPower	10	-3.00	10	-2.93	10	-2.89	1.18	1.05	1.03	2	0.35	0.30	.738	.001	

^a $p < 0.02$, ^b $p < 0.02$, ^c $p < 0.04$, ^d $p < 0.02$

- Urban means are significantly higher for universalism,
- Urban means are significantly lower for conformity and security,
- Rural means are significantly higher for tradition.

In Table 6, we see the analysis of variance tests for effects of gender on value dimensions means:

- Females have significantly higher value dimensions means for universalism and benevolence.
- Males have significantly higher value dimensions means for self-direction, achievement, stimulation and power.

In Table 7, we see the correlations among age, education, income and the value dimension means:

- Age, income and education were significantly positively correlated, on average, the older the participant the higher the income and education.
- Higher income participants have significantly higher value dimension means for power and security.
- Higher income participants have significantly lower value dimension means for universalism.
- The older participants had significantly lower means for stimulation, hedonism and achievement.
- The more highly educated participants had significantly lower means for conformity, tradition, hedonism and security.

We do not speculate on the causes of these intercorrelations. A valuable follow-up study would be a qualitative interview attempting to assess, for example if power and security is a cause or an effect of higher income, or if the positive effect of education on Universalism is negated by higher income.

Tests of Hypotheses

Specific conclusions concerning our hypotheses are:

Hypothesis-Mainstream Ranks Using the Spindlers’ model, USA White mainstream culture is expected to have relatively higher Schwartz individual value dimension means:

- Self-direction
- Achievement
- Power
- Benevolence
- Perhaps universalism—not clearly evident from the literature

For the value rankings, we find universalism, benevolence and self-direction to be strong motivating values for Americans. Power is the least motivating value. Our results

Table 7 Tests of between-subjects effects for gender

Value dimension	Rank	Female mean	Rank	Male mean	Female <i>SD</i>	Female <i>SD</i>	<i>df</i>	Mean square	<i>F</i>	Sig.	Partial eta squared
cUniversalism	1	1.02	3	0.71	0.94	0.85	1	10.8	13.6	.000**	0.03
cBenevolence	2	0.96	2	0.78	0.77	0.66	1	4.0	8.1	.005**	0.02
cSelf-direction	3	0.75	1	0.92	0.71	0.78	1	3.3	5.8	.017*	0.01
cConformity	4	0.06	5	0.16	0.92	0.90	1	1.1	1.3	.251	0.00
cAchievement	5	-0.02	4	0.21	0.86	0.89	1	6.3	8.1	.005**	0.02
cSecurity	6	-0.15	6	-0.06	0.82	0.76	1	0.8	1.3	.259	0.00
cHedonism	7	-0.68	8	-0.55	1.12	1.16	1	1.8	1.4	.236	0.00
cStimulation	8	-0.72	7	-0.23	1.17	1.12	1	27.5	21.2	.000**	0.04
cTradition	9	-0.93	9	-0.73	1.01	1.05	1	4.6	4.3	.039	0.01
cPower	10	-1.87	10	-1.59	1.00	0.92	1	8.7	9.6	.002**	0.02

* Different, $p < 0.05$, ** $p < 0.01$, one-sample t test

Table 8 Correlations: age, education, income and value dimension means

	Age	Educ	Inc	Conform	Trad	Benev	Univer	Self-dir	Stim	Hedon	Ach	Power	Secur
<i>Age</i>													
<i>r</i>		.153 ^a	.279 ^a	.017	.022	-.001	.002	-.020	-.230 ^a	-.191 ^a	-.204 ^a	-.066	.079
Sig.		.001	<.0005	.713	.639	.983	.967	.671	<.0005	<.0005	<.0005	.150	.086
<i>N</i>		469	423	471	471	471	471	471	471	471	471	471	471
<i>Educ</i>													
<i>r</i>	.153 ^a		.257 ^a	-.139 ^a	-.165 ^a	-.029	-.002	-.030	-.016	-.121 ^a	-.080	.020	-.135 ^a
Sig.	.001		<.0005	.002	<.0005	.523	.971	.517	.724	.009	.084	.664	.003
<i>N</i>	469		425	472	472	472	472	472	472	472	472	472	472
<i>Income</i>													
<i>r</i>	.279 ^a	.257 ^a		.089	.069	.028	-.116 ^b	-.067	-.031	.033	.039	.190 ^a	.195 ^a
Sig.	<.0005	<.0005		.066	.156	.560	.016	.166	.518	.494	.427	<.0005	<.0005
<i>N</i>	423	425		425	425	425	425	425	425	425	425	425	425

