

# Ethical Living and Work Self Efficacy Beliefs of Academicians of Higher Education in ASIA: A Key Determinant of One's Belief in One's Ability to Achieve the Desired Result in a Precise State of Affairs

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## Abstract

Ethical academicians are perfectly virtuous. They always strive for greater virtue and follow strictly the moral stands of their profession. The ethical living and self-efficacy are important to them because of being fair and honest in their academics. Determinants of ethics include knowledge, values, attitude and intention. The domain-specific framework developed by Verbeke et al. (2004) has been considered as fundamental for identifying the dimensionality of work Self-efficacy and ethical challenges of academicians. A comprehensive literature review is undertaken regarding the concept of work Self-efficacy to assess workers' confidence and their ethical living in the workplace. This article examines theoretically and analytically the antecedent processes and information cues involved in the formation of work self-efficacy. Theoretical and numerical analysis of the key determinants of work self-efficacy increases the understanding of moral values, truthful fair and honest. Factors which decisively affect ethical living were identified from literature collected from the academicians who are working in the Five Regions of Asia - Central Asia (Tajikistan, Uzbekistan, Kazakhstan, Turkmenistan, Kyrgyzstan) East Asia (China, Mongolia, North Korea, South Korea, Japan, Hong Kong, Taiwan, Macau) South Asia (Sri Lanka, Bangladesh, India, Afghanistan, Pakistan, Bhutan, Nepal, the Maldives) through Google classroom. Methods of Statistical Analysis of self-efficacy data are descriptive statistics, Pearson Correlation Coefficient and Kolmogorov-Smirnov normality test and Kruskal-Wallis one-way analysis of variance and Principal Component Analysis. Positive, mastery experiences give academicians a sense of accomplishment when they have faced a challenge ethically. Positive Zeal during Academic interaction, vicarious experiences that occur when academician see others succeed and feel an increased sense of their own ability to succeed. Sincere & deeper self, mingling with students, Social persuasion increase a teacher's sense of confidence and ability to succeed. A proper plan of action has drawn special attention, and inferences pertaining to future research are discussed at the end of the critique.

**Keywords:** vicarious experience, multiple likert scales, enactive attainment, measure of sampling adequacy, eigenvalue, factor rotation

## 1. Introduction

Academicians are living ethically with their own beliefs and never compromise them by giving up to greed. Academician's self-belief or self-efficacy affects learning, academic performance and their level of commitment to their academic goals to the greatest extent. Self-efficacy theory (SET) also envisage that employees will discharge desirable when they accept that is true and in particular they have sufficient skills needed to be achieved. (Barling, J., & Beattie, R. (1983). Therefore, this study aims to identify the principal determinants of work self-efficacy belief of Academician, and, if there are any mean differences the work experience and work self-efficacy on their work routine and at the within-person level. Work Self-efficacy has been examined in an exclusive means as it's linked with Academic using different factors collected from previous literature. The research population is considered to be full-time Academician of Higher education who works in Asian countries. Likert five-point scales were employed in asking the interview schedule questions and evaluate the research components. Pearson's Correlation Coefficient (r) was calculated to assess the strength of the association between or among work self-efficacy components and to check linearity. Principal components analysis with varimax rotation was carried out to grouping similar variables

into dimensions. The Kruskal-Wallis H test was conducted to determine whether work self-efficacy components differ statistically (an independent variable) on mastery work experience (a dependent variable). The findings confirm five chief determinants of work self-efficacy on the work routine of Academician. They have proven to have a noticeable impact on carrying out their process. The recommendation gives an idea that Academic has to be more self-efficacious, so that they would better handle the student and have better relations and build good affinity with a student to improve the Academic performance.

## 2. Theoretical Framework

"Self-efficacy" was emerged with consistent research over 20 years by the psychologist, Albert Bandura. The significant self-efficacy feature or quality belonging to persons is its changeability and moldability. People's ability to make decisions or resolution reached after consideration can change as situations change (Bandura, 1986; 1997; Gist & Mitchell, 1992). Four most important sources of influence of self-efficacy are mastery experiences, seeing people similar to oneself manage task demands successfully, social persuasion that one has the capabilities to succeed in given activities, and inferences from somatic and emotional states indicative of personal strengths and vulnerabilities. (Bandura, 1994). Stajkovic and Luthans (1998) pointed out in their research article that enhanced self-efficacy foretells flourishing performance of tasks. They inspected thoroughly to predict the relationship between self-efficacy and work-related performance with the help of meta-analysis (114 studies,  $k = 157$ ,  $N = 21,616$ ). They found a significant weighted average correlation between self-efficacy and work-related performance,  $G (r_{\pm}) = 0.38$ . Also, Judge, T. A., Jackson, C. L., Shaw, J. C., Scott, B. A., & Rich, B. L. (2007) assessed many positive contributions of self-efficacy to work-related performance and the Big 5 distinguishing qualities that have strong moral principles and core values, personality, intelligence or general mental ability, and job or task experience.

J Cherian, J Jacob (2013) made an effort to evaluate the most important influence of self-efficacy on the performance of single human beings as distinct from a group in the workplace and the mechanism by which self-efficacy determines motivation and the capacity to have an effect on the character, behavior of someone. From the results of their study it is observed that self-efficacy theory can be applied for work-related performance in terms of motivating different employees related facets as well as organizational pursuits.

Of late, Vancouver and colleagues (2001, 2002) suggested based on the outcome that self-efficacy would have the opposite and undesirable effect what was intended at the within-person level. This assumption was derived from perceptual control theory (Powers, 1973). Perceptual control theory accepted that a negative feedback system determines human behaviour depends on the ability to become aware through sensing the discrepancy between current and desired states. Marilyn E. Gist and Terence R. Mitchell (1992) holds as an opinion that a way in which people are dissimilar in self-efficacy are connected with genuine or without an intention to deceive in skill level and legitimate in personality, motivation, and the task itself.

In reality, self-efficacy forms a bigger difference in how the human being has been considered collectively think, feel and act. Vancouver et al. (2001) cited evidence in support of an idea that high level-self-efficacy might become greater the optimism at a given point in time. By logical inference, resources insufficient for the purpose will not enhance subsequent performance. Low self-efficacy occurs as consequences of depression, anxiety, and helplessness. It develops low esteem, harbor pessimistic thoughts on personal development and accomplishment (Schwarzer & Schmitz, 2005).

Baum and Locke (2004) investigated more than two hundred entrepreneurs to a greater degree over six years. Goals, vision, and gains in self-efficacy were identified as the explanatory factors for new ventures to be more successful. The principal research outcome of the of Gillian B. Yeo and Andrew Neal (2006) is that dynamic effects of self-efficacy will change over time, but it can be foreseen or estimated depends on the level of analysis and specificity at which self-efficacy is conceptualized.

Robert M. Klassen and Joel R. L. Klassen (2018) critically assessed with the intention of instituting change if necessary in the self-efficacy beliefs. They attempt to generalize from the existing research that self-efficacy works as an intra-personal motivator that captures the core aspects of human agency. People's beliefs are contributors, but not sole determiners, of what happens to them. People obtain their self-efficacy beliefs from four sources such as past performance, vicarious experiences (observing others perform), verbal persuasion and physiological cues (The National Research Center on the Gifted and Talented - NRCGT 1990-2013).

Enactive mastery experiences work as indicators of capability. Vicarious experiences modify efficacy beliefs during transmission of competences and contrast with the achievements of others. Verbal persuasion and related types of

social influences point out one possess certain capabilities; and psychological and affective states from which individuals partly judge their capability, strength, and vulnerability to dysfunction. Contextual and social factors influence how people interpret and act on the sources of self-efficacy (Pajares 2005). Relations between work-related social, emotional, and cognitive self-efficacy and leadership and work-related wellbeing (i.e. Emotional exhaustion, emotional irritation, work engagement, and team climate) were considered as the most important in many studies. Efficacy beliefs can be upgraded by enhancing the physical status, reducing stress levels and negative emotional tendencies, and correcting misinterpretations of bodily states. Emotionally involving, psychologically taxing, and socially consequential is also looked attentively as equally significant.

Young HN, Schumacher JB, Moreno MA, et al. (2012) examined thoroughly three supportive experiences (observing role models, having mastery experiences, and receiving feedback) and 3 key FCC tasks (relationship building, exchanging information, and decision making) and with social cognitive theory. They perceived by chance that Self-efficacy with two specific FCC tasks, relationship building and decision making (each  $p < 0.05$ ), mediated the effects of supportive experiences on self-efficacy. Until now, very little evidence is available to show whether self-efficacy has an association with life satisfaction. Self-efficacy, without doubt, reduces the unpleasant, depressing and harmful actions caused by young people's life satisfaction. Burger et al. (2016) found from their study that baseline levels of stress, as well as within-person change in stress, make difference in adolescents' life satisfaction. However, work efficacy is more than just knowledge and skills, but also made as of right a sense of belonging to a particular profession demands the cultural and behavioural norms of membership (A. Bates, Bates, & Bates, 2007). Thus, this study endeavours to expand previous theory on the subject of ethical living, self-efficacy beliefs in the workplace by investigating communal, strong feeling deriving from one's relationship, and cognitive self-efficacy dimensions.

### **3. Methodology**

#### *3.1 Data Collection*

The descriptive research design was adopted for this study. This design made possible the researcher to collect data from 650 academicians of the Five Regions of Asia - Central Asia (Tajikistan, Uzbekistan, Kazakhstan, Turkmenistan, and Kyrgyzstan) East Asia (China, Mongolia, North Korea, South Korea, Japan, Hong Kong, Taiwan, Macau) South Asia (Sri Lanka, Bangladesh, India, Afghanistan, Pakistan, Bhutan, Nepal, the Maldives) through Google classroom. The present study is interested to investigate how Academicians of higher education approach goals, tasks, and challenges in the workplace. 14 independent variables identified as being influential which includes Social persuasion, Emotional intelligence, Situational Reaction, Flexibility, Enactive attainment, Vicarious experience, Dealing with self-emotion, Sincere and deeper self, Laughing at myself, Moral and social norms, Zeal during Academic interaction, Emotions during Academic interaction, Mingling with students. From this, a well-structured questionnaire was constructed according to plan to solicit Academician' view or opinion on a multiple Likert scales, where 1 = "Strongly agree" and 5 = "Strongly disagree. This scale is a self-report measure of self-efficacy. The data collected were analyzed with the help of the Statistical Package for Service Solution (SPSS version 19).

#### *3.2 Data Analysis*

Cronbach Alpha is a reliability test performed within SPSS in succession to ascertain the internal consistency i.e. Reliability of the measuring research instrument (Questionnaire). Standard Internal reliability = Cronbach's alphas 0.6. The Work Self-Efficacy (WSE) Scale is related to emotion, hopefulness, and confidence about the future, and a sense of accomplishment. Negative coefficients were computed for feelings of severe despondency, pressure or tension exerted from demanding circumstances, health complaints, workaholic, and anxiety.

The total score is worked out by finding the sum of the score of all variants. For the WSE, the total score ranges between 1 and 5. A higher score among independent variables suggests as desirable self-efficacy. Pearson Correlation Coefficient ascertains the degree of association between two or more numeric variables. The calculated correlation coefficient lies between -1 to +1 and value "0" indicates that there is no interdependence among determinants of self-efficacy.

At next level a factor analysis was made to locate potential factors among observed variables and to trim down the number of variables. Factor analysis is grouping variables with almost identical characteristics together. For that reason, with factor analysis, the researchers generated a small number of factors from a large number of variables. The present study used reduced factors for further analysis.

#### 4. Results

The total number of respondents who participated in this research work was 650 Academician from a different region of Asia. The collected data were more reliable because it was collected from quite a big sample size. The results are presented in several subsections which are reliability test, descriptive statistics, reliability analysis, Pearson correlation coefficient, factor analysis, normality test and non-parametric technique using the Kruskal-Wallis test.

##### 4.1 Reliability Test in SPSS using Cronbach Alpha

The reliability test is necessary to evaluate reliability and validity of the research instrument before starting the study. Cronbach Alpha is a reliability test which normally used when the questionnaire is constructed using Multiple Likert Scale statements and therefore to verify if the scale is reliable or not. A researcher evolved 14 statements from previous literature to determine how Academic people undergo and experience about work self-efficacy of their routine work. The work efficacy statements in the questionnaire were in the 5-point Likert Scale with responses ranging from “Strongly agree” to “Strongly disagree”. With the intention to verify if the questionnaire could “reliably” assess or evaluate the independent variables i.e. An emotional state of self-efficacy and ethical living, the Cronbach alpha test was conducted at the beginning of the present study. The acceptable or desirable reliability value is 0.6. Therefore, if reliability test value is more than 0.6, then questionnaire is considered as “reliable”. The Reliability Statistics is presented in Table 1. The numerical value of Cronbach alpha (Keith S. Taber 2018) in this case is 0.650 ( $\alpha = 0.657$ ) and reveals high reliability of the research instrument and high level of internal consistency with respect to the target sample of the present study.

Table 1. Results of Reliability Statistics

<i>Cronbach's Alpha</i>	<i>Cronbach's Alpha Based on Standardized Items</i>	<i>Number of Items</i>
0.650	0.657	14

Table 2 presents the results for ‘scale mean, if Item Deleted’ and ‘scale variance if item deleted’ for each work efficacy statement. It helps to determine the “Item” to be deleted. Table 4.2 shows below that, other than statement 7 (WSE7), if one deletes any other question then the reliability will result in lower Cronbach Alpha. Further, the Corrected item-total Correlation value for statement 7 is very low, i.e. 0.175, researcher was in a position to remove the statement from the set of statements in the questionnaire. Therefore, statement 7 (WSE7) has been removed from the overall questionnaire of the present study with the intention to enhance the overall reliability of the measuring instrument.

Table 2. Results of Reliability and Validity of the measuring instrument (Questionnaire)

	<i>Self-efficacy Statement</i>	<i>Scale Mean if Item Deleted</i>	<i>Scale Variance if Item Deleted</i>	<i>Corrected Item-Total Correlation</i>	<i>Squared Multiple Correlation</i>	<i>Cronbach' alpha if Item Deleted</i>
WSE1	I can easily put myself in the place of students and understand their needs	44.2200	28.375	0.319	0.191	0.629
WSE 2	People, in general, have understood to accept the manner I succeed in my emotions	44.3900	28.543	0.237	0.348	0.638
WSE 3	I can without difficult display a variety of emotions when the set of circumstances asks for it	44.3000	27.545	0.383	0.363	0.619
WSE 4	I am flexible with my emotions and tuning my emotions to that of the students	44.6200	27.955	0.238	0.217	0.638
WSE 5	I cannot be misled by empty praise and condescending encouragement	44.7600	26.164	0.369	0.247	0.615
WSE 6	If they can do it, I can do it as well	44.3200	27.555	0.384	0.365	0.620

WSE 7	I feel low about how I manage my emotions	45.1000	28.091	0.180	0.175	0.649
WSE 8	My expressed emotions are a part of what I see as my truthful way of dealing	44.6600	26.752	0.326	0.429	0.623
WSE 9	My strong feelings are an integral part of my sincere and deeper self.	44.6400	26.516	0.318	0.513	0.625
WSE 10	I love laughing at myself- it helps me in not getting too emotional.	45.1900	26.196	0.323	0.278	0.624
WSE 11	My emotions are effected by moral and societal norms.	44.9200	27.185	0.265	0.265	0.634
WSE 12	I feel guilty showing zeal during Academic interaction.	45.4000	26.667	0.280	0.298	0.632
WSE 13	I can create emotions which facilitate Academic interaction	44.4900	27.848	0.267	0.369	0.633
WSE14	I can mix with students more easily than others	44.2300	28.704	0.200	0.332	0.643

#### 4.2 Descriptive Statistics -Mean Ratings of WSE Factors (N = 650)

In the research work, after reliability test and data collection are made, it is usually suggested to run Descriptive statistics in SPSS. Descriptive statistics encompass measures of central tendency and measures of variability (spread). It is displayed in Table no.4.3, provide the mean value and standard deviations for each of the 13 independent variables taken into the current study.

The present study considered the mean score as a standard measure of the center of the distribution of the data. Now, let's have a close look at the mean scores on the work self-efficacy components. The mean scores of variables were high and averaged around 3.5. The work self-efficacy response rate shows high with a mean score of 4.20 when the Academician is mingling with the students. Further Social persuasion, situational reaction, emotional intelligence and Perception of Ability are securing second, third, fourth and fifth positions with a mean score of 4.19, 4.07, 4.02 and 3.93 respectively. In these results, the standard deviation is around 0.7 -1.2. With normal data, most of the observations are spread within 1 standard deviation on each side of the mean.

#### 4.3 Correlation Analysis

Pearson Correlation analysis was employed after Descriptive statistics computation to establish a relationship (but no causal relationship) between self-efficacy beliefs and its determinants. The correlation statistics presented in Table 4.2 provide the correlation and significance level for each independent variable. Correlations were examined as a check for possible collinearity between independent variables.

Legends:

1. Pearson Correlation: Gives Correlation coefficient value at a significant level of 95% and 99%
2. Sig (2-tailed): Gives the probability value of the significance of the correlation between the two variables at 95% and 99% confidence interval
3. Df: put on view the degree of freedom, i.e. the sample size of the study.

The output exhibited in table 4.4 provides the matrix of Pearson's correlation coefficient. Variables have been put in a matrix to the extent that their columns/rows intersect. In the cell there are numbers that tell about the statistical interaction between the variables. Three types of information are provided in each cell, i.e., Pearson correlation, significance and number of cases. The values on either side of the diagonal are mirror images of each other, i.e., The values are the same. Table 4.5 summarized and shortened Correlations Analysis outcome.

Table 3. Composite statement of Descriptive Statistics for work self-efficacy (N=650sample)

<i>S.No</i>	<i>Self-efficacy Statement</i>	<i>Factors identified</i>	<i>Total score</i>	<i>Sample size</i>	<i>Mean score = Total score N</i>	<i>Std. Deviation Statistic</i>	<i>Rank based on mean score</i>
1	I can easily put myself in the place of students and understand their needs	Social persuasion	2724	N=650	4.19	0.706	II
2	People, in general, have understood to accept the manner I succeed in my emotions	Emotional intelligence	2613	N=650	4.02	0.816	IV
3	I can without difficult display a variety of emotions when the set of circumstances asks for it	Situational reaction	2646	N=650	4.07	0.777	III
4	I am flexible with my emotions and tune my emotions to that of the students	Flexibility	2438	N=650	3.75	0.957	VIII
5	I cannot be misled by empty praise and condescending encouragement	Enactive attainment	2392	N=650	3.68	1.058	IX
6	If they can do it, I can do it as well	Vicarious experience	2113	N=650	3.25	1.070	XII
7	My expressed emotions are a part of what I see as my truthful way of dealing	Dealing with self-emotion	2470	N=650	3.8	1.029	VII
8	My strong feelings are an integral part of my sincere and deeper self.	Sincere and deeper self	2490	N=650	3.83	1.090	VI
9	I love laughing at myself- it helps me in not getting too emotional.	Laughing at myself	2360	N=650	3.63	1.142	X
10	My emotions are effected by moral and societal norms.	Moral and social norms	2275	N=650	3.5	1.068	XI
11	I feel guilty of showing zeal during Academic interaction.	Zeal during Academic interaction	1976	N=650	3.04	1.141	XIII
12	I can create emotions which facilitate Academic interaction	Perception of Ability	2555	N=650	3.93	0.918	V
13	I can mix with students more easily than others	Mingling with students	2730	N=650	4.2	0.857	I

Sources: Primary data

Table 4. Correlation analysis using Karl Pearson’s Correlation Coefficient

		<i>Social persuasion</i>	<i>Emotional intelligence</i>	<i>Situational reaction</i>	<i>Flexibility</i>	<i>Enactive attainment</i>	<i>Feel comfort</i>	<i>Dealing with self-emotion</i>	<i>Sincere and deeper self</i>	<i>Laughing at myself</i>	<i>Moral and social norms</i>	<i>Zeal during Academic interaction</i>	<i>Perception of Ability</i>	<i>Mingling with students</i>
Social persuasion	Pearson Correlation	1	.291(**)	.293(**)	.224(*)	.212(*)	-.012	.094	.188	.161	.063	.148	.070	.026
	Sig. (2-tailed)		.003	.003	.025	.035	.907	.353	.060	.111	.535	.142	.486	.795
Emotional intelligence	Pearson Correlation	.291(**)	1	.474(**)	.290(**)	.219(*)	.155	.006	-.029	.049	.128	-.054	-.065	-.034
	Sig. (2-tailed)	.003		.000	.003	.029	.124	.953	.776	.625	.206	.591	.519	.737
Situational reaction	Pearson Correlation	.293(**)	.474(**)	1	.330(**)	.281(**)	.129	.111	.149	.098	.044	.215(*)	-.002	-.015
	Sig. (2-tailed)	.003	.000		.001	.005	.202	.273	.138	.334	.664	.032	.987	.883
Flexibility	Pearson Correlation	.224(*)	.290(**)	.330(**)	1	.246(*)	.084	.069	.205(*)	-.040	.042	-.081	.038	.022
	Sig. (2-tailed)	.025	.003	.001		.014	.406	.493	.041	.689	.675	.421	.706	.829
Enactive attainment	Pearson Correlation	.212(*)	.219(*)	.281(**)	.246(*)	1	.159	.234(*)	.367(**)	.081	.064	.036	.096	.003
	Sig. (2-tailed)	.035	.029	.005	.014		.113	.019	.000	.422	.528	.719	.343	.974
Vicarious experience	Pearson Correlation	-.012	.155	.129	.084	.159	1	.172	-.051	.158	.007	.155	-.036	.038
	Sig. (2-tailed)	.907	.124	.202	.406	.113		.087	.616	.115	.944	.125	.721	.710
Dealing with self-emotion	Pearson Correlation	.094	.006	.111	.069	.234(*)	.172	1	.615(**)	.073	-.007	.114	.107	.063
	Sig. (2-tailed)	.353	.953	.273	.493	.019	.087		.000	.470	.946	.259	.289	.533
Sincere and deeper self	Pearson Correlation	.188	-.029	.149	.205(*)	.367(**)	-.051	.615(**)	1	.041	-.067	.099	.153	.023
	Sig. (2-tailed)	.060	.776	.138	.041	.000	.616	.000		.685	.508	.326	.128	.819
Laughing at myself	Pearson Correlation	.161	.049	.098	-.040	.081	.158	.073	.041	1	.374(**)	.393(**)	.104	.165
	Sig. (2-tailed)	.111	.625	.334	.689	.422	.115	.470	.685		.000	.000	.305	.100
Moral and social norms	Pearson Correlation	.063	.128	.044	.042	.064	.007	-.007	-.067	.374(**)	1	.261(**)	.277(**)	.212(*)
	Sig. (2-tailed)	.535	.206	.664	.675	.528	.944	.946	.508	.000		.009	.005	.035
Zeal during Academic interaction	Pearson Correlation	.148	-.054	.215(*)	-.081	.036	.155	.114	.099	.393(**)	.261(**)	1	.136	.019
	Sig. (2-tailed)	.142	.591	.032	.421	.719	.125	.259	.326	.000	.009		.178	.853
Perception of Ability	Pearson Correlation	.070	-.065	-.002	.038	.096	-.036	.107	.153	.104	.277(**)	.136	1	.545(**)
	Sig. (2-tailed)	.486	.519	.987	.706	.343	.721	.289	.128	.305	.005	.178		.000
Mingling with students	Pearson Correlation	.026	-.034	-.015	.022	.003	.038	.063	.023	.165	.212(*)	.019	.545(**)	1
	Sig. (2-tailed)	.795	.737	.883	.829	.974	.710	.533	.819	.100	.035	.853	.000	

\* Correlation is significant at the 0.05 level (2-tailed).

\*\* Correlation is significant at the 0.01 level (2-tailed).

Table 5. Correlations Analysis outcome -Karl Pearson’s Correlation Coefficient

<i>Sl. No</i>	<i>Self-efficacy components</i>		<i>Related variables</i>	<i>Outcome extracted from Table 4.3.2</i>
1	Social persuasion	1	Emotional intelligence	The statistically significant relationship among Social persuasion, emotional intelligence, situational reaction, flexibility, and Enactive attainment at 0.05 or 0.01 level (2-tailed) of significance
		2	Situational reaction	
		3	Flexibility	
		4	Enactive attainment	
2	Emotional intelligence	1	Situational reaction	The statistically significant relationship between Emotional intelligence, situational reaction, flexibility and Enactive attainment at 0.05 or 0.01 levels (2-tailed) of significance
		2	Flexibility	
		3	Enactive attainment	
3	Situational reaction	1	Flexibility	The statistically significant relationship among Situational reaction, flexibility, Enactive attainment and zeal during Academic interaction at 0.05 or 0.01 level (2-tailed) of significance
		2	Enactive attainment	
		3	Zeal during Academic interaction	
4	Flexibility	1	Enactive attainment	The statistically significant relationship between Flexibility, Enactive attainment and sincere & deeper self at 0.05 or 0.01 level (2-tailed) of significance
		2	Sincere & deeper self	
5	Enactive attainment	1	Dealing with self-emotions	A statistically significant relationship between Enactive attainment, dealing with self-emotions and sincere & deeper self at 0.05 or 0.01 level (2-tailed) of significance
		2	Sincere & deeper self	
6	Dealing with self-emotions	1	Sincere & deeper self	A statistically significant relationship between Dealing with self-emotions and sincere & deeper self at 0.05 or 0.01 level (2-tailed) of significance
7	Laughing at myself	1	Moral and social norms	The statistically significant relationship among Laughing at myself, moral and social norms and zeal during Academic interaction at 0.05 or 0.01 level (2-tailed) of significance
		2	Zeal during Academic interaction	
8	Moral and social norms	1	Zeal during Academic interaction	The statistically significant relationship among Moral and social norms, zeal during Academic interaction, Perception of Ability and mingling with students at 0.05 or 0.01 level (2-tailed) of significance
		2	Perception of Ability	
		3	Mingling with students	
9	Perception of Ability	1	Mingling with students	A statistically significant relationship between Perception of Ability and mingling with students at 0.05 or 0.01 level (2-tailed) of significance



#### 4.4 Exploratory Factor Analysis

After finding the significant association of self-efficacy variables, it was suggested to run an exploratory factor analysis to reduce the large number of variables into a fewer number of factors. The results are presented as follows.

##### 4.4.1 Correlation Matrix

The responses of the 13 items related to work self-efficacy were brought to a Principal Component Analysis (PCA) using SPSS. The correlation matrix is included in the initial analysis to know whether there is any computational problem in factor analysis. Furthermore, the aim is to confirm the determinant is zero. If the computed value of the determinant is zero, then there is a chance of a computational problem in factor analysis or seem not to be able to finish exploratory factor analysis. The determinant value listed down at the bottom of the matrix (Table 4.6) for this data. Since the computed value of determinant 0.073 is not less than the necessary value of 0.00001, multicollinearity is not an issue or troublesome for these data. So, the entire work self-efficacy components show a relationship well and hence there is no need to eliminate any components at this stage.

##### 4.4.2 A Measure of Sampling Adequacy:

After having obtained the correlation matrix, the principal component analysis was decided to perceive the intended covariance structure in the original variables in the work self-efficacy beliefs. First, the sampling adequacy of performing factor analysis was assessed by a Kaiser Meyer Olkin Measure of sampling adequacy (KMO).

The measure of sampling adequacy (Bartlett 1950) varies between 0 and 1, and values closer to 1 are better. A value of 0.6 is a suggested minimum. KMO value of the present study (Table 4.7) was 0.60, which is equal to the recommended value of 0.6

Bartlett's Test of Sphericity examines the reliability of null hypothesis.i.e., The correlation matrix is an identity matrix. An identity matrix is a matrix in which all of the diagonal elements are 1 and off-diagonal are 0 that indicates a lack of correlation. The final outcome of Bartlett's test of sphericity shows significant ( $p \leq 0.001$ ). Since Null hypothesis under Bartlett's Test is rejected with approximate Chi-Square of 245.615 and degrees of freedom 48 (sig. =0.000), the correlation matrix is the identity matrix and indicates significant correlation of work self-efficacy variables. (Hair, Anderson et al. 1995a; Tabachnick and Fidell, 2001). Subsequently, this research work can go-ahead with calculation of Extraction communalities.

Table 6. Correlation Matrix<sup>a</sup>

		<i>Social persuasion</i>	<i>Emotional intelligence</i>	<i>Situational reaction</i>	<i>Flexibility</i>	<i>Enactive attainