

## Original Research Article

# Self-efficacy in the urban Indian culture- exploring values, self-construal and personality

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### ABSTRACT

**Background:** Personality and cultural influences on self-efficacy have not been examined among urban Indian adults, though they are relevant. Of specific importance is the relationship between self-efficacy and an individual's perceptions of relatedness and autonomy, and their values.

**Methods:** The aim of the present study was to examine the association between self-efficacy with self-construal, personality and individual values in an urban community sample from Bangalore city, India. A snowballing technique was used to recruit community participants (N=304, mean age=24.80±4.35 years). The tools used were the self-efficacy scale, the self-construal scale, the temperament character inventory-revised, and the portrait values questionnaire. Data was fitted into a linear regression model.

**Results:** About seventy percent of self-efficacy was associated with was positively associated with personality dimensions of persistence and self-directedness, and negatively associated with novelty seeking and harm avoidance. Moreover, there was a significant positive association with the family value of benevolence and a negative association with security.

**Conclusions:** It is important to study self-efficacy which has implications for domains such as quality of life, sense of contribution to society, well-being and positive beliefs held by individuals and the community at large regarding their self-worth and control. The study highlights the role of personality and values; all suggestive of a shift from the collectivist.

**Keywords:** Self-efficacy, Personality, Values, Self-construal

### INTRODUCTION

Almost 30% of the adult Indian population live in urban settings. The population of metropolitan Bangalore is over 85 lakhs as per the current Indian census data. Correspondingly, this has opened opportunities for employment, education, and vast numbers of migration, with greater choice provided than earlier to peer-group and partner relationships. Within such a scenario, self-efficacy, that is, beliefs in one's abilities to produce desirable outcomes is a useful parameter to guide better adaptation to the urban Indian setting.<sup>1,2</sup>

Self-efficacy has been typically described as a cognitive theory that proposes how individuals have mastery and control over their behaviors and aspects of life.<sup>1</sup> It differs in magnitude toward application to tasks, generalizability and strength. While this offers a useful method to understand self-efficacy, it needs to be conceptualized within the context of Indian culture. It has been suggested by theoreticians that a stereotyped Indian is viewed largely as group oriented and interpersonal, embedded within a matrix of relationships from which a sense of efficacy is derived.<sup>3-5</sup> However, this viewpoint of an Indian as predominantly interpersonal has been seen as cultural

pigeonholing and has been contested, with adults harboring co-existing individualistic and relational aspects of the self that are domain specific.<sup>6-9</sup> Furthermore, studies from Asian settings have suggested that the concept of “self” needs to be looked at in terms of one’s personality and the shared meanings one ascribes to one’s culture.<sup>10</sup> However, there is limited research that has specifically examined how different aspects of an individual’s self-construal interact among each other and with personality dimensions to maintain a sense of self-worth within an urban Indian environment.

Culture, including values has been examined from the perspective of social norms, practices, relationships and family. Values are guiding principles that underlie choices and behaviors, and which transcend concrete situations.<sup>11,12</sup> They influence individuals’ beliefs and direct their decisions, choices and behaviors, thereby having an impact on self-efficacy. Studies on the social context of collective cultures such as Asia have revealed that mental health of individuals is largely impacted by context sensitive social cues from which they derive satisfaction from, irrespective of self-goals.<sup>13</sup> Furthermore, research suggests that when there is congruence between personal values and those of the prevailing environment, it leads to a sense of wellbeing and greater self-efficacy.<sup>14</sup> Across different ethnic groups, power values have been found related to distress, while emphasis on affiliation values contribute to a positive effect.<sup>15</sup> In a similar way, while the values of achievement, self-direction and stimulation are positively correlated to mental health and well-being, while those of tradition, conformity and security are correlated negatively.<sup>16</sup> These studies indicate that value priorities differ across cultures, that they have an impact beliefs and perceptions, and that they are important determinants of self-worth.

In the light of the above literature, we decided to empirically study variables that were associated with self-efficacy among urban adults in India. Specifically, our aim was to examine the determinants of self-efficacy, for which we studied the associations between independent and interdependent self-construal and different dimensions of personality in terms of temperament and character with self-efficacy. Also, in accordance with our model that urban India is represented by a vast diversity of ideological beliefs, many of which influence personality functioning, our interest was to build a model that would examine the relationship between self-construal, values and personality traits in contributing to self-efficacy among urban Indian adults.

## **METHODS**

The study was cross-sectional in design and a snow-balling technique was used to identify the sample. The study was conducted in the therapy rooms of National Institute of Mental Health and Neuro Sciences (NIMHANS), Bengaluru. The entire phase of data collection lasted for 14 months (August 2007-December 2008). Participants

comprised of 304 adults from the community, in the age range of 20-40 years, in and around Bangalore city, with a minimum of 10 years of formal schooling with fluency in spoken English. The initial participant pool comprised of 373 individuals who consented to participate in the study. Among these individuals, participants who obtained a score of eight or more on the general health questionnaire (GHQ)-28 were excluded from the study to reduce the impact of current mood state as a confounding factor. Similarly, participants who obtained a score of 2 and more on the temperament character inventory (TCI) validity scale, which provided information on an individual’s tendency to mark items inconsistently through guess work, were excluded.

We also recruited college students (N=40; psychology and journalism graduate majors) to establish test-retest reliability over a 4-week time period for those tools that were being used for the first time in India (self-construal scale, temperament character inventory-revised, and portrait values questionnaire). The study was initiated after obtaining requisite institutional ethical clearances and getting written informed consent from participants. All assessments were carried out within the Institute and took approximately one hour to complete in a single session.

We used four tools to examine the relationship of self-efficacy with self-construal, personality and values.

### ***Self-efficacy scale***

This was administered on each participant to obtain a measure of total self-efficacy, which the authors define as a belief in one’s abilities. It comprises of 23 items that are rated on a five-point Likert scale. Reliability and validity of the scale has been established in India.<sup>17,18</sup>

### ***Self-construal scale***

The SCS was used to obtain the relative standing of participants on independent and interdependent self-construal, which is defined as a constellation of thoughts, feelings and actions concerning the self as related to others and the self as distinct from others. It comprises of 30 items that are rated on a 7-point Likert-type format ranging from 1 (strongly disagree) to 7 (strongly agree). The internal coefficients were 0.62 and 0.64 for independent and interdependent self-construal respectively while the test-retest reliability was 0.62 for independent self-construal and 0.60 for interdependent self-construal.<sup>19</sup>

### ***Portrait values questionnaire***

This tool was incorporated into the study to measure the values held by the individual as the “guiding principles in life”. Each item described a person’s goals, aspirations, or wishes that pointed implicitly to the importance of a value. The tool is a 40-item scale measuring 10 value dimensions of conformity, tradition, benevolence, universalism, self-direction, stimulation, hedonism, achievement, power and

security. The items were rated on a 6-point-Likert-style format ranging from 1 (not at all like me) to 6 (very much like me). It has been used extensively in cross-cultural research across countries. Internal coefficients ranged from 0.55 to 0.79 and test-retest reliability ranged from 0.58 to 0.84.<sup>20</sup>

**Temperament character inventory-R**

We used the temperament character inventory-revised as a measure of personality dimensions that was based on Cloninger’s psychobiological model of personality. This model assesses 4 dimensions of temperament, which is defined as the autonomic emotional responses to experience that are moderately heritable and stable throughout life. These include novelty seeking, harm avoidance, reward dependence, and persistence. It also assesses 3 dimensions of character, which refers to self-concepts and individual differences in goals and values, which influence voluntary choices, intentions, and the meaning and salience of what is experienced in life. These dimensions include self-directedness, cooperativeness, and

self-transcendence. Temperament character inventory is a 140-item questionnaire, with 135 items being part of the TCI, and 5 items being validity questions. Scoring is done on a five-point Likert scale. Internal consistency coefficients ranged from 0.68 to 0.87 and test-retest reliabilities ranged from 0.57 to 0.88.<sup>21</sup>

**RESULTS**

Statistical analysis was carried out using STATA software version 10 (StataCorp. 2009. Stata Statistical Software: Release 10. College Station, TX: StataCorp LP). The demographic details of the sample revealed that participants (mean age=24.80±4.35 years; 171 males, 133 females) were predominantly Hindu in their religious affiliation (70%), were single (85%), were employed-either in temporary or full-time jobs (79%), and held at least a high school or college education (75%) (Table 1). This highlights that the young urban Indian adults we have studied were educated, employed and unmarried. We found that overall, participants were high on self-efficacy (mean=80.77±10.79).

**Table 1: Demographic details of the participants.**

Variable	Total (N=304)		Male (N=171)		Female (N=133)		χ <sup>2</sup> /t value
<b>Age</b>							
Mean	24.80		25.57		23.80		3.60*
SD	4.35		4.86		3.85		
	<b>f</b>	<b>%</b>	<b>f</b>	<b>%</b>	<b>f</b>	<b>%</b>	
<b>Education</b>							
High school to graduation	230	76	144	84	86	65	15.52*
Post-graduation	74	24	27	16	47	35	
<b>Occupation</b>							
Student	56	18	12	07	44	33	-
Employed	240	79	158	92	82	62	
Homemaker	08	03	01	01	07	05	
<b>Marital status</b>							
Single	259	85	140	82	119	89	3.42
Married	45	15	31	18	14	11	
<b>Place of residence</b>							
Home	126	41	73	43	53	40	0.25
Other (hostel/paying guest)	178	59	98	57	80	60	
<b>Religion</b>							
Hindu	212	70	123	72	89	67	0.89
Other	92	30	48	28	44	33	
<b>Family type</b>							
Nuclear	247	81	136	79	111	83	0.89
Joint/extended	57	19	35	21	22	17	

\*P<0.001

We used Pearson’s product moment correlations to study associations among the variables (Table 2). The temperament of harm avoidance had a negative association with self-efficacy (r=-0.68, p<0.01), while reward dependence, persistence, self-directedness, cooperativeness and self-transcendence had positive associations (r=0.18, p<0.05; r=0.67, p<0.01; r=0.64, 0.01;

r=0.37, p<0.01; r=0.18, p<0.05 respectively). In terms of self-construals and values with respect to self-efficacy, it was found that independent self-construal, benevolence, universalism, self-direction, stimulation, achievement, power and security were positively associated with self-efficacy (r=0.22, p≤0.001; r=0.30, p≤0.001; r=0.26, p≤0.001; r=0.33, p≤0.001; r=0.33, p≤0.001; r=0.28,

p≤0.01; r=0.14, p≤0.05; r=0.15, p≤0.01 respectively). These value associations further suggest that self-transcendence, conservation and self-enhancement were all relevant in the context of self-efficacy. To examine these associations in more detail, the data was fitted into a linear regression model with self-construal, personality dimensions and values as associate variables of self-efficacy (Table 3). A total of 20 variables that were used for the correlational analyses were entered into the regression model; adjusted R<sup>2</sup>=0.70, F=38.06, RMSE=5.92) (Table 3).

Data for males and females was analyzed together for this report since our attempt here was primarily to understand, as a first step, the factors that as associated with self-efficacy in India. While we understand that these variables may play out differently across men and women, our aim here was to use these findings for further research with larger sampling frames that would allow for testing for gender differences.

The results indicated that self-efficacy was positively associated with the personality dimensions of persistence and self-directedness, and negatively associated with novelty seeking and harm avoidance. This suggests that autonomy plays a significant role in terms of self-efficacy. Simultaneously, having an anxious temperament and having a need for novelty undermine self-efficacy. The results also highlighted an association between the family value of benevolence and the conservation value of

reduced security with self-efficacy. Overall, relational and autonomy variables were associated with self-efficacy.

**Table 2: Associations of self-efficacy with self-construal, values and personality.**

Variable	Self-efficacy
<b>Independent self-construal</b>	0.22†
<b>Interdependent self-construal</b>	0.13
<b>Novelty seeking</b>	-0.06
<b>Conformity</b>	0.12
<b>Tradition</b>	0.08
<b>Benevolence</b>	0.30†
<b>Universalism</b>	0.26†
<b>Self-direction</b>	0.33†
<b>Stimulation</b>	0.33†
<b>Hedonism</b>	0.06
<b>Achievement</b>	0.28**
<b>Power</b>	0.14*
<b>Security</b>	0.15**
<b>Novelty seeking</b>	-0.06
<b>Harm avoidance</b>	-0.68†
<b>Reward dependence</b>	0.18†
<b>Persistence</b>	0.67†
<b>Self-directedness</b>	0.64†
<b>Co-cooperativeness</b>	0.37†
<b>Self-transcendence</b>	0.18†

P≤0.05, \*\*P≤0.01, †P≤0.001

**Table 3: Regression model indicating beta coefficients and standard errors of self-efficacy with self -construal, values and personality.**

Variables	Beta	t	95% confidence interval
<b>Independent self-construal</b>	0.14 (0.64)	0.21	-0.35, 1.39
<b>Interdependent self-construal</b>	1.18 (0.77)	1.52	-1.12, 1.40
<b>Conformity</b>	-0.19 (0.14)	1.36	-0.46, 0.08
<b>Tradition</b>	0.04 (0.12)	0.31	-0.20, 0.28
<b>Benevolence</b>	0.33* (0.16)	2.06	0.01, 0.64
<b>Universalism</b>	0.07 (0.11)	0.63	-0.15, 0.30
<b>Self-direction</b>	0.04 (0.16)	0.26	-0.28, 0.36
<b>Stimulation</b>	0.06 (0.16)	0.38	-0.25, 0.37
<b>Hedonism</b>	-0.07 (0.04)	0.52	-0.35, 0.20
<b>Achievement</b>	0.10 (0.13)	0.81	-0.14, 0.35
<b>Power</b>	0.01 (0.14)	0.10	-0.25, 0.28
<b>Security</b>	-0.25* (0.12)	2.09	-0.48, -0.01
<b>Novelty seeking</b>	-0.14** (0.05)	2.55	-0.24, -0.03
<b>Harm avoidance</b>	-0.25† (0.05)	5.52	-0.34, -0.16
<b>Reward dependence</b>	0.07 (0.05)	1.45	-0.02, 0.16
<b>Persistence</b>	0.38† (0.04)	8.38	0.29, 0.47
<b>Self-directedness</b>	0.35† (0.05)	7.31	0.25, 0.44
<b>Cooperativeness</b>	-0.03 (0.06)	0.46	-0.14, -0.08
<b>Self-transcendence</b>	0.07 (0.05)	1.47	-0.02, 0.17

P≤0.05, \*\*P≤0.01, †P≤0.001; values in brackets indicate standard errors; {F (19, 284) = 38.06; R<sup>2</sup> = 0.72; adjusted R<sup>2</sup> = 0.70; RMSE = 5.92}

## DISCUSSION

The present study has revealed several meaningful relationships between self-efficacy, self-construal, values and personality dimensions in Indian adults. The main finding of our study is that approximately seventy percent of the variance in self-efficacy could be explained by personality dimensions of novelty seeking, harm avoidance, persistence and self-directedness; and by the family values of benevolence and conservative values of security (Table 3). This holds two core implications. Firstly, it underscores the importance of temperament and character on self-efficacy. Secondly, perceptions of the cultural context in terms of values play an important role in guiding self-beliefs that are congruent with self-efficacy.

Such a finding indicates that individuals who are behaviorally inhibited and avoidant due to their fear of facing adverse stimuli or punishment tend to be lower on self-efficacy. Such persons are disinclined to seek novel environments due to a fear of loss of control, a factor that goes against self-efficacy. In this context, studies suggest that low self-efficacy is associated with depression, excessive anxiety and avoidant behaviors, evidenced by our findings.<sup>2,22</sup> While harm avoidance to some extent, does provide young adults with an ability to anticipate potential threats in the environment and plan for the future with caution, therefore providing safety, our study suggests that for navigating within the urban metropolitan setting, this temperament goes against efficacious behaviors. At the same time, high novelty seeking, that is, risk-proneness and disinhibitory behavior is associated with low efficacy, reflecting that both, excessive inhibition and excitability contribute to beliefs of low self-worth.