Demographic

Significantly positive

Significantly negative

Summary of correlations

Age	Education, income	Stimulation, hedonism, achievement
Education	Age, income	Conformity, tradition, hedonism, security
Income	Education, income, power, security	Universalism

r = Pearson correlation, sig. is two-tailed test

^a Correlation is significant at the 0.01 level (two-tailed)

^b Correlation is significant at the 0.05 level (two-tailed)

indicate that residents of the USA have great positive social consciousness reflected in high benevolence and universalism, and have strong individual self-direction. The drives for power especially, and achievement, are much lower on average than predicted in the Spindlers' analyses.

Hypothesis-National Culture The United States White population have a homogeneous *mainstream national culture* as indicated by patterns of individual cultural values that do not vary significantly by geographic region, operationalised by state boundaries.

In Table 2 and Figs. 3 and 4, we see a generally homogenous set of cultural values, with statistical analyses influenced by a few outlier states for universalism, conformity, security and tradition. With the demographic data we collected we are unable to isolate any pattern for the outlier states. We generally accept *Hypothesis-National Culture*-based comparisons of results using states as boundaries.

Hypothesis-Culture Areas These exist in the USA as indicated by different patterns of individual cultural values operationalised by the SVS with states as boundaries.

With our sparse within-state and between-state sample sizes, we are unable to draw a definitive conclusion for this hypothesis related to states.

Hypothesis-Urban–Rural There will be significant differences in value dimension priorities amongst White urban, suburban and rural residents in the USA.

We found some significant differences:

- Urban means are significantly higher for universalism and significantly lower for conformity and security.
- Rural means are significantly higher for tradition.

This result has face validity, with rural residents being historically categorised as more traditional, conforming, security-seeking and in-group orientated in the national media and social survey results.

Discussion and Conclusions

In our “Introduction”, we commented on the value of accurate stereotyping of national and societal cultures. We find a generally consistent set of priorities of individual value dimensions across the USA employing the SVS 57 to operationalise the values.

Our sample consists of a ‘general public’ group of White residents of the USA. In a study by Ralston et al. (2011) data were collected from samples of employed business people. Table 9 compares their US means with ours (L&D).

Schwartz (2006, personal communication) indicated that he observes sample variation amongst sample means based upon vocation. He specifically mentioned that tertiary business students had a different ranking of value priorities compared to other students. We see support for this observation in Fig. 6; our general public sample has much higher dimension means for benevolence, universalism and self-direction, and much lower means for power and hedonism. Littrell et al. (2009) also found similar high

means for businesspeople in Chile and Mexico, and they speculate that when values are assessed in a business context, a high hedonism mean can indicate businesspeople think engaging in business is fun.

Our statistical comparisons indicate that the responses of the samples categorised by state of residence, sex and urban–suburban–rural location of residence for Schwartz’ ten individual cultural values support hypotheses that urban–rural culture areas exist for Whites and there are significant gender differences amongst value rankings. However, there is a consistency amongst the demographic groups that provides a cohesive description of mainstream White American culture as:

- Individualist yet highly concerned about the welfare of in-groups and for humanity in general.
- Power having the lowest mean by a considerable amount indicates an Egalitarian culture.
- Achievement orientation is lower than predicted.

Rural residents tend to be more individualistic and conforming (conforming to individualism as a norm), conservative, traditional and security-oriented. Bunce (1982) finds these traits to be general global characteristics when comparing rural and urban residents in the USA as well as throughout the world.

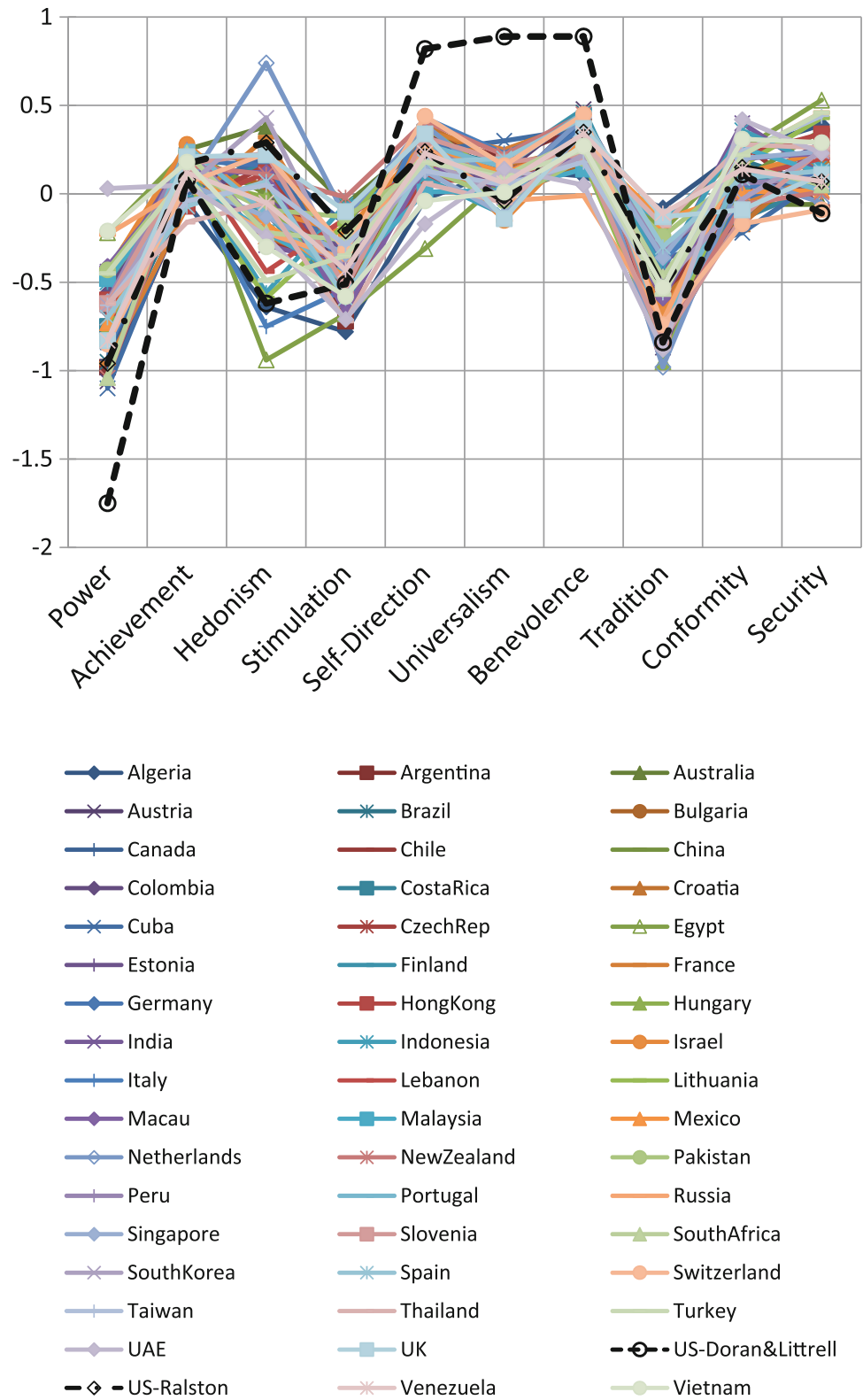
Limitations

Our comparisons with the results of Ralston et al. (2011) indicate an expectation of significant effects on statistical results from sample variations. Further research is required to analyze other sub-cultural groups and compare them to these results. In the US, due to the small samples in some states, further investigation with larger samples is required; however, we are confident that our results provide a definitive overview of Schwartz’ individual value dimensions for White Americans across the USA.

Table 9 Comparison of US means for samples between Ralston et al. (2011) and our sample

	cPower	cAchievement	cHedonism	cStimulation	cSelf-dir	cUniversalism	cBenevolence	cTradition	cConformity	cSecurity
Rank	10	5	8	7	3	1	1	9	4	6
Doran & Littrell, this study	-1.8	0.08	-0.62	-0.51	0.82	0.89	0.89	-0.84	0.11	-0.11
Rank	10	4	2	8	3	7	1	9	5	6
Ralston et al. (2011)	-1.0	0.17	0.29	-0.21	0.24	-0.04	0.35	-0.53	0.15	0.07

Fig. 6 Chart of Ralston et al. (2011) means for all countries and our means for the USA



Appendix: Testing Schwartz’ Model Against our Data

Ralston et al. (2011) found reliability problems amongst national samples of businesspeople. We see some general

reliability problems from our sample data. The SVS items and the dimensions they defined are listed in Table 10.

Table 10 SVS items and individual value dimensions

<i>Achievement</i>	
A34	34 AMBITIOUS (hard-working, aspiring)
A39	39 INFLUENTIAL (having an impact on people and events)
A43	43 CAPABLE (competent, effective, efficient)
A55	55 SUCCESSFUL (achieving goals)
<i>Benevolence</i>	
B33	33 LOYAL (faithful to my friends, group)
B45	45 HONEST (genuine, sincere)
B49	49 HELPFUL (working for the welfare of others)
B52	52 RESPONSIBLE (dependable, reliable)
B54	54 FORGIVING (willing to pardon others)
<i>Conformity</i>	
C11	11 POLITENESS (courtesy, good manners)
C20	20 SELF-DISCIPLINE (self-restraint, resistance to temptation)
C40	40 HONORING OF PARENTS AND ELDERS (showing respect)
C47	47 OBEDIENT (dutiful, meeting obligations)
<i>Hedonism</i>	
H04	4 PLEASURE (gratification of desires)
H50	50 ENJOYING LIFE (enjoying food, sex, leisure, etc.)
H57	57 SELF-INDULGENT (doing pleasant things)
<i>Power</i>	
P03	3 SOCIAL POWER (control over others, dominance)
P12	12 WEALTH (material possessions, money)
P27	27 AUTHORITY (the right to lead or command)
P46	46 PRESERVING MY PUBLIC IMAGE (protecting my 'face')
<i>Self-direction</i>	
SD05	5 FREEDOM (freedom of action and thought)
SD16	16 CREATIVITY (uniqueness, imagination)
SD31	31 INDEPENDENT (self-reliant, self-sufficient)
SD41	41 CHOOSING OWN GOALS (selecting own purposes)
<i>Security</i>	
SE08	8 SOCIAL ORDER (stability of society)
SE13	13 NATIONAL SECURITY (protection of my nation from enemies)
SE15	15 RECIPROCATION OF FAVORS (avoidance of indebtedness)
SE22	22 FAMILY SECURITY (safety for loved ones)
SE506	56 CLEAN (neat, tidy)
<i>Stimulation</i>	
ST25	25 A VARIED LIFE (filled with challenge, novelty and change)
ST37	37 DARING (seeking adventure, risk)
ST09	9 AN EXCITING LIFE (stimulating experiences)
<i>Tradition</i>	
T18	18 RESPECT FOR TRADITION (preservation of time-honoured customs)
T32	32 MODERATE (avoiding extremes of feeling and action)
T36	36 HUMBLE (modest, self-effacing)

Table 10 continued

T44	44 ACCEPTING MY PORTION IN LIFE (submitting to life's circumstances)
T51	51 DEVOUT (holding to religious faith and belief)
<i>Universalism</i>	
U01	1 EQUALITY (equal opportunity for all)
U17	17 A WORLD AT PEACE (free of war and conflict)
U24	24 UNITY WITH NATURE (fitting into nature)
U26	26 WISDOM (a mature understanding of life)
U29	29 A WORLD OF BEAUTY (beauty of nature and the arts)
U30	30 SOCIAL JUSTICE (correcting injustice, care for the weak)
U35	35 BROADMINDED (tolerant of different ideas and beliefs)
U38	38 PROTECTING THE ENVIRONMENT (preserving nature)
<i>No constant location in a dimension across cultures</i>	
X10	10 MEANING IN LIFE (a purpose in life)
X14	14 SELF RESPECT (belief in one's own worth)
X19	19 MATURE LOVE (deep emotional & spiritual intimacy)
X02	2 INNER HARMONY (at peace with myself)
X21	21 PRIVACY (the right to have a private sphere)
X23	23 SOCIAL RECOGNITION (respect, approval by others)
X28	28 TRUE FRIENDSHIP (close, supportive friends)
X42	42 HEALTHY (not being sick physically or mentally)
X48	48 INTELLIGENT (logical, thinking)
X53	53 CURIOUS (interested in everything, exploring)
X06	6 A SPIRITUAL LIFE (emphasis on spiritual not material matters)
X07	7 SENSE OF BELONGING (feeling that others care about me)

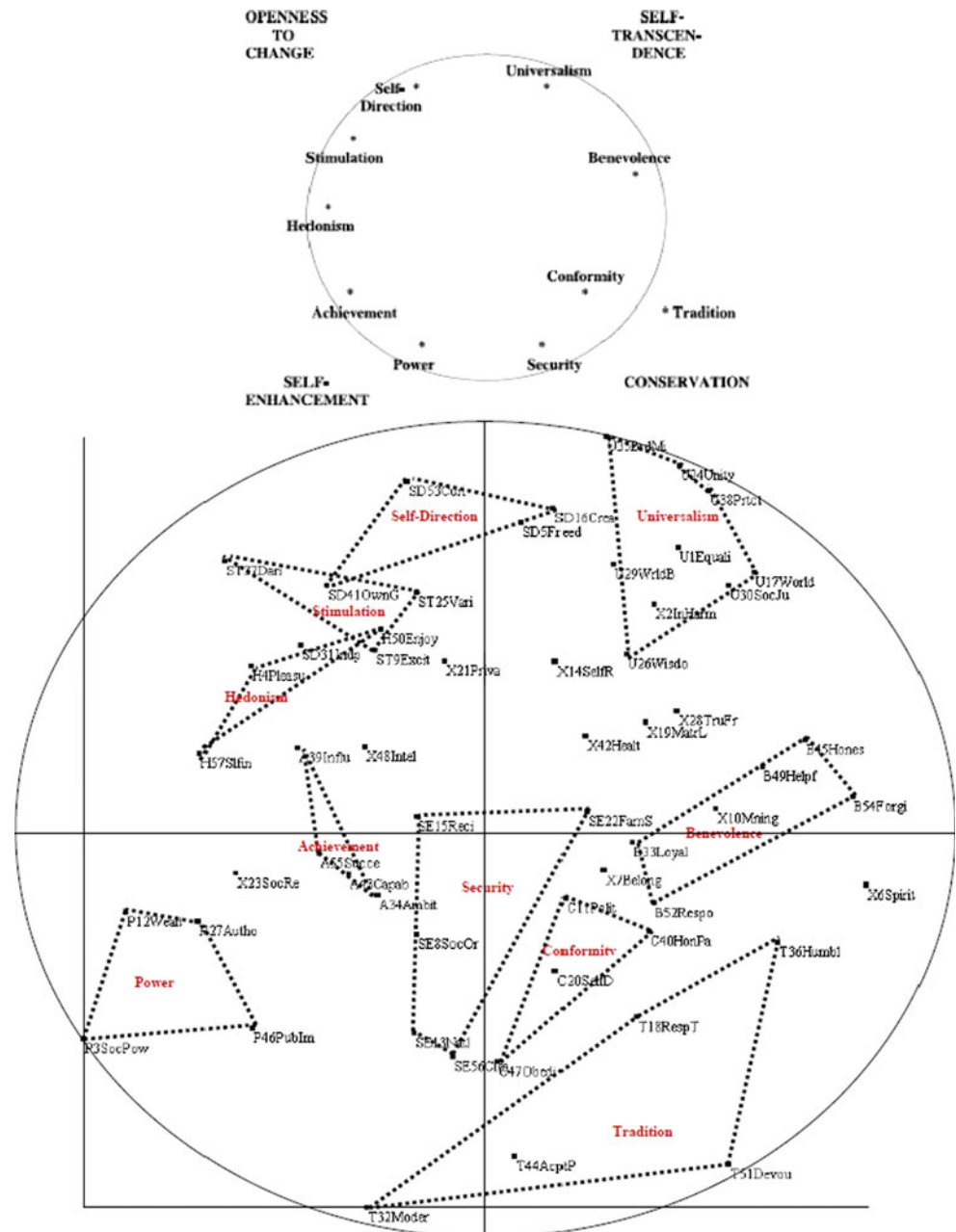
Testing Schwartz' Model Against our Data

