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James Playford  
jplayfo@uwo.ca

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Cultural Differences in Free-Market Attitudes

By

James Playford

Honours Thesis

Department of Psychology

King's University College at Western University

London, Canada

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Thesis Advisor: Dr. Chris Roney

### Abstract

This study examined cultural influences on free-market beliefs. North American and Indian participants were recruited online. A questionnaire measuring free-market beliefs was administered along with other measures of cultural and political attitudes (Right-wing Authoritarianism, Social Dominance Orientation, Actual/Ideal Meritocracy, Individualism vs. Collectivism, and Religiosity/Spirituality) to explore how culture may influence free-market beliefs. Using Amazon's Mechanical Turk (MTurk), a total of 448 participants (236 American, 212 Indian) were recruited, and completed the questionnaires online. Analysis indicated five separate free-market attitude factors. Indian society was shown to hold more conservative beliefs than American society, and cultural influences were shown to predict differences in free-market attitudes.

### Cultural Differences in Free-Market Attitudes

Elective affinity is a term used by the psychologist John Jost to describe how ideologies are adopted based on an interaction between situational needs and psychological dispositions. In this way particular ideologies will appeal to certain individuals and groups because they serve a psychological function and help people rationalize the system they live in (Jost, Federico, Napier 2009). On an individual level, psychological dispositions could influence which ideologies appeal to a person. Particular ideologies could also be appropriate for some groups but not others because of differing situational contexts. The current study will examine the role of culture on ideological views, specifically an economic ideology called Free-Market Ideology (FMI).

Psychological research on ideologies has offered insight into how certain ideologies serve psychological functions. A meta-analysis by Jost, Kruglanski, and Sulloway (2003a) examined social-cognitive motivations and their political outcomes. They found strong evidence that complicated relationships among interrelated epistemic, existential and ideological motives influence the expression of political ideologies. Situational and dispositional tendencies to perceive threat and uncertainty were proposed to be the core differences between liberal and conservative attitudes. Psychological needs, such as need for closure, order, structure and avoidance of uncertainty, are partially responsible for leading people to adopt ideologies such as conservatism. Situational stimuli that elicit fear and threats of uncertainty were shown to predict core elements of conservatism such as resistance to change and favoring inequality. This was based on 88 studies that involved over 22,000 participants from 12 countries, suggesting these results are relevant to various cultures.

Research into political ideology has primarily focused on the social domain, leaving the economic domain understudied. The small body of literature that exists on economic attitudes

has primarily been conducted on participants from a western context (North American and Western Europe). The purpose of this research is to examine the extent to which cultural influences may shape free market beliefs and their relation to other political beliefs. Research has identified some of the links between free-market beliefs and social conservatism for western participants. However, these findings may not be relevant to non-western participants (Roney 2014). Hopefully, by understanding how underlying psychological motivations and situational factors lead individuals and groups to adopt particular ideologies productive discussion and compromise can be promoted between opposing political and cultural groups who understand the world through different lenses. Understanding how cultural differences influence political and economic attitudes is essential for cooperation among different countries in an increasingly globalized economy.

### *Free-market Ideology*

The current study will investigate an aspect of economic conservatism called Free-Market Ideology (FMI). FMI is based on the writings of the economist and philosopher Adam Smith, who believed free-markets are the best economic system because they are suited to human nature. Smith outlined his beliefs about human nature and free-markets in his book *The Wealth of Nations* (1776). He held that human nature is inherently competitive and selfish but free-markets are able to harness this aspect of human nature and allow it to be expressed in a healthy way. Competition among people pursuing their own self-interests would motivate individuals to be more productive. As a consequence, all of society would benefit as productive individuals stimulated modernization and societal progress. At FMI's core is a belief that markets should be free from government intervention because it would reduce competition among motivated individuals and thereby reduce social and commercial development.

To examine whether Free-Market Ideology exists as a coherent ideological belief system, Roney and Alexander (2002) developed a 55-item questionnaire based on the writings of early free market proponents such as Smith. The study found evidence that a coherent free market belief system exists, which they termed Free-Market Ideology (FMI). This factor reflected pro free-market beliefs such as: market freedom fosters economic growth, human nature is greedy and selfish, and government intervention would interfere with freedom disrupting optimal outcomes. In addition to a general FMI factor, a smaller pro free-market but socially liberal (i.e., pro welfare) group emerged. This group espoused the benefits of the free-market but also believed that there are disadvantaged groups who require government assistance. The economic conservative but socially liberal group is evidence that economic and social domains are not always correlated, and that a distinction between economic and social domains of conservatism exist for some people.

Recognizing this distinction between social and economic domains, Roney (2009) conducted a study that examined how economic conservatism and FMI are linked with social conservatism. This study included measures of Right-wing Authoritarianism (RWA) and Social Dominance Orientation (SDO). RWA is a personality type that adheres and upholds societal conventions, acts aggressively towards people who defy societal conventions, and is submissive to traditional authority figures, (i.e. government or religious leaders) (Altmeyer 1981). SDO is a personality type that has a desire to dominate out-groups and view the world as a competitive place where some groups are inherently more deserving than others (Pratto, Sidianus, Stallworth & Malle 1994). Both of these variables were found to independently predict FMI, showing there are at least two distinct paths linking FMI and conservatism. The factor reflecting favorable attitudes towards free-markets in conjunction with socially liberal beliefs that government has a

responsibility to provide assistance to disadvantaged groups was replicated in this study as well. This supports the idea that economic and social dimensions are distinct, and that people who endorse free-markets are not a homogenous group. Both RWA and SDO were unrelated to the pro-welfare/pro-market factor, suggesting that it is the strong FMI set of beliefs that link free-market beliefs with conservative attitudes.

Buckland (2014) did a study that further examined the different aspects of free-market attitudes. This study developed a free-market questionnaire that identified multiple possible facets of free-market beliefs. It was suggested that different people might emphasize different aspects of free-markets when expressing endorsement for a free-market system. An online study administered the questionnaire to 320 participants living in North America, and revealed five dimensions. The first factor was free-market ideology (FMI), which is the total endorsement of free markets in the way that Smith described them. Mistrust of government (MoG) was correlated with FMI but was also identified as an independent factor. MoG reflects beliefs that government and politicians are untrustworthy and should not be allowed to influence free market outcomes. Emphasis on economic change (EoC) was the third factor, which expresses beliefs that free market outcomes are based on effort and competence allowing for anyone to succeed. Emphasis on tradition (EoT) was the fourth factor that reflects a belief that free markets are an important element of western culture. Pro-welfare/free-market beliefs was the fifth and final factor which expresses a belief in free markets coupled with the socially liberal belief that governments have a responsibility to help disadvantaged people.

The Buckland (2014) study also replicated the Roney (2009) finding of independent links between FMI and social conservatism through RWA and SDO, and no link between these variables and the fifth factor (pro market, pro welfare). The multifaceted approach to free-market

beliefs allow us to examine how personality variables such as RWA and SDO predict what facets of free-markets people emphasize when expressing endorsement of free-market systems.

Following is a more detailed elaboration of RWA and SDO and possible explanations for their link with FMI, because these are fundamental to the present study.

### *Right-Wing Authoritarianism, Social Dominance Orientation and FMI*

Right-wing Authoritarianism (RWA) is a personality variable that evolved out of Adorno's work on authoritarian personality theory (1950). Altemeyer (1981) coined the term RWA, and created a statistically robust questionnaire to measure authoritarianism, which has been widely used in psychological research. RWA is a single personality trait composed of three correlated but distinct facets: submission to authority that is perceived as legitimate, adherence to social conventions and norms, and aggression to groups who deviate from social conventions. Authoritarian attitudes may stem from situational threats and harsh parenting styles that produce fear and aggression in individuals who are in turn motivated to control and create predictability in their environment (Altemeyer 1988). RWA has been shown to correlate with both socially and economically conservative attitudes (Jost et al 2003b, Roney 2009).

