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Cross-National Variation in the Predictors of Wellbeing: Life Domains and Positive Personality Traits

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Abstract

Background: Previous research has demonstrated cross-national variation in domain-life satisfaction relationships, with neither health, family, social life, personal safety, financial situation, home life or job satisfaction being universal predictors of wellbeing. The largest limitation of this previous research was a lack of appropriate control variables. Past research has shown that personality traits are powerful predictors of wellbeing, with three particularly important constructs being self-esteem, optimism and self-efficacy. Aims: The present study examined whether after controlling for positive personality traits, domain-life satisfaction relationships would vary cross-nationally and whether a direct cross-national comparison of domain-life satisfaction would reveal significant differences. It was predicted that the cross-national differences would be smaller than those found using more countries with greater cross-cultural differences. Methods: These hypotheses were tested using an online survey with samples from the USA and India, recruited using Mechanical Turk. Results: Both hypotheses were supported in that there was cross-national variation in domain-life satisfaction relationships, even after controlling for positive personality traits. In the Indian sample, health, financial and job satisfaction predicted life satisfaction. Amongst Americans, family, social life, financial situation and home satisfaction predicted it. Direct comparison revealed significant differences in the predictive power of home and job satisfaction, supporting the second hypothesis. As expected, the differences noted in this study were smaller than those revealed through our analysis of the World Values Scale and Eurobarometer. Conclusions: Domain life satisfaction relationships vary cross-nationally, even when personality traits are controlled.

Keywords: Cross-cultural; Wellbeing; Life domains; Self-esteem; Self-efficacy; Optimism.

1. Introduction

Psychologists have made many attempts to quantify wellbeing, and each approach is based on certain philosophical assumptions. Both bottom-up and top-down explanations of variation in wellbeing have been proposed. In bottom-up approaches, people are thought to begin by assessing factors influencing their lives and then aggregating across conditions to arrive at an overall evaluation (Lucas, 2004). Top-down processing assumes that they first compute a general life satisfaction judgment and then rely on this general feeling when judging more specific domains (Lucas, 2004). Research indicates that there is evidence for both approaches (Feist *et al.*, 1995; Headey *et al.*, 1991; Lucas, 2004; Scherpenzeel and Saris, 1996). There are three main contemporary philosophies of wellbeing: hedonism, desire, and objectivism, each of which emphasises bottom-up assessments. Hedonism and desire theories are subjective and are based on the premise that the value of "goods" and their relationship with wellbeing are determined by an individual's attitudes. In contrast, objectivists assume that certain "goods" have inherent value and will improve quality of life independent of attitudes.

To hedonists, wellbeing occurs when pleasure is greater than pain. Prudential hedonism argues that the more pleasure one can have in one's life, the better it will be, and the more pain one encounters, the worse it will be (Crisp, 2016). As only a desired good can bring pleasure, its importance to the individual determines its value. Beyond these basic views, there is debate amongst hedonists. Bentham (1879), stated that the two determinants of pleasure are duration and intensity. However, as noted by others, there is not a unique sensation that underlies all sources of pleasure. This criticism also relates to the issue of equality of sensations. For example, it is difficult to compare the pleasure achieved from reading a piece of literature and the enjoyment of a meal. However, other approaches imply that some pleasures have greater inherent value than others (Crisp, 2016). This notion violates the primary assumption of hedonism (wellbeing equals total pleasure) and is no longer a subjective theory. Perhaps the strongest argument against simple hedonism is the experience machine; a theoretical device that, once plugged into, provides endless pleasure. Even if the instrument allowed for true choice and interaction with others, many philosophers claim that they would forgo it, once again violating the basic premise of hedonism, namely that wellbeing is a function of the greatest balance of pleasure and pain (Crisp, 2016).