Reliability and Validity

Ralston et al. (2011) reported an extensive study employing comparisons of results from administering the SVS across 50 national samples and concluded that the reliability and validity of the SVS57 are questionable across cultures. Littrell (2010) noted similar problems comparing results from southern China and New Zealand. In this study, the nation was treated as is if it is a cohesive whole in every case. We were of course prompted to investigate the characteristics of the fit to theory of the model with our sample.

We first employed Schwartz' use of Multi-Dimensional Scaling Smallest Space Analysis for a test, as this is the technique he employed in developing the model. Schwartz proposes value relationships are defined as circumplex (arranged in a circular format in a two-dimensional SSA plot), with adjacent dimensions related to one another. The arrangement is shown in Fig. 7, along with the SSA model

Fig. 7 Comparison of MDS smallest space analysis of Schwartz Model and our national sample of White adults in the USA



from our data. The two models are similar; however, our data for the USA indicate Achievement and Security may be core values, with the others more peripheral values.

Smallest Space Analysis

See Fig. 7.

Structural Equations Modelling (SEM) Tests

Early reviewers of manuscripts of this study commented on our discussion of goodness-of-fit probabilities for our SEM

tests. There are no generally accepted cut-off values for SEM statistics (Garson 2007). The current consensus is not to use the goodness-of-fit statistic (GFI) or the adjusted goodness-of-fit statistic (AGFI) as they are unreliable measures (Kline 2004). Root mean square error of approximation (RMSEA) is one of the SEM fit indexes less affected by sample size (Fan et al. 1999), and is included in most discussions of SEM as the best estimate of goodness-of-fit (Chen et al. 2008; Garson 2007; Schumacker and Lomax 2004: 82; MacCallum et al. 1996). RMSEA has a range from 0 to 1. Chen et al. (2008) evaluated the choice of fixed cut-off points in assessing the RMSEA test statistic as a measure of goodness-of-fit. The results of their study

Table 11 SEM tests of goodness-of-fit of our data to the SVS57 model

Model	PRATIO	PNFI	PCFI
Parsimony-adjusted measures			
Default model	.873	.567	.643
Saturated model	.000	.000	.000
Independence model	1.000	.000	.000
Model	RMSEA	LO 90	HI 90
Root mean square error of approximation (RMSEA)			
Default model	.063	.060	.066
Independence model	.115	.112	.117

indicate that there is little empirical support for the use of 0.05 or any other values as universal cut-off values to determine adequate model fit, regardless of whether the point estimate is used alone or jointly with the confidence interval. Chen et al.'s analyses suggested that to achieve an appropriate level of power or Type I error rate (finding a difference in a sample when there is none in the population), the choice of cut-off values depends on model specifications, degrees of freedom and sample size. The results of their analyses indicate that an appropriate value for RMSEA for a correctly specified model is about 0.078 for rejection of the null hypothesis of lack of fit with a confidence level of $p = 0.05$. The width of the confidence interval is very informative about the precision in the estimate of the RMSEA. RMSEA should be interpreted in the light of the parsimony ratio (PRATIO), *the higher parsimony measure represents the better fit*, with 0.90 an acceptable level.

For our data, we find a good fit of the data to the SVS57 model, as noted in Table 11.

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