The link between RWA and FMI could exist for a number of reasons. Through the submission to authority facet, RWAs could perceive that authority figures, such as government officials or business elites, are promoters of free-market systems. Through the facet that expresses aggression towards those who do not conform to social norms, RWAs may support free-markets because they offer a punitive function to lazy people or low-status groups (Roney 2002, Buckland 2014). Items used by Buckland (2014) that emphasize the punitive aspect of free markets have been included in the FMI questionnaire. Perhaps the clearest connection between RWA and free-market endorsement is from the RWA facet that expresses adherence to



conventions and traditions (Altemeyer 1988, Roney 2014). North American participants who score high on RWA are hypothesized to endorse free markets because they are considered to have a traditional significance in North American history. RWA is not expected to predict free-market beliefs for people from cultures where free-market capitalism is not considered a traditional aspect of their culture. Supporting this idea, Roney (2014) found that Indian participants scored higher on RWA and FMI but RWA was not predictive of FMI. Items created by Buckland (2014) to capture the traditional importance of free-market capitalism were included in the free-market attitudes questionnaire (eg. “Without free markets we wouldn’t have enjoyed the comforts and luxuries in this country”). These are included to provide a more direct test of the idea that traditional cultural significance links free-market attitudes with conservatism more generally in North America, but not in India. RWA may predict free-market beliefs for the non-western sample for other reasons, and some of these can also be investigated by the inclusion of the other factors found by Buckland.

Social Dominance Orientation (SDO) is a personality trait that expresses one’s preference for the in-group domination of out-groups, and support for a hierarchical society. SDOs view the world as being a “dog-eat-dog” competition and that some groups are more deserving of resources than others (Pratto et al. 1994). SDO and RWA have been shown to consistently predict similar conservative attitudes, but these variables show weak correlation with each other thus, indicating these variables measure distinct personality traits (Altemeyer 1998, Pratto et al. 1994). Altemeyer (1998) proposed that authoritarianism emphasizes intragroup relations that concern how individuals should act within their own group while SDO is more concerned with in-group relations to out-groups.

SDO has been shown to correlate with ideologies that promote inequality such as social and economic conservatism. The competition inherent in free-markets seems like an obvious explanation for why SDOs show a preference for free-markets. Pratto et al. (1994) demonstrated that SDOs showed a preference for capitalism, which is seen as creating a situation where some groups could thrive in a competitive business environment, and thereby dominate groups that are deemed less worthy. Sidanus, Pratto & Bobo (1996) examined the relationship between SDO, racism and social conservatism. They found that the three aforementioned variables correlated the most among high status participants compared to lower status participants. They inferred that SDOs in high status positions would use conservatism and racism to preserve their privileged position. However, SDOs were also observed in low status groups suggesting that beliefs in group competition and hierarchies is not only about maintaining out-group's high status (Jost Pelham Sheldon & Sullivan 2003b). SDOs may endorse economic conservatism because, like socially conservative beliefs, it too can serve the function of maintaining high status positions and promoting dominance over subordinate groups.

The connection between SDO and free-market beliefs could partially be explained with system justification theory and may help to explain why low-status SDOs endorse beliefs and economic systems that oppress them. System justification theory says that people are motivated to believe that the economic, political and social systems are fair and legitimate (Jost, Banaji & Nosek, 2004). SDO's endorsement of free-markets, because they serve a system justification function, is supported by a paradoxical belief that many SDO espouse FMI but show negative attitudes towards immigration, which is an aspect of truly free-markets (Roney 2009). If SDOs had overall support of free markets, they should have positive attitudes toward immigration. To measure attitudes about societal change that free-markets are partially responsible for,

Buckland's (2014) items measuring an emphasis on free-markets as agents of change have been included in the free-market attitudes questionnaire (e.g. "Anyone's fortunes can change in a free market system"). SDOs who endorse free-markets in order to maintain privileged positions and/or the status quo in general should not endorse this facet of free-market beliefs because the potential changes associated with free markets pose as a threat to the status quo they desire to maintain.

Meritocracy has been used to examine the relationship between SDO and economic attitudes. Meritocracy is the belief that resources such as jobs, wealth and power are distributed based on one's bias free worthiness. Sidanus and Pratto (1999) proposed that a belief in meritocracy is a hierarchy enhancing myth that serves to maintain inequality among groups. It promotes the idea that privileged groups deserve their positions and disadvantaged groups are just so because they are incompetent. Judd, Son Hing, Bobocel, Zanna, Garcia, Gee, & Oraziotti (2011) proposed that meritocracy can be understood as a justice principle based on equality, equity, and need, or as a hierarchy enhancing belief. Belief in meritocracy as a justice principle is reflected in the belief that there "ought" to be a meritocracy while beliefs that there is an "actual" meritocracy reflect a hierarchy enhancing ideology. Belief in "actual" meritocracy was shown to correlate with other hierarchy enhancing ideologies such as SDO and conservatism.

Theoretically, free-markets should be considered meritocratic because their outcomes are based on competition between people where the most worthy individuals receive the most resources. It has been suggested that economic inequality will be accepted if people perceive the outcomes as being the results of a meritocratic system (Mitchel, Tetlock, Newman, and Learner 2003). Thus, promoting a system as meritocratic can serve to maintain inequalities, and this may

also explain why SDO predicts FMI; free markets may be perceived as a meritocracy, which then may “justify” various groups’ current economic position.

### *Culture, FMI, and Conservatism*

An Internet study by Roney (2014) included a substantial subgroup of participants from India. Although the study was not designed as a cross-cultural study, this Indian subgroup made a preliminary exploration of cultural differences possible. This study offered more evidence for the existence of a FMI and pro-market/pro-welfare factor, with the former being more related with social conservatism. With respect to culture differences, Indians scored higher on all measures (RWA, SDO, actual meritocracy, FMI, pro-market/pro-welfare) except “ought” to be meritocracy. Understanding situational and cultural influences between the two groups may help to explain these differences. Indians scored higher in all levels of conservatism, which could be a reflection of greater social stratification and more conservative traditions. India has had a long history of a caste system that categorizes people based on inherent status ascribed at birth. This feature of Indian society could promote beliefs that some groups are inherently better than others, and lead Indians to be generally more accepting of inequalities than North Americans. These beliefs could be reflected in higher SDO scores among Indian participants. A strong tradition of submission to parental authority may contribute to higher RWA scores. A study by Jambunathan and Counselman (2002) showed that Indian parents are more authoritarian than Western parents and viewed corporal punishment as acceptable. Parents exercise control over the direction of their children’s lives by choosing their career path and whom they marry. Baumrind (1971) found that authoritarian parenting styles were more likely to lead to poor moral development and aggression. However, it is not clear how more authoritarian attitudes will influence free-market attitudes, in Indian participants, if at all. Roney (2014) found that RWA

did not significantly predict FMI for Indian participants supporting the idea that RWA predicts FMI through the adherence to conventions facet.

The primary purpose of the current study is to compare participants from India and North America on free-market beliefs and other aspects of conservatism. The current study will use the same free-market beliefs questionnaire used in Buckland's (2014) study. In addition to measures of RWA, SDO, and free-market attitudes, measures of religiosity/spirituality, believe in meritocracy (ideal vs. actual), and individualism/collectivism scales will be used to identify how cultural differences influence free-market attitudes and other aspects of conservatism.

The religiosity/spirituality scale by Masters, Carey, Maisto, Caldwell, Wolfe, Hackney, and Himawan (2009) has been included in the current study. When it comes to religious differences, the majority of North Americans are Christian while the majority of Indians are Hindu. These religious differences could influence a difference in free-market attitudes. Religiosity in Western participants has been shown to correlate with social conservatism (Jost et al. 2003a), but the connection to economic conservatism is less clear. In the *Protestant Ethic and the Spirit of Capitalism* Weber (1958) argues that Christianity was partially responsible for economic success in the Western world. The theory holds that people viewed wealth and social status as an indication of their predestined salvation. The protestant work ethic (PWE) is espousing values hard work, frugality, and minimizing leisure activities. PWE has been related to conservative attitudes including RWA and SDO (Christopher, Zabel, Jones, Marek, 2008). PWE beliefs may help to explain a link between religion, conservatism and free-market attitudes in the West. Religious individuals may assume they have been "chosen" by God to be socially and economically prosperous and value free-markets as a way to achieve the resources God intends them to have. It is difficult to anticipate how religiosity in Indian participants will relate to free

market beliefs partially due to a relatively new coexistence between free-markets and the Hindu religion within India.

North America has been defined as an individualistic culture while India is considered to be collectivist. The current study will use Triandis and Gelfand's Horizontal and Vertical/Individualism and Collectivism Scale. This measurement proposes that collectivism and individualism should not be viewed in dichotomous terms and distinguishes between two types of collectivism: horizontal collectivism (HC) and vertical collectivism (VC), and two types of individualism: horizontal individualism (HI) and vertical individualism (VI). The vertical dimension emphasizes social hierarchy in society while the horizontal dimension emphasizes social equality. The type of society one lives in will influence their self-concept as dependent or interdependent, their goals, social relations and behavior. This should be reflected in cultures reporting different attitudes on personality variables and free-market beliefs. For example, collectivist cultures put more emphasis on equality among people within the group, which could influence negative attitudes towards free-markets if they are viewed contributing to social hierarchy. Free-markets in general may be more suited to individualistic societies who are more concerned with exchange over communal relationships. Vertical individualist societies such as the United States may be the most conducive society for free-markets to thrive in considering their emphasis on competition and exchange relationships (Triandis, Gelfand, 1998). However, free-market capitalism has been on the rise in India, and Roney (2014) found the Indian subgroup to score highest on FMI. It seems plausible that for these people the vertical dimension, emphasizing hierarchy, is more important in driving their free-market support. Consistent with this, Roney (2014) did find a correlation between SDO and FMI among the Indian participants.

The purpose of this study is to compare a sample of Americans and of Indians on free-market beliefs and other conservative attitudes. Past research has shown that FMI is predicted by the personality variables RWA and SDO for Western participants but this may not be true for participants in from non-western cultures. This study will examine differences in religiosity, belief in meritocracy, and individualist/collectivist orientations to try to understand different free-market and conservative attitudes between cultures.

## **Method**

### *Participants*

For this study participants from the United States and India were recruited using Amazon's Mechanical Turk Program (MTurk), which is an online crowd-sourcing marketplace. Research done by Berinsky, Huber & Lenz (2012) found that MTurk generates samples that are generally representative of North America. However, MTurk's ability to generate representative Indian samples is unknown. Participants were recruited via an e-poster (Appendix A) posted on Mturk's Human Intelligence Task (HIT) page. The e-poster asked participants to take part in a study that is concerned with answering questions on economic and political attitudes. It states how long participation will take (45 – 60 minutes) and that participants would receive three dollars as compensation for their time. The poster specified that only participants from the US or India who are over 18 and speak English qualify to take part in the study. Participants were not excluded from taking part in the study based on any other demographic variable.

In total 448 participants took part in the study (236 US, 212 Indian). Their ages ranged from 18 – 75, and 281 males (63%) and 167 females (37%) took part in this study. Participants were presented with a consent form that conveyed the nature of the study and accepted to take part by clicking on an agreement statement. Participants were given brief instructions on how to fill out the questionnaires and proceeded to answer the six questionnaires included in the study. Upon completion of all the questionnaires participants received a debriefing form that describes in more detail the purpose of the study. Follow up information was offered for participants who wished to learn more about this research.

### *Materials*



The materials being used in this study were six questionnaires that assessed attitudes about free markets, personality/political variables (right-wing attitudes, and Social Dominance Orientation), religious beliefs, beliefs in meritocracy, and individualistic vs. collectivist orientations. The questionnaires were accessed by participants via the Internet, using a website called “Survey Monkey”. Participants read the question and respond by clicking on an option presented with a seven-point Likert Scale ranging from “strongly disagree” to “strongly agree”.

The first questionnaire contains questions pertaining to attitudes about free-markets and has nine dimensions within it that emphasize particular reasons why people endorse free markets (appendix B). The questionnaire contains a total of 64-items. Fourteen of these items have been used by Roney (2009) in past research, with half of these items measuring Free-Market Ideology and the other half measuring pro-free market/pro-welfare beliefs. Six items have been used in past research on Fair Market Ideology and measure the degree to which one believes free-markets are fair systems (Jost et al, 2003). The factors used by Roney both have good internal consistency with Free-Market Ideology and pro-welfare/free-market beliefs having an alpha of .84 and .78 respectively (Roney 2009). Jost’s fair market items have been shown to have strong internal consistency with an alpha of .89 (Jost 2003). The remaining items in this questionnaire were developed to reflect seven additional hypothesized dimensions that may explain why people endorse free-markets: economically efficient, being agents of change, having traditional significance, views on socialism, emphasizing competition, having a punitive quality, and mistrust in government.

Participants completed questionnaires measuring Right-Wing Authoritarianism (RWA) and Social Dominance Orientation (SDO). The RWA scale has been widely used in psychological research since its development by Altmeyer (1981). This questionnaire contains 24

items that measure the degree to which one has an authoritarian personality. An example of an RWA question is, “Obedience and respect for authority are the most important virtues children should learn”. The RWA scale is composed of three dimensions that measure adherence to established authority, liking for tradition and convention, and aggression for people who deviate from social conventions. Foder, Wick, Hartsen and Preve (2008) found this the RWA scale to have good internal consistency ranging from  $(\alpha) = .85$  to  $.94$ . The SDO questionnaire (Pratto et al., 2006) contains 16-items which measure the degree to which one believes the world is a competitive place where some groups are more deserving than others. An example of a question used on this survey is, “It's OK if some groups have more of a chance in life than others”. It has been shown to have good internal consistency  $(\alpha) = .83$  (Pratto et al., 2006).

Three more questionnaires were administered to participants concerning religious beliefs, beliefs about meritocratic systems, and individualistic vs. collectivistic orientations. The religiosity scale is an adapted version of Masters’ Measure of Religiosity/Spirituality (2009). This measure includes seven items from the original questionnaire and two additional questions included for the purposes of this study. Because of the different religions prominent in the United States and India, and the diversity within both, two additional items were added prior to the religiosity questions, which ask the participant if they belong to a religion and to specify which religion they belong to. An example of an original question from this questionnaire is “I try hard to carry my religious beliefs over into all my other dealings in life”. The scale is divided into three dimension which have been shown to have the following internal consistency: personal spirituality  $(\alpha) = .75$ , punishing god  $(\alpha) = .63$ , and forgiveness  $(\alpha) = .85$  (Masters et al. 2009).

The next questionnaire is a meritocracy scale with 15-items based on an existing measure developed by Davey et al. (1999); eight items were in their original form, measuring beliefs that

there “ought” to be meritocracy ( $\alpha = .69$  to  $.72$ ) and seven were reworded to reflect beliefs that there is “actually” a meritocracy ( $\alpha = .75$  to  $.84$ ). This was done because previous research suggests that these differ in their implications for people’s political attitudes. An example question from the “ought” dimension is, “It is wrong for an employer to give a job to someone they know without advertising the job to other candidates”. An example from the “actual” meritocracy dimension is, “In organizations, people who do their job well will rise to the top”

Triandis and Gelfand’s Horizontal and Vertical Individualism and Collectivism scale is the final questionnaire participants were administered. This questionnaire contains four dimensions to reflect different social orientations. The horizontal dimensions reflects a value for equality amongst people in society, while the vertical dimension reflects a view that society is organized in a hierarchy where some groups are superior to others. It is composed of 16 questions, which measure four dimensions: horizontal individualism ( $\alpha = .81$ ), horizontal collectivism ( $\alpha = .80$ ), vertical individualism ( $\alpha = .82$ ) and vertical collectivism ( $\alpha = .73$ ). An example question from the horizontal individualism dimension is, “I’d rather depend on myself than others”, from horizontal collectivism “If a co-worker gets a prize, I would feel proud”, from vertical individualism “It is important that I do my job better than others”, and from vertical collectivism “Parents and children must stay together as much as possible” (Triandis & Gelfand 1998).

### *Procedure*

Participants were recruited online using Amazon’s Mechanical Turk using an e-poster. Participants who agreed to take part were given a consent form followed by instructions on how to fill out the questionnaires. In total six questionnaires will be given to participants. Upon completion of the questionnaires participants were given a debriefing form, contact information and further readings for those interested in learning more about the topic. Participants received a

human intelligence task (HIT) code in order to receive their three-dollar reward for their participation.

## Results

### *Factor Analysis on Free-market Attitudes Questions*

A factor analysis was conducted on the free-market items to determine what elements of free-markets are leading to their endorsement. This was first done on the American sample, and after an orthogonal varimax rotation five distinct factors emerged.

The first two factors appear to reflect different aspects of one previously established FMI factor (Roney & Alexander 2002). Both factors were highly correlated with each other and many items load somewhat on both, but they are distinct in the way that one emphasizes anti-government attitudes while the other emphasizes a liking for the competitive nature of free-markets. The first factor (26% of the variance explained) includes items that emphasize mistrust in government and an overall liking for free market (free-market ideology items). The mistrust in government items loaded the highest onto this factor. Seven items were included in this factor (see items labelled MOG in Appendix B), which emphasized that government has no place in the economy ( $\alpha = .91$ ). The second factor (13% of the variance explained) emphasized free-market outcomes as fair and liking the competitive nature of free-markets. These items are labelled FMISDO in Appendix B, because these items seem to reflect group competition and include a number of items that had been included to reflect aspects of markets that were hypothesized to appeal to people high in SDO. A total of nine items loaded onto this factor ( $\alpha = .88$ ). The third factor (8% of the variance explained) was characterized by six items, and is labeled EoT for emphasis on tradition in Appendix B. This factor emphasizes the important historical significance that free-markets have ( $\alpha = .83$ ). The fourth factor is a pro-socialism factor, and is labeled SOC in appendix B (6% of the variance explained). The seven items loaded onto this factor emphasize that free-markets lead to unfair and poor economic outcomes and that

government has a role to play in regulating the markets ( $\alpha = .78$ ). The fifth factor (6% of the variance explained) consists of four items, and is labeled EoC in Appendix A. This factor emphasizes the free markets as agents of change ( $\alpha = .76$ ).

Because this study is based on research that was done using North American samples, it was decided to base the free-market attitude variables on the factor analysis on the U.S. sample. An exploratory factor analysis on the Indian sample gave similar results, except that only one FMI factor emerged, which was similar to FMISDO. Two small additional factors emerged for the India sample, which emphasized pro-welfare/free-market beliefs and a general dislike for free-markets because they lead to unfair outcomes and instability. These factors will not be further considered in this study.

Reliability analyses were conducted for the free-market factors mentioned above (Table 1), and the other established measures being used in this study (Table 2). All measures produced sufficient alpha values.

Table 1

*Chronbach's Alpha for Mistrust of Government (MoG), Free-market competition (FMISDO), Emphasis on Tradition (EoT), Socialism (SOC), and Emphasis on Change (EoC).*

<u>MoG</u>	<u>FMISDO</u>	<u>EoT</u>	<u>SOC</u>	<u>EoC</u>
.91 (7 items)	.88 (9 items)	.83 (6 items)	.78 (7 items)	.76 (4 items)

Table 2

*Chronbach's Alpha for Right-wing Authoritarianism (RWA), Social Dominance Orientation (SDO), Ideal Meritocracy (IM), Actual Meritocracy (AM), Vertical Collectivism (VC), Vertical Individualism (VI), Horizontal Collectivism (HC), Horizontal Individualism (HI), and Religiousness/Spirituality (BMMRS).*

<u>RWA</u>	<u>SDO</u>	<u>IM</u>	<u>AM</u>	<u>VC</u>	<u>VI</u>	<u>HC</u>	<u>HI</u>	<u>BMMRS</u>
.91	.95	.79	.77	.83	.71	.82	.79	.92

*Comparisons Between Indian and U.S. Samples*

A series of t-tests were conducted comparing the American and Indian samples on all the free-market factors and other predictor variables. The means, standard deviations, and t-values are presented in Table 3. Indians scored higher on MoG, SDOFMI, and SOC, and contrary to our hypothesis, Indians scored higher on the emphasis on tradition (EoT) factor. There were no differences between Indian and American's mean scores for the emphasis on change (EoC) factor. T-tests conducted on the remaining variables found that Indians scored higher on RWA, SDO, "actual" meritocracy (AM), social orientation facets: VC, VI, HC, and religiosity. Americans scored higher on "ideal" meritocracy (IM) and HI. Indians' higher scores on all the conservative measures replicate previous findings that suggest Indian society is more conservative than American society (Roney 2014).

Correlations among the free-market factors for both Indian and American samples are presented in Tables 4 and 5, and the other variables in Tables 6 and 7. Interestingly, the socialism factor (SOC) was negatively correlated with the other free-market factors for both samples, but the correlation was much weaker for the Indian sample, suggesting a capitalist-socialist dichotomy may exist in the US but not to the same extent in India. Also of note, there was a moderate correlation between SDO and RWA for the American sample, consistent with other research largely done with North American samples, but no correlation existed between SDO and RWA for the Indian sample.



Table 3

*Means and t-values for Mistrust of Government (MoG), Free-market competition (FMISDO), Emphasis on tradition (EoT), Socialism (SOC), Emphasis on Change (EoC), Right-wing Authoritarianism (RWA), Social Dominance Orientation (SDO), Ideal Meritocracy (IM), Actual Meritocracy (AM), Vertical Collectivism (VC), Vertical Individualism (VI), Horizontal Collectivism (HC), Horizontal Individualism (HI), and Religiousness/Spirituality (BMMRS).*

Measure	Country of Residence		t-value, p
	US	India	
<b>MoG</b>	3.82 (1.61)	4.56 (.1.15)	40.85 (425), $p < .001$
<b>FMISDO</b>	3.74 (1.33)	4.50 (.99)	24.86 (431), $p < .001$
<b>EoT</b>	4.74 (1.24)	5.57 (1.10)	4.36 (446), $p < .001$
<b>SOC</b>	3.87 (1.15)	4.30 (1.00)	3.86 (446), $p < .001$
<b>EoC</b>	5.01 (1.11)	4.96 (1.04)	.41 (446), <i>ns</i>
<b>SDO</b>	2.16 (1.26)	3.05 (1.22)	1.07 (446), $p < .001$
<b>RWA</b>	3.68 (1.27)	4.08 (.78)	58.25 (446), $p < .001$
<b>Meritocracy: Ideal</b>	4.79 (1.10)	4.00 (1.05)	1.25 (446), $p < .001$
<b>Meritocracy: Actual</b>	5.10 (1.43)	6.19 (1.11)	13.14 (446), $p < .001$
<b>Vertical Collectivism</b>	4.84 (1.26)	5.40 (1.24)	.532 (446), $p < .001$
<b>Vertical Individualism</b>	3.90 (1.33)	4.70 (1.07)	7.41 (446), $p < .001$
<b>Horizontal Collectivism</b>	4.81 (1.21)	5.45 (1.15)	.015 (446), $p < .001$
<b>Horizontal Individualism</b>	5.66 (.99)	5.34 (1.2)	9.95 (410), $p = .003$
<b>BMMRS</b>	4.1 (1.71)	4.74 (1.81)	1.73 (446), $p < .001$

*Note: The number in parentheses is the standard error.*

Table 4

*Correlations for American sample on Mistrust of Government (MoG), Free-market competition (FMISDO), Emphasis on tradition (EoT), Socialism (SOC), and Emphasis on Change (EoC).*

	MoG	FMISDO	EoT	SOC	EoC
MoG	1				
FMISDO	.68**	1			
EoT	.55**	.66**	1		
SOC	-.56**	-.71**	-.58**	1	
EoC	.43**	.43**	.61**	-.29**	1

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

Table 5

*Correlations for Indian sample on Mistrust of Government (MoG), Free-Market Competition (FMISDO), Emphasis on Tradition (EoT), Socialism, and Emphasis on Change (EoC).*

	MoG	FMISDO	EoT	SOC	EoC
MoG	1				
FMISDO	.73**	1			
EoT	.62**	.77**	1		
SOC	-.053	-.26**	-.19**	1	
EoC	.54**	.62**	.53**	.03	1

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

Table 6

*Correlations for American sample on Right-wing Authoritarianism (RWA), Social Dominance Orientation (SDO), Ideal Meritocracy (IM), Actual Meritocracy (AM), Vertical Collectivism (VC), Vertical Individualism (VI), Horizontal Collectivism (HC), Horizontal Individualism (HI), and Religiousness/Spirituality (BMMRS).*

	RWA	SDO	IM	AM	VC	VI	HC	HI	BMMRS
RWA	1								
SDO	.25**	1							
IM	.14*	.13*	1						
AM	.16*	.21**	-.05	1					
VC	.22**	-.01	-.04	.30**	1				
VI	.15*	.31**	.01	.32**	.25**	1			
HC	-.02	-.34**	-.16*	.16*	.56**	-.01	1		
HI	-.063	-.029	.23**	-.07	.09	.20**	.06	1	
BMMRS	.28**	.05	.02	.11	.31**	-.01	.29**	-.03	1

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

Table 7

*Correlations for Indian sample on Right-wing Authoritarianism (RWA), Social Dominance Orientation (SDO), Ideal Meritocracy (IM), Actual Meritocracy (AM), Vertical Collectivism (VC), Vertical Individualism (VI), Horizontal Collectivism (HC), Horizontal Individualism (HI), and Religiousness/Spirituality (BMMRS).*

	RWA	SDO	IM	AM	VC	VI	HC	HI	BMMRS
RWA	1								
SDO	.00	1							
IM	.04	-.09	1						
AM	.11*	.04**	-.16*	1					
VC	.13	-.36**	-.21**	.44**	1				
VI	.05	.30**	-.22**	.44**	.39**	1			
HC	.13	-.46**	-.10	.44*	.75**	.28**	1		
HI	.03	-.22**	.07	.31**	.53**	.43**	.58**	1	
BMMRS	.35**	.08	.06	-.08	.11	-.07	.08	.01	1

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

*Regression Analyses Predicting Free-market Attitudes with RWA and SDO*

The following analyses were done to examine the hypothesis that SDO would predict free-market attitudes in both the U.S. and India, but that RWA would only be a significant predictor for the U.S. sample. There were not specific predictions pertaining to the specific factors, so these were done separately for each of the free-market attitude variables.

Separate multiple regression analyses revealed that when SDO and RWA were entered simultaneously as predictor variables, they predicted MoG and SDOFMI for both samples (see Table 8 and Table 9). It can be seen in the Tables that the predictors were generally stronger in the American sample, and in particular SDO seemed to predict free-market attitudes more strongly. Also, while SDO and RWA predicted SOC in a negative direction for the American sample, only RWA negatively predicted SOC for the Indian sample, and SDO was unrelated to SOC. RWA and SDO did not predict EoC for both samples when entered simultaneously, but when entered individually RWA and SDO predicted EoC for the US sample. RWA and SDO both predicted EoT for the US sample, but only RWA predicted EoT for the Indian sample.

In summary RWA and SDO appeared to be predictive of most of the free-market factors (MoG, SDOFMI, SOC, EoT) in similar ways, with both predicting independently. The main differences were that EoC was not predicted independently by RWA and SDO, and that SDO did not independently predict SOC for the Indian sample. Although RWA and SDO were significant predictors for most of the free-market factors for both samples, SDO in particular seemed to be stronger predictors of free-market factors for the US sample. These findings were therefore not supportive of the hypothesis that RWA would be the weaker predictor for participants from India.

Table 8

*Regressions for free-market composite variables, Social Dominance Orientation (SDO), Right-wing Authoritarianism (RWA), and SDO and RWA entered simultaneously as predictor variables for American sample.*

	RWA	SDO	RWA/SDO
MoG	$\beta = .29, p < .001$	$\beta = .45, p < .001$	RWA: $\beta = .19, p < .001$ SDO: $\beta = .40, p < .001$
SDOFMI	$\beta = .34, p < .001$	$\beta = .43, p < .001$	RWA: $\beta = .25, p < .001$ SDO: $\beta = .37, p < .001$
EoT	$\beta = .23, p < .001$	$\beta = .28, p < .001$	RWA: $\beta = .17, p = .009$ SDO: $\beta = .24, p < .001$
SOC	$\beta = -.26, p < .001$	$\beta = -.33, p < .001$	RWA: $\beta = -.19, p = .003$ SDO: $\beta = -.29, p < .001$
EoC	$\beta = .15, p = .026$	$\beta = .15, p = .023$	RWA: $\beta = .12, ns$ SDO: $\beta = .12, ns$

Table 9

*Regressions for free-market composite variables, Social Dominance Orientation (SDO), Right-wing Authoritarianism (RWA), and SDO and RWA entered simultaneously as predictor variables for Indian sample.*

	RWA	SDO	RWA/SDO
MoG	$\beta = .14, p < .001$	$\beta = .19, p = .005$	RWA: $\beta = .14, p = .04$ SDO: $\beta = .19, p = .01$
SDOFMI	$\beta = .17, p < .001$	$\beta = .14, p < .001$	RWA: $\beta = .17, p = .02$ SDO: $\beta = .14, p = .05$
EoT	$\beta = .16, p = .022$	$\beta = .03, ns$	RWA: $\beta = .16, p = .02$ SDO: $\beta = .03, ns$
SOC	$\beta = -.14, p = .038$	$\beta = -.06, ns$	RWA: $\beta = -.14, p = .04$ SDO: $\beta = -.06, ns$
EoC	$\beta = .10, ns$	$\beta = -.10, ns$	RWA: $\beta = .01, ns$ SDO: $\beta = -.100, ns$

*Exploratory Regression Analyses*

There were no specific culture differences hypothesized for remaining predictor variables predicting free-market attitudes. Exploratory analyses will be reported separately for individualism/collectivism, actual/ideal meritocracy, and religiosity.

*Individualism/Collectivism*

To simplify these analyses, just the two most distinct aspects of individualism/collectivism, vertical individualism (VI) and horizontal collectivism (HC), will be reported. A similar pattern emerged for social orientation predicting the free-market factors MoG, SDOFMI, and EoT. VI predicted MoG, SDOFMI, and EoT for both Americans and Indians (see Tables 10 and 11). In contrast, HC predicted MoG, SDOFMI and EoT for the Indian sample only. This pattern suggests that horizontal collectivists like the free-markets in India but the same group in the US does not. When SOC was the criterion variable, VI negatively predicted SOC for Americans but was unrelated to SOC for Indians. HC predicted SOC for Indians but was unrelated to SOC for Americans. It seems that individualists are opposed to socialism in the US but not in India, and collectivist in India endorse some socialist beliefs while collectivist Americans are indifferent to them. When EoC was used as a criterion variable VI and HC were predictive of EoC for Indians, but only VI predict EoC for Americans. For the Indian sample, collectivists are placing a strong emphasis on free-markets as agents of change, while the same group in the U.S. is not.

Table 10

*Regression for free-market composite variables, Vertical Individualism (VI), Horizontal Collectivism (HC), and VI and HC entered simultaneously as predictor variables for American sample.*

	VI	HC	VI/HC
MoG	$\beta = .35, p < .001$	$\beta = -.133, p = .041$	VI: $\beta = .35, p < .001$ HC: $\beta = -.13, p = .033$
SDOFMI	$\beta = .40, p < .001$	$\beta = .053, ns$	VI: $\beta = .41, p < .001$ HC: $\beta = .06, ns$
EoT	$\beta = .33, p < .001$	$\beta = .034, ns$	VI: $\beta = .33, p < .001$ HC: $\beta = .04, ns$
SOC	$\beta = -.27, p < .001$	$\beta = .023, ns$	VI: $\beta = -.27, p < .001$ HC: $\beta = .02, ns$
EoC	$\beta = .26, p < .001$	$\beta = .078, ns$	VI: $\beta = .26, p < .001$ HC: $\beta = .08, ns$

Table 11

*Regression for free-market composite variables, Vertical Individualism (VI), Horizontal Collectivism (HC), and VI and HC entered simultaneously as predictor variables for Indian sample.*

	VI	HC	VI/HC
MoG	$\beta = .45, p < .001$	$\beta = .32, p < .001$	VI: $\beta = .39, p < .001$ HC: $\beta = .21, p = .001$
SDOFMI	$\beta = .48, p < .001$	$\beta = .43, p < .001$	VI: $\beta = .39, p < .001$ HC: $\beta = .32, p < .001$
EoT	$\beta = .36, p < .001$	$\beta = .47, p < .001$	VI: $\beta = .25, p < .001$ HC: $\beta = .40, p < .001$
SOC	$\beta = .13, ns$	$\beta = .19, p = .006$	VI: $\beta = .09, ns$ HC: $\beta = .16, p = .022$
EoC	$\beta = .33, p < .001$	$\beta = .53, p < .001$	VI: $\beta = .19, p < .001$ HC: $\beta = .48, p < .001$

*Ideal and Actual Meritocracy*

Ideal (IM) and actual meritocracy (AM) were entered simultaneously as predictor variables for each free-market factor (see Tables 12 and 13). IM and AM predicted MoG and EoC in similar ways. AM predicted MoG and EoC for both India and the US. IM predicted MoG and EoC for the American sample only. IM and AM predicted SDOFMI for both samples but AM was a stronger predictor for both samples. Similarly, AM and IM predicted EoT for both samples. However, IM was a weak predictor while AM was a strong predictor for the Indian sample, while IM and AM predicted EoT to an equal degree for Americans. IM and AM both negatively predicted SOC for the American sample. IM negatively predicted SOC for the Indian sample but AM was unrelated to SOC. Notably, holding beliefs that meritocracies are ideal systems are not predicting liking for free-markets for Indians in general, but were strongly predictive of anti-socialist feelings in that sample, while AM was generally predictive of all the free-market factors except for socialism for Indians. For Americans, AM and IM are predicting all free-market factors to about the same degree.



Table 12

*Regression for free-market composite variables, Actual Meritocracy (AM), Ideal Meritocracy (IM), and AM and IM entered simultaneously as predictor variables for American sample.*

	AM	IM	AM/IM
MoG	$\beta = .35, p < .001$	$\beta = .27, p < .001$	AM: $\beta = .36, p < .001$ IM: $\beta = .28, p < .001$
SDOFMI	$\beta = .60, p < .001$	$\beta = .15, p = .019$	AM: $\beta = .61, p < .001$ IM: $\beta = .18, p < .001$
EoT	$\beta = .37, p < .001$	$\beta = .34, p < .001$	AM: $\beta = .38, p < .001$ IM: $\beta = .36, p < .001$
SOC	$\beta = -.36, p < .001$	$\beta = -.33, p < .001$	AM: $\beta = -.37, p < .001$ IM: $\beta = -.35, p < .001$
EoC	$\beta = .22, p = .001$	$\beta = .28, p < .001$	AM: $\beta = .24, p < .001$ IM: $\beta = .29, p < .001$

Table 13

*Regression for free-market composite variables, Actual Meritocracy (AM), Ideal Meritocracy (IM), and AM and IM entered simultaneously as predictor variables for Indian sample.*

	AM	IM	AM/IM
MoG	$\beta = .45, p < .001$	$\beta = -0.08, ns$	AM: $\beta = .45, p < .001$ IM: $\beta = -.01, ns$
SDOFMI	$\beta = .53, p < .001$	$\beta = .09, ns$	AM: $\beta = .56, p < .001$ IM: $\beta = .18, p = .002$
EoT	$\beta = .44, p < .001$	$\beta = .06, ns$	AM: $\beta = .46, p < .001$ IM: $\beta = .13, p = .036$
SOC	$\beta = .09, ns$	$\beta = -.57, p < .001$	AM: $\beta = .00, ns$ IM: $\beta = -.57, p < .001$
EoC	$\beta = .29, p < .001$	$\beta = -.00, ns$	AM: $\beta = .29, p < .001$ IM: $\beta = .04, ns$

*Religiosity and Spirituality*

A series of regression analyses were performed with religiosity and spirituality as the predictor variable and the free market factors as criterion variables. Contrary to hypotheses based on past research (Buckland 2014), religiosity did not significantly predict any of the free-market factors for either group.

## Discussion

### *Free-market factors*

The two largest free-market factors found, based on a factor analysis using the American sample, were labeled mistrust of government (MoG) and free-market items consistent with Social Dominance Orientation (SDOFMI). FMI and MoG both contain items that reflect Roney's (2002) previously established FMI factor, but MoG emphasizes free-markets as good because untrustworthy politicians aren't involved with them, while SDOFMI emphasizes the liking for the competitive nature of free-markets and the opportunity they provide for certain groups to be dominant over others. These factors were highly correlated with each other for both samples, but more so for Indians. Indians also scored higher on both MoG and SDOFMI, suggesting Indians are more economically conservative than Americans.

A socialism factor (SOC) emerged which emphasizes the role of governments to regulate the economy. Surprisingly, although Indians scored higher on MoG they also scored higher on SOC compared to Americans. It is difficult to speculate on the exact meaning of this finding but it may be due to a combination of differing attitudes about government and capitalism / socialism between American and India. Socialism was highly negatively correlated with the other free-market factors for the American sample, but only moderately negatively correlated with EoT and SDOFMI for the Indian sample. This may reflect a capitalism-socialism dichotomy that exists for Americans but not for Indians. Americans are viewing socialist beliefs about government intervention as being in opposition to free-market beliefs, while Indians do not seem to conceptualize these two economic systems as contradictory. For both groups SOC and SDOFMI were the highest negative correlations suggesting liking for the competitive nature of free-markets and pro-socialist beliefs are incompatible for both groups.

Another factor was emphasizing free-market capitalism as being part of a cultural tradition where participants live (EoT). Surprisingly, Indians score higher on this factor, though it was hypothesized that since free-markets have a long history in the U.S. that Americans would score higher. It seems that some Indians also see free-markets as a part of their cultural tradition. Possible reasons for this will be discussed in more detail below. For both groups EoT negatively correlates with SOC, suggesting SOC may pose a threat to those who see capitalism as part of the cultural tradition for both America and India.

Another factor that emerged reflected emphasizing free-markets as allowing change (EoC); this was the only factor on which there was no difference between American and Indian scores. Both groups scored fairly high on this factor suggesting they both like the potential change that free-markets can lead to. This factor was positively correlated with all the other factors for both samples except for SOC. For Americans it was negatively correlated with SOC suggesting Americans who value free-markets as possessing the potential for change see SOC as opposing their values. This finding could be the result of America's historical rivalry with communism, which has pitted capitalism against socialism since the beginning of the cold war. For Indians EoC and SOC were unrelated, which again suggests that Indians who like the free-markets are not viewing socialism as opposing free-markets.

A factor analysis on the Indian sample revealed similar factors with the appearance of two possible additional factors. The first was a pro-welfare/free market belief factor, which emphasizes that free-markets are the best economic system but government intervention is important to help people in need. The second factor was a general dislike of free-markets because they lead to economic instability and bad outcomes for society in general. Future research could examine the free-market factors for non-American samples more in-depth.

In general Indians scored higher on all free-market and predictor variables except for “ideal” meritocracy. These findings are consistent with Roney’s (2014) findings that suggest Indians are more socially and economically conservative than Americans. This may reflect an American historical value on liberty and opportunity, while India’s historical tradition has emphasized social stratification, partly as a consequence of the caste system.

*Cultural Differences in RWA/SDO predicting free-market beliefs*

Both RWA and SDO independently predicted all the free-market factors for both samples, except for EOC, and SDO did not predict SOC for Indians. This replicates past findings that have shown SDO and RWA to be two independent pathways linking social and economic conservatism (Roney 2009), and suggests this relationship is generalizable beyond a Western sample. Contrary to our hypothesis based on past research, RWA did predict most free-market factors, and even EoT, for Indians. Since India has undergone rapid economic development in the past 20 years, Indians may be viewing free-markets as being responsible for their country’s current circumstances. Although free-markets may not have a long historical tradition in India, the rapid development of the country may be leading Indians to view free-markets as having an important role in modern Indian society. Future research may want to consider differences in how age is related to free-market attitudes. It is possible that younger Indians are the group viewing free-markets as apart of Indian culture, while older Indians may not consider them to have cultural significance.

In general, SDO seemed to be a stronger predictor of free-market factors for Americans compared to Indians. People who are high on SDO in America may have a particular liking for free-markets because it allows them to express their competitive nature and dominance over other groups. In this way SDO Americans may think of the free-market as a mechanism for

social dominance. For Indians, SDO is weakly or not predicting the free-market factors. SDOs in India may have a history of using different cultural traditions to dominate over groups, such as the caste system, rather than free-markets.

*Culture Differences in Individualism and Collectivism predicting Free-Market Beliefs*

Vertical individualism (VI) was a predictor of all free-market factors for both samples except for SOC for the Indian sample. VI predicted SOC in a negative direction for Americans. It seems that Individualists have a general liking for free-markets across cultures. This may be because VI's emphasize exchange relationships among individuals and hierarchy in society, which free-markets may be perceived as a contributing to. The idea that capitalism and socialism are antithetical for Americans is again reflected in VI's liking all free-market factors but dislike for socialism. VI's in India also like free-markets, however, they appear to be indifferent to socialism. This may suggest that VI's in India like free-markets for the same reason as Americans as explained above, but they don't view socialism as being in opposition to free-markets, and might be indicating beliefs that these economic systems can coexist.

For Americans horizontal collectivism was negatively related to MOG, but was unrelated to all the other free-market factors. Surprisingly, collectivists' attitudes did not predict socialism for Americans. Interestingly, collectivism is strongly predicting all free-market factors in the Indian sample. The fact that HC was such a strong predictor of the EoC factor for Indians may help provide an explanation for this. Indians who are collectivist may value the potential for change that free-markets hold. These collectivist Indians seem to be endorsing free-markets because they provide an opportunity to overcome a long history of poverty and social stratification that has existed in Indian society. On the other hand, HC is unrelated to EoC for Americans suggesting collectivists in America may be less optimistic about the potential for

change that free-markets hold. This could be because of the perception that capitalism has led to less equality in the United States in recent decades. Notably, the collectivists in India like all the free-market factors, including socialism although it was a weaker relationship. This again reflects that Indians can hold capitalist and socialist beliefs simultaneously, or at least are not thinking of them as opposing forces.

*Culture Differences in Meritocracy predicting Free-Market Beliefs*

Ideal and Actual meritocracy predicted all free-market factors for Americans, with SOC being predicted in a negative direction. Actual Meritocracy was a stronger predictor of MoG and in particular SDOFMI for Indians and Americans. People who believe that an actual meritocracy exists in their country seem to like the competitive aspect of free-markets. This is consistent with the idea from system justification theory (Jost, Banaji & Nosek, 2004) that the belief in an actual meritocracy is a hierarchy enhancing myth that is employed by people who want to keep their status, much as SDO are inclined to do. IM and AM were equally negatively predictive of SOC, presumably because governments redistributing wealth compromises the meritocratic nature of free-markets.

For Indians, actual meritocracy predicted all free-market factors except for SOC. Again, this shows that Indians who like free-markets, and believe they live in a meritocracy, are not necessarily anti-socialism, which seems to be the pattern in America. Indians who believe they live in a meritocracy do not seem to be threatened by socialist ideas, which is striking because in theory socialist beliefs reflect a belief in more equal outcomes among people rather than meritocratic beliefs where the best workers receive the highest rewards. Looking at this the other way, socialists in the U.S. seem to believe that their country is not a meritocracy, whereas beliefs in socialism in India is not related to beliefs about whether India is a meritocracy.

On the other hand, ideal meritocracy did not predict any free-market factors for India, except for SOC in a strong negative direction. The beliefs that a meritocracy ought to exist seem to be irrelevant to the free-market factors that reflect capitalism, but it is predicting anti-socialist attitudes. Thus, Indians who believe in meritocracy as an ideal may not be viewing free-markets as being meritocratic in nature but are clearly holding the view that socialism is compromising of a meritocracy. It is interesting that, in comparison, Indians who believe in meritocracy are not stronger in their overall attitudes toward free markets, again showing that free-markets and socialism seem to be part of different attitudes in India.

#### *Future Research and Limitations*

Research has shown that MTurk generates fairly representative samples in the U.S. (Berinsky, Huber & Lenz 2012) but it is likely that different states in both countries will report different attitudes, and it would be difficult to fairly represent each state. Northern and Southern states in America have different cultures and may influence a differences in free-market attitudes. Similarly, Indian states have very distinct cultures and may also influence differences in free-market attitudes within India. Future research may want to explore how free-market attitudes differ within countries.

For the American sample the number of male and female participants was somewhat similar (58% male and 42% female), but for the Indian sample there were far more men than women (68% male and 32% female). Sex may influence differences in free-market attitudes since males have typically dominated politics and economics. Further analysis of the data may be done to examine sex differences between males and females on free-market attitudes. Sex differences are likely to vary between cultures because certain countries, such as India, will have more stratified gender roles, such may be the case between India and America.



There also may have been a communication barrier that existed for the Indian sample, more so than the American sample. Although the Indians may be fluent in English it is likely to be their second language and many of the items in the questionnaires are expressing complicated attitudes, which may have been misinterpreted.

A surprising finding was that RWA predicted all the free-market factors for Indians. It was expected that Indians would not view free-markets as having traditional importance in their culture, but it seems, in fact that they do. Future research may want to break down RWA into its three facets instead of using it as one big variable. This would provide for a more specific examination of how RWA predicts free-market beliefs. For Indians, RWA may be predicting EoT through the other facets of RWA (submission to authority and aggression to those who don't conform to norms), rather than the liking for traditional conventions facet.

Religiosity has been shown to predict free-market attitudes in past research (Buckland, 2014), however no such relationship emerged in the current study. It is surprising that religiosity did not predict the conservative free-market factors because past research has shown that religiosity is correlated with conservative beliefs (Jost et al. 2003). However, it may be that religiosity is related to the socially conservative domain rather than the economic domain. Perhaps, if the items were broken down into their individual facets (personal spirituality, punishing god, and forgiveness) significant associations would have been found. In the current research all the items loaded onto one big religiosity/spirituality factor, so the individual facets were not examined.

### *Conclusion*

This research has demonstrated that free-market attitudes are complex in the way they are related to personality and political attitudes, and this complexity increases further when culture is

considered. This study showed that Indians are more socially and economically conservative, but also seem to be more approving of socialism. Americans are viewing free-markets and socialism as polarizing forces while Indians are more likely to hold pro free-market and socialist beliefs at the same time. An especially unique finding of this study is that collectivist Indians seem to endorse free-markets because of their potential for change. Indians may think of free-markets as offering a chance to overcome poverty and social stratification while Americans view free-markets as contributing to social inequality.

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## Appendix A

**Poster**

This study is available to people living in the United States / India

Where do you stand on a variety of political and economic issues? Even if you don't consider yourself extremely political, we would like to know your views. Participants will complete 1 fairly large questionnaire (64 questions) and 5 shorter ones (ranging from 9 to 24 questions) online. Participation should take between 30 to 60 minutes, and you will be paid \$3.00

I am looking for adults (over 18) who live in the United States / India and are fluent English speakers to participate.

To accept this HIT, simply complete the study at the following website:

To complete this HIT, enter the code at the end of the study here: \_\_\_\_\_

*Principal Investigator:*

Dr. Chris Roney,  
Department of Psychology,  
King's University College, University of Western Ontario

## Appendix B

## New FMI Questionnaire

Following are statements about various political points of view that different people hold. On the rating scale below each question, please indicate your level of agreement or disagreement with each statement.

1	2	3	4	5	6	7
<b>Strongly Disagree</b>			<b>Neither Agree or Disagree</b>			<b>Strongly Agree</b>

1. Government regulation can only interfere in the production and efficiency of the economy.

\_\_\_ **MoG**

2. If the government gets involved in the Free Market it will undoubtedly end in failure, because politicians lack the expertise required to run an economy. \_\_\_ **MoG**

3. Anyone's fortunes can change in a free market system. \_\_\_ **EoC**

4. Programs aimed at helping balance inequalities have a necessary place in our society. \_\_\_

5. The free market system is a fair system. \_\_\_ **SDOFMI**

6. Regulation of the free market restricts the most skilled and intelligent traders and bankers. \_\_\_

7. The competition associated with free markets is consistent with the historic values in my country. \_\_\_ **EoT**

8. Welfare makes people lazy and hurts the economy in the long run. \_\_\_

9. Socialism may work in other countries, but our system has made our country the great nation that it is. \_\_\_

10. Common or "normal" business practices must be fair, or they would not survive. \_\_\_

**SDOFMI**

11. Regulation of the free market economy only serves to help those individuals unwilling to help themselves. \_\_\_



12. People born into bad circumstances deserve our help to give them a chance in life. \_\_\_
13. A free market system can lead to great gains and losses for all involved. \_\_\_ **EoC**
14. The free market system does not reflect the values and traditions of my country. \_\_\_ **EoT**
15. Governments should help individuals in need, but should largely leave economic markets and businesses alone. \_\_\_
16. Acting in response to market forces is not always a fair way to conduct business. (R) \_\_\_
17. The Socialist systems in some countries punish those who do well, but countries with a tradition of capitalism encourage success. \_\_\_
18. We should maximize free enterprise and minimize government interference. \_\_\_
19. The Government is unable to balance its own budget, and it should stay out the Free Market. \_\_\_ **MoG**
20. In free market systems, people tend to get the outcomes that they deserve. \_\_\_ **SDOFMI**
21. A free market is a dynamic system in which fortunes can be made or fall at any moment. \_\_\_ **EoC**
22. A market that governs itself will develop its own regulations to protect the economy. \_\_\_
23. The free market provides equal opportunity for any individual to do well; those that don't succeed should not burden those that do. \_\_\_
24. Governments should not interfere with economic markets, but they do have a responsibility to help individuals in need. \_\_\_
25. Free enterprise can run almost everything, including universities and hospitals, better than government bureaucrats. \_\_\_
26. Profitable businesses tend to be more morally responsible than unprofitable businesses. \_\_\_
27. The free market provides a mechanism for economic stability in individual wealth (R). \_\_\_

28. If individuals are unable to compete in a free market system they should not bother participating. \_\_\_
29. Economic markets do not fairly reward people. \_\_\_ **SDOFMI (R), SOC**
30. Fortunes rise and fall in a free market system and are constantly in a state of flux. \_\_\_ **EoC**
31. The Wealthiest bankers and traders have not earned their position at the top in the free market. \_\_\_ **SDOFMI (R), SOC**
32. Free enterprise is the best way to run an economy, but social programs to help needy individuals also have their place. \_\_\_
33. No one benefits from regulating a free market, except for those unskilled and unwilling individuals that burden our economy. \_\_\_
34. The intricacies of the Free Market are understood by government officials and should not be left to the private sector. \_\_\_ **SOC**
35. Everybody wins from free trade in the end. \_\_\_ **SDOFMI**
36. The free market system reflects the spirit of competition and freedom that has made our country what it is. \_\_\_ **EoT**
37. Socialist countries are sure to achieve to economic success. \_\_\_ **SOC**
38. Rules and regulations governing free market transactions can only serve to reward undeserving individuals. \_\_\_
39. The less environmentalists interfere with the free market, the better things will be for the economy, and for the environment as well. \_\_\_
40. Interfering with financial markets in any way may hinder efficiency. \_\_\_
41. Governance over the Free Market should be left to bankers and economists, and kept out of the hands of politicians. \_\_\_

42. Stability and a lack of change in the economy are due in part to the nature of the free market (R). \_\_\_

43. Redistribution of wealth allows those at the bottom to hold everyone else back. \_\_\_

44. Politics has no place in the Free Market; politicians are apt to try and further their own careers at the expense of economic growth. \_\_\_ **MoG**

45. The best government is the one that least interferes with the economy and the markets. \_\_\_

**MoG**

46. By hindering the freedom of market interactions, the economy may prove unable to compete in an international setting. \_\_\_

47. The corruption found in modern government demonstrates why it should have no place in the Free Market setting. \_\_\_ **MoG**

48. Given absolute freedom, the competition in financial markets will prevent stagnation. \_\_\_

49. As long as people have a free choice in the marketplace, business cannot be blamed for consumer's mistakes. \_\_\_

50. A free market system is not the best way to discover the most skilled economic players. \_\_\_

**SOC**

51. It might sound harsh, but free economic markets allow things to work as Darwin suggested, by removing the weak. \_\_\_ **SDOFMI**

52. The free market, like life in general, ensures that the fittest survive, the weak perish, and the world and economy are better for it. \_\_\_ **SDOFMI**

53. My country would not hold the economic power and influence it does today were it not for the free market. \_\_\_ **EoT**

54. The free market is an agent of economic change. \_\_\_

55. Socialist countries are often plagued by corruption. \_\_\_
56. Where I live, free markets have a long history. \_\_\_ **EoT**
57. Innovation is discouraged by the unfettered competition of free markets. \_\_\_ **SOC**
58. Without the free market we would not have enjoyed the comforts and luxuries of economic prosperity in this country. \_\_\_ **EoT**
59. The people at the top in countries with free markets tend to be the most deserving of their position. \_\_\_ **SDOFMI**
60. Politicians are only good at spending money, not making difficult decisions that benefit the economy in the long run. \_\_\_ **MoG**
61. Those individuals who cannot compete in a free-market economy should not be coddled, but left to their own devices. \_\_\_
62. Even undeserving individuals can make their fortunes in a free market system (R). \_\_\_
63. Over-regulation of the free market threatens the position we have earned in the world's economy. \_\_\_
64. It is essential that an economic market be regulated in order to develop the most productive system. \_\_\_ **SOC**

**Key:**

**Economic efficiency/Pure economics:** 1, 22, 40, 46, 48, 57, 64

**Emphasizing change:** 3, 13, 21, 27, 30, 42, 54

**Traditionalism/This is how we do things:** 7, 14, 36, 53, 56, 58,

**View of Socialism:** 9, 17, 37, 55, 63

**SDO/Competition:** 6, 31, 38, 50, 52, 59, 62

**Noncompassion/Vulnerability:** 11, 23, 28, 33, 43, 51, 61

**Mistrust of Government/Politicians:** 2, 19, 34, 41, 44, 47, 60

**FMI Factor 1 items:** 8, 18, 25, 35, 39, 45, 49

**FMI Factor 2 items:** 4, 12, 15, 24, 32

**Just Fair Market items:** 5, 10, 16, 20, 26, 29

*Items marked (R) are reverse coded.*