Desire theory suggests that a person's life is going well when they get the things that they want, and wellbeing is the satisfaction of these desires. The most basic version argues that only current desires matter, neglecting the past and future (Heathwood, 2014). In response, theories that focus on desire-satisfaction across the lifespan have been

proposed. Here, desires are ranked globally, and their relative importance to the individual is taken into account. While there are criticisms related to defective desires, being improperly informed, and the desire to not be well off, these theories are typically better regarded than hedonism (Crisp, 2016). Heathwood (2006), argued that hedonism and desire theories are one and the same. To him, net pleasure in hedonism could be understood in the following way. The intrinsic value of a life for the one who lives it equals the sum of the values of all the instances of intrinsic attitudinal pleasure and pain contained therein. Here, the attitude an individual has towards "goods" determines their ability to produce pleasure and pain. These conclusions are nearly identical, and Heathwood (2006) proposed that the attitudinal pleasure of hedonism is equivalent to the subjective desire satisfaction of desire theories. Assuming his argument is correct, these theories can be understood as subjectivism, where the predictors of wellbeing are a function of an individual's values.

To objectivists, certain "goods" with inherent value will improve a person's quality of life independent of their attitudes. In other words, they are universal predictors of wellbeing. Though basic human needs are thought to determine prudential "goodness", there has been debate concerning which "goods" are inherently valuable. Doyal and Gough (1991) noted 11 objective markers of wellbeing, namely adequate nutritional food and water, adequate protective housing, non-hazardous work and physical environments, appropriate healthcare, security in childhood, significant primary relationships, physical and economic security, safe birth control and childbearing, and appropriate basic and cross-cultural education. Others have fixated on moral goodness, rational activity, the development of one's abilities, having children and being a good parent, knowledge and the awareness of true beauty (Varelius, 2004). Accepting the argument proposed by Heathwood (2006), there are two theories of wellbeing. Subjectivism proposes that the predictors of wellbeing vary as a function of values, while objectivists claim that certain "goods" with inherent value will do so universally.

There are many competing psychological conceptualizations of subjective wellbeing, and the most commonly cited components are life satisfaction, happiness, and positive and negative affect. Diener *et al.* (1985), noted that life satisfaction refers to a cognitive, judgmental process wherein an individual forms a global assessment of the quality of their life, according to their chosen criteria. Individuals use their own standards when forming satisfaction judgements. In the context of wellbeing, positive and negative affect are two dimensions which can be understood as the frequency and degree to which an individual experiences emotion. The former refers to the extent to which a person feels enthusiastic, active and alert"; individuals with high levels of positive affect will experience "high energy, full concentration, and pleasurable engagement" (Watson *et al.*, 1988). On the other hand, negative affect is thought to be a state of distress, characterised by aversive mood states, including anger, contempt, disgust, guilt, fear, and nervousness; low levels are associated with calmness and serenity (Watson *et al.*, 1988).

The constructs of life satisfaction and positive/negative affect are relatively straight forward, but this cannot be said of happiness. Oishi *et al.* (2013), noted that defining the concept has been difficult, despite decades of investigation. One of the more commonly cited definitions is a balance of positive and negative affect, derived from the concept of Eudemonia as proposed by Aristotle. However, Ryff and Singer (2008) argued that this is a mistranslation, instead suggesting the idea of striving toward excellence based on one's unique potential. Further complicating matters are varying culture-bound definitions. Historically, happiness was seen as experiencing favourable external circumstances, particularly in East Asian nations. In the modern Western world, the focus has shifted to positive individual feelings (Oishi *et al.*, 2013). One commonly held belief is that wellbeing is a combination of life satisfaction, affect and happiness. For example, Diener *et al.* (1985) proposed it to be a balance between life satisfaction, and positive and negative affect. Though some might argue that this approach is too narrow, it is important to consider that in certain populations, life satisfaction is strongly correlated with several proposed components of wellbeing. These include, but are not limited to, happiness (Gamble and Gärling, 2012; Nemati and Maralani, 2016; Piccolo *et al.*, 2005) positive and negative affect (Diener *et al.*, 1985; Headey *et al.*, 1993), and anxiety and depression (Arrindell *et al.*, 1991; Ghazwin *et al.*, 2016; Headey *et al.*, 1993). Given this, conclusions based on these concepts can be generalized to wellbeing as a whole. From here, it becomes a question of determining how to address this issue empirically.

Previous research has demonstrated cross-national variation in domain-life satisfaction relationships, with neither health, family, social life, personal safety, financial situation, home life or job satisfaction being universal predictors of wellbeing. Taken with other existing literature, these findings support subjectivism and the notion that the predictors of wellbeing vary as a function of values. This conclusion is further reinforced by the findings of Fonberg (2017), where significant cross-national variation in the self-reported importance of life domains was noted.

However, there are other factors to consider. The largest limitation of the previous research was a lack of appropriate control variables. Past research has shown that personality traits are powerful predictors of wellbeing, with three particularly important constructs being self-esteem, optimism and self-efficacy. Self-esteem is "the degree to which one's attitude toward, opinions about, and evaluation of one's own body, history, mental processes, and behaviour are positive."; self-efficacy is a person's belief "in their ability to influence events that affect their lives." and optimism is "a tendency to expect the best possible outcome and to dwell on positive aspects of situations" (Matsumoto, 2009). Williams (2014) found that these positive personality traits predicted wellbeing above beyond above and beyond stressors, social support, and negative coping, all of which being powerful predictors of wellbeing in their own right (Mark and Smith, 2012).

Though this alone justifies their inclusion, there is further theoretical validation. Both top-down and bottom-up processes contribute to wellbeing. Values and domain satisfaction are bottom-up processes, wherein an individual assesses the conditions of their lives, aggregating across conditions to reach a final evaluation (Lucas, 2004). The above personality traits are positive attributions about one's self, future and abilities (Williams, 2014), and they exemplify a top-down approach. Given this, they could influence both domain and life satisfaction judgements,

explaining the results of the previous studies. The question remains as to whether values, a bottom-up process, influence wellbeing while controlling for this top-down factor.

As such, the goal here was to extend our previous research through an examination of cross-national variation in domain-life satisfaction relationships while controlling for the positive personality traits detailed above (self-efficacy, self-esteem and optimism). Mechanical Turk was chosen for data collection, and fewer countries could be analysed than in more extensive surveys. The decision was made to sample from the United States and India, as they are the most represented nationalities on Mechanical Turk (Ipeirotis, 2010). Unfortunately, recent evidence indicates that these nations share cultural similarities. For example, Inglehart and Welzel (2010) noted that they were nearly identical in Traditional/Secular-rational values and similar in terms of Survival/Self-expression values. While the United States is thought to be an exemplar of individualism (Hofstede, 1983), India appears to contain a mix of collectivistic and individualistic values (Sinha *et al.*, 2001). This is of particular relevance here, as modernization is associated with individualism (Hamamura, 2012; Rothwell and Hawdon, 2008). If the use of Mechanical Turk is taken to be a sign of modernization, then an Indian sample drawn from it is likely to be relatively individualistic. This finding has important implications for not only domain-life satisfaction relationships, but positive personality traits as well, for self-esteem predicted life satisfaction more robustly in individualistic nations.

Despite similarities, it should be clear that the cultural values of these nations are not identical. This is unsurprising, as evidence indicates that some traditional values persist in spite of modernization (Inglehart and Baker, 2000). As such, it is likely that domain-life satisfaction relationships will vary, even if the differences are not as large as those reported elsewhere. Two hypotheses were developed on the basis of the reviewed literature and the results of our previous studies.

Hypothesis One: After controlling for positive personality traits, domain-life satisfaction relationships will vary cross-nationally. These differences will be smaller than those reported in our previous studies.

Hypothesis Two: Direct cross-national comparison of domain-life satisfaction will reveal significant differences.

2. Method
2.1. Recruitment
Participants were recruited through Mechanical Turk, an online crowd-sourcing website. Turk appears to provide reliable and valid data (for a detailed review, see Paolacci *et al.* (2010), and Buhrmester *et al.* (2011). Participants were linked to the Qualtrics website to complete the questionnaire. Based on pre-existing knowledge of Turk's user base (section 1), samples were collected from the United States and India.

2.2. Materials
Domain (health, family, social, personal safety, financial situation, home life and employment) and life satisfaction were assessed with single-item questions identical in wording to those of the Eurobarometer, though a larger Likert-type scale was used to allow for greater specificity (Table 1). Self-efficacy, self-esteem and optimism were measured with the same single-item scales used in Fonberg and Smith (2019). Finally, socio-demographic variables (age, gender, relationship status, education, occupation) were measured using single-item measures, as past research has shown they influence both value priorities (Meuleman *et al.*, 2012) and wellbeing (Oishi *et al.*, 2007).

Table-1. Domain Satisfaction Questions Assessing Life, Health, Family, Social Life, Personal Safety, Financial Situation, Home and Job

For each of the following, please tell me if you are very satisfied (1), satisfied (2), somewhat satisfied (3) neutral (4), somewhat dissatisfied (5), dissatisfied (6) or very dissatisfied (7)?						
	Very satisfied	Satisfied	Somewhat satisfied	Neutral	Somewhat dissatisfied	Dissatisfied	Very dissatisfied
Your life in general	1	2	3	4	5	6	7
Your own health	1	2	3	4	5	6	7
Your family life	1	2	3	4	5	6	7
Your social life	1	2	3	4	5	6	7
Your personal safety	1	2	3	4	5	6	7
Your financial situation	1	2	3	4	5	6	7
Your home, housing	1	2	3	4	5	6	7
Your current job	1	2	3	4	5	6	7

Table-2. Single Item Positive Personality Questions

Variable	Question
Self-efficacy	I am confident in my ability to solve problems that I might face in life (For example, I can usually handle whatever comes my way, If I try hard enough I can overcome difficult problems, I can stick to my aims and accomplish my goals)
Self-esteem	Overall, I feel that I have positive self-esteem (For example, On the whole I am satisfied with myself, I am able to do things as well as most other people, I feel that I am a person of worth)
Optimism	In general, I feel optimistic about the future (For example, I usually expect the best, I expect more good things to happen to me than bad, It's easy for me to relax)

2.3. Planned Analysis

One hierarchical multiple regression analysis was run per country to test the first hypothesis and analyse cross-national variation in the predictors of wellbeing. Socio-demographic variables were entered in the first block, positive personality traits in the second, and domain satisfaction in the third. Life satisfaction was the outcome variable. A priori Pearson correlations were run between all satisfaction items and personality traits for both samples. Z-scores computed from the unstandardized beta coefficients, and standard error terms of these analyses were used to make direct comparisons and test the second hypothesis. This method was outlined by Paternoster *et al.* (1998) and used in our previous research. A hierarchical multiple regression was run using interaction terms developed from domain satisfaction scores and nationality to better understand these findings and relate them to the first hypothesis. Tabachnick and Fidell (2013), outlined the method used to create these variables. Multiple imputation was used to replace missing values, as recent evidence indicates it is the most recommended approach (Baraldi and Enders, 2010). Socio-demographic variables (age, gender, employment, education, religion) and positive personality traits (self-efficacy, self-esteem and optimism) were introduced in the first step. In the second and third blocks, the domain satisfaction interaction terms were entered: health, family, social, personal safety, financial situation, home life and employment. Life satisfaction was the outcome variable. A power analysis for a multiple regression with 15 predictors was conducted in G*Power to determine a sufficient sample size using an alpha of 0.05, a power of 0.80, and a medium effect size ($f2 = 0.15$; Faul *et al.* (2013). Based on the aforementioned assumptions, the desired sample size was 139.

3. Results

The Pearson correlations for the American and Indian samples are reported in Tables 3 and 4. Fisher transformations revealed that optimism ($z = 3.07$, $p = .001$) and self-esteem ($z = 2.44$, $p = .007$) were more strongly related to life satisfaction amongst Americans when compared to Indians. The Pearson correlations for the American and Indian samples are reported in Tables 3 and 4. Fisher transformations revealed that optimism ($z = 3.07$, $p = .001$) and self-esteem ($z = 2.44$, $p = .007$) were more strongly related to life satisfaction amongst Americans when compared to Indians.

Table-3. Summary of Life Satisfaction Pearson Correlations in American Participants

	1	2	3	4	5	6	7	8	9	10	11
1.LS	1	-	-	-	-	-	-	-	-	-	-
2.Health	.537**	1	-	-	-	-	-	-	-	-	-
3.Family	.718**	.537**	1	-	-	-	-	-	-	-	-
4.Social	.696**	.507**	.705**	1	-	-	-	-	-	-	-
5.Safety	.395**	.457**	.496**	.443**	1	-	-	-	-	-	-
6.Financial	.624**	.322**	.451**	.494**	.201*	1	-	-	-	-	-
7.Home	.511**	.356**	.454**	.358**	.444**	.536**	1	-	-	-	-
8.Job	.447**	.480**	.436**	.439**	.409**	.554**	.500**	1	-	-	-
9.Opt	.559**	.373**	.415**	.479**	.212**	.371**	.234**	.349**	1	-	-
10.S-Ef	.506**	.320**	.361**	.491**	.285**	.312**	.234**	.336**	.724**	1	-
11.S-Est	.608**	.444**	.430**	.565**	.233**	.435**	.232**	.369**	.797**	.789**	1

LS=Life Satisfaction, Opt=Optmism, S-Ef=Self-efficacy, S-Est=Self-esteem. *p < .05. **p < .01. ***p < .001

Table-4. Summary of Life Satisfaction Pearson Correlations in Indian Participants

	1	2	3	4	5	6	7	8	9	10	11
1.LS	1	-	-	-	-	-	-	-	-	-	-
2.Health	.683**	1	-	-	-	-	-	-	-	-	-
3.Family	.685**	.657**	1	-	-	-	-	-	-	-	-
4.Social	.657**	.688**	.651**	1	-	-	-	-	-	-	-
5.Safety	.621**	.644**	.619**	.703**	1	-	-	-	-	-	-
6.Financial	.646**	.605**	.614**	.675**	.587**	1	-	-	-	-	-
7.Home	.650**	.613**	.608**	.708**	.640**	.751**	1	-	-	-	-
8.Job	.700**	.577**	.664**	.696**	.643**	.668**	.709**	1	-	-	-
9.Opt	.263**	.207*	.215*	.163	.178*	.150	.260**	.179*	1	-	-
10.S-Ef	.371**	.296**	.304**	.308**	.273**	.228**	.325**	.279**	.389**	1	-
11.S-Est	.395**	.329**	.301**	.314**	.219**	.141	.311**	.297**	.419**	.483**	1

LS=Life Satisfaction, Opt= Optimism, S-Ef=Self-efficacy, S-Est=Self-esteem. *p < .05. **p < .01. ***p < .001

The results of the first set of regression analyses are reported in Tables 5 and 6. Z-scores computed from the unstandardized regression coefficients of these analyses revealed that home accounted for a greater proportion of the variance in life satisfaction in India (Beta = 0.18, SE = 0.062) when compared to the United States. (Beta = -0.01, SE = 0.246); z = 1.70, p = .045. Similarly, job satisfaction accounted for a greater proportion of the variance in life satisfaction in India (Beta = 0.246, SE = 0.083) when compared to the United States (Beta = -0.117, SE = 0.062); z = 3.50, p < .001.This comparison is shown in Figure 1. The addition of domain satisfaction resulted in significant increases in the predictive power of both models, as changes in R^2 ranged from 0.303 to 0.309 and 0.452 to 0.560 in the American and Indian participants, respectively. Both findings were significant at the p < .001 level. Differences in these changes are likely to be a function of positive personality traits, which were added in the second model. They accounted for a greater proportion of the variance in life satisfaction amongst Americans (R^2 = 0.407-0.415, ΔR^2 = 0.375-0.382) when compared to Indians (R^2 = 0.173-0.182, ΔR^2 = 0.170-0.179).

Figure-1. Histogram Depicting Standardized Beta Weights of Job Satisfaction for India and US Samples (DV=Life Satisfaction)
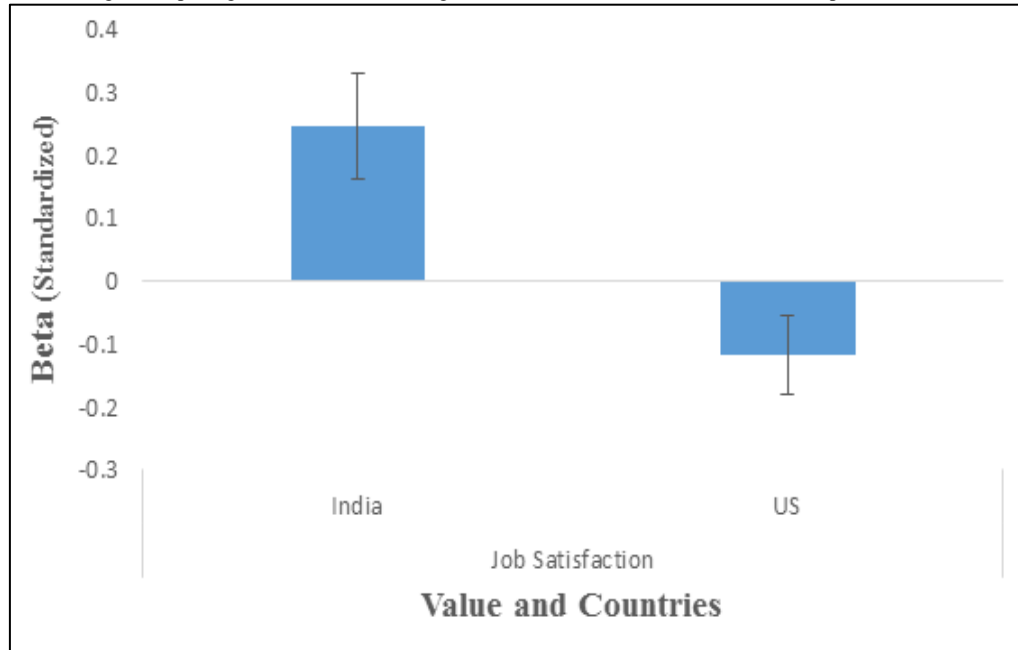

Table-5. Summary of Regression Analysis for Variables (Positive Personality Traits and Domain Satisfaction Scores) Predicting Life Satisfaction in American Participants (Larger regression coefficients indicate more powerful relationships between the variable and life satisfaction.)

Column1	Model 1		Model 2		Model 3	
Variable	B	SE	B	SE	B	SE
Age	0.012	0.015	0.004	0.013	0.001	0.009
Gender	-0.008	0.283	-0.089	0.261	-0.128	0.179
Relationship	0.231	0.137	0.21	0.127	0.086	0.085
Education	0.068	0.155	0.025	0.142	0.017	0.097
Occupation	-0.016	0.013	-0.004	0.012	-0.014	0.008
Optimism			0.059	0.082	0.018	0.054
Self-Efficacy			0.165	0.081	0.036*	0.054
Self-Esteem			0.243**	0.083	0.109	0.058
Health					0.226**	0.08
Family					0.147	0.08
Social					0.007	0.093
Personal-Safety					0.092	0.092
Financial					0.155*	0.076
Home					-0.01	0.093
Job					0.246**	0.083
R^2	0.032		0.407-0.415		0.717-0.725	
ΔR^2	0.064		0.375-0.382***		0.303-0.309***	
F	1.981		13.792-14.229***		2217-27.125***	

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

SPSS does not provide pooled statistics for all regression variables when multiple imputation is used. In these instances, ranges are listed.

Table-6. Summary of Regression Analysis for Variables (Positive Personality Traits and Domain Satisfaction Scores) Predicting Life Satisfaction in Indian Participants (Larger regression coefficients indicate more powerful relationships between the variable and life satisfaction).

Column1	Model 1		Model 2		Model 3	
Variable	B	SE	B	SE	B	SE
Age	-0.022	0.015	**-0.038	0.012	**-0.027	0.009
Gender	-0.061	0.296	0.24	0.237	0.35*	0.165
Relationship	0.397**	0.136	0.28**	0.108	0.145	0.078
Education	0.044	0.125	0.115	0.098	0.023	0.07
Occupation	-0.015	0.012	-0.007	0.01	-0.005	0.007
Optimism			0.126	0.078	0.051	0.055
Self-Efficacy			0.036	0.088	0.038	0.062
Self-Esteem			0.286***	0.079	0.117	0.06
Health					0.111	0.064
Family					0.286**	0.068
Social					0.167*	0.07
Personal-Safety					-0.003	0.077
Financial					0.207**	0.065
Home					0.18**	0.062
Job					-0.116	0.062
R^2	.015		0.173-0.182		0.641-0.643	
ΔR^2	.049		0.170-0.179***		0.452-0.560***	
F	1.427		4.727-4.979***		18.051-18.152***	

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

SPSS does not provide pooled statistics for all regression variables when multiple imputation is used. In these instances, ranges are listed. These differences were further validated in the results from the interaction regression, which are reported in Table 7. This analysis revealed a significant interaction between job satisfaction and country for life satisfaction (Beta = -0.003, SE = 0.001), which was significant at the p < .01 level. Though the z-scores discussed in the previous paragraph revealed a significant difference in the amount of variance that job satisfaction accounted for, there was no interaction between it and country. This was an unsurprising finding as the z-score approached non-significance (p = .045).

Table-7. Summary of Interaction Regression Analysis for Variables (Positive Personality Traits and Domain Satisfaction Scores) Predicting Life Satisfaction (Larger regression coefficients indicate more powerful relationships between the variable and life satisfaction)

Variable	B	Std. Error	Beta
Optimism	0.049	0.037	.057
Self-Efficacy	0.038	0.04	.050
Self Esteem	0.1	0.04	.138
Health Interaction	-0.001	0.001	.038
Family Interaction	0.002	0.001	-.108
Social Interaction	0.001	0.001	.245
Personal Safety Interaction	-0.001	0.001	.180
Financial Interaction	0.001	0.001	-.156
Home Interaction	0.001	0.001	.139
Job Interaction	-0.003**	0.001	.195

*p < .05. **p < .01. ***p < .01

4. Discussion

Both hypotheses were supported in that there was cross-national variation in domain-life satisfaction relationships, even after controlling for positive personality traits (hypothesis one). In the Indian sample, health, financial and job satisfaction predicted life satisfaction. Amongst Americans, family, social life, financial situation and home satisfaction predicted it. A direct comparison revealed significant differences in the predictive power of home and job satisfaction, supporting the second hypothesis. As expected, the differences noted in this study were smaller than those revealed through our analysis of the Eurobarometer (Fonberg, 2017). The United States and India share some cultural values, a limitation addressed in the ensuing section, but despite this, variation in domain-life satisfaction relationships persisted while controlling for positive personality traits (self-esteem, self-efficacy and optimism). As these variables are robust predictors of wellbeing in certain populations, it was thought that they could explain the results of our previous studies (Fonberg, 2017; Fonberg and Smith, 2019). Though these concerns appear to be unfounded, this point raises an important theoretical consideration. Evidence indicates that both top-down and bottom-up processes contribute to wellbeing. Though values and domain-satisfaction embody a bottom-up approach, self-esteem, optimism, and self-efficacy reflect positive attributions about one's self, one's future, and one's abilities (Williams, 2014; Williams *et al.*, 2017a; Williams *et al.*, 2017b; Williams *et al.*, 2017c). These traits are characteristic of a top-down approach, one which could potentially influence both domain and life satisfaction

judgements. As such, there is an additional theoretical conclusion, as in this study, a bottom-up process affected wellbeing while controlling for a top-down factor.

Also worth noting is that the effects of individualism and collectivism were reflected in other predictors of wellbeing. Previous literature suggests that self-esteem is a more powerful predictor of life satisfaction in individualistic nations (ref). As discussed in the introduction to this article, India contains a mixture of both values, while the nations is highly individualistic. The correlations between all positive personality traits and life satisfaction were more powerful amongst American participants. However, self-esteem predicted life satisfaction across both samples; it was the only personality trait that accounted for a significant portion of the variance in both groups. Furthermore, relationship status was associated with life satisfaction amongst Indians, but not Americans. This finding might reflect the importance placed on relationships in collectivistic societies. Though somewhat tangential, these findings further demonstrate the role values play in determining the predictors of wellbeing.

While objectivists argue that certain goods with inherent value predict wellbeing universally, subjectivism stresses the importance of values. While the results of this study and our previous research refute the core premise of objectivism, the concern with both past research and our previous empirical studies was that these differences were a function of positive personality traits. However, even after they were controlled, cross-national variation in domain-life satisfaction relationships persisted, further supporting subjectivism. This conclusion is reinforced by the previous empirical research and literature reviews, where cross-national variation in both values and domain-life satisfaction relationships were noted.

4.1. Limitations

The largest limitation of this study was that only two countries could be studied. Financial constraints meant that a more comprehensive study was not feasible; an issue that was further exacerbated by cultural similarities between the United States and India. This is the most likely explanation for the magnitude of differences noted here, which were less substantial those revealed through analysis of the Eurobarometer. Detecting variation in domain-life satisfaction relationships requires a broad net, and this was taken into account when developing the hypotheses for this study. It seems probable that these differences would have been greater with data from additional countries, though analysis of larger samples may have been equally beneficial in this regard. While a larger, more diverse sample would have been ideal, this does little to limit the conclusions that can be drawn when the results of our previous research are taken into consideration.

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