On the other hand, as anticipated, the study reveals the importance of the character of being self-directed or acting in an autonomous manner, being self-sufficient and goal oriented, while possessing the temperament of being persistent and actively working toward a task in the face of challenges as being associated with greater self-efficacy. This indicates that the more an individual is purposeful and self-reliant, and able to adapt to individually chosen goals, the greater is a belief in one's own ability. Being self-directed creates a sense of competitive advantage and control, through which young adults cope with daily challenges, solve problems and create opportunities. Our study supports research from other countries that have demonstrated that low self-directed persons have significant personality pathology, and reveals that being high on this personality dimension allows for adaptive coping behaviors.<sup>23</sup> According to Cloninger, self-directed people are calmer, accept their limitations and let go of their fears and conflicts.<sup>24</sup> This, in turn, leads to greater self-efficacy. In India, there is considerable expansion of roles experienced by young urban adults, as their social and professional networks increase, and they move away from their family of origin, often to different cities to seek higher education and career opportunities. Our findings

also indicate that the participants of our study are predominantly graduate educated, single, in their mid-twenties and employed (Table 1). In such a situation, goal directed activities with an internally driven sense of control work toward self-efficacy. These findings suggest the importance of health workers and counsellors to screen youths whose efficacy has become less, possibly as a result of their harm avoidant temperament and provide them with appropriate interventions.

The second major finding of our study is that high benevolence and low security values are associated with self-efficacy (Tables 2 and 3). This suggests that while paying priority to one's own goals are relevant, concern for the welfare of one's family and their safeguard are implicated in self-efficacy. This highlights the importance that the Indian culture places on relational values. Protection of the family is seen as a primary goal that an individual strives towards, and derives satisfaction from. Thus, while autonomy is valued, it is within a relational context. Furthermore, as social networks of young adults increase, benevolent values experienced in terms of friendships, commitment, pro-social behaviors and responsibility are important beliefs for them. A novel finding that emerged from our study is that perception of unavailability of safe surroundings is detrimental to one's self worth. This implies that the social transitions seen in the urban Indian landscape in recent times creates disruptions in internal representations of health, political order, as well as a sense of isolation and separation from families that create a sense low efficacy. This supports prior work and suggests that adults whose values are incongruent with that of the prevailing environment, for instance, individuals who have shifted to a new city for opportunities and life goals, often experience social sanctions when their goals are not met, leading to internal conflict and distress.<sup>14</sup>

The findings from the present study have revealed that a value congruence between the urban social setting influences self-efficacy. While our study has not found a significant relationship between self-efficacy and self-construal, the personality and values represented in our self-efficacy model suggest that while independent, goal directed, work oriented activities are important, they are so within the context of family and relational values. Surprisingly, while independent self-construal emerged as significant, there were no associations between self-construals and self-efficacy (Table 2). This might be interpreted in the light of collinearity between the tools that measure self-efficacy and self-construals, and indicate a more nuanced tool to study the same. The present study has highlighted that self-efficacy needs to be examined within an Asian setting using culturally adapted tools to arrive at interrelationships between self-efficacy with self-construal, personality dimensions and values. However, we have used a relatively small sample size that limits generalization to urban English-speaking adults of Bangalore city. It would also have been useful to have incorporated a qualitative measure that would have

examined some of the cultural values that cannot be fully represented in a questionnaire format. That said, some of the strengths of the study need to be reiterated. We have provided information on cultural and personality determinants of self-efficacy among urban Indian adults from the community, and results do indicate that autonomy and relatedness are both relevant in self-efficacy research in India. The study also informs clinicians and health workers of personality traits that need to be addressed in interventions and guides human resource professionals to focus on the values that could aid in work satisfaction and overall quality of life. Programs that identify the factors associated with self-efficacy would further minimize the burden of care in treatment settings.

## CONCLUSION

In conclusion, the present study has indicated that seventy percent of the variance in self-efficacy is related to the personality dimensions of harm avoidance, persistence and self-directedness, and by the individual values of benevolence and security among young Indian adults. It would be essential to incorporate such suggestions into adult health programs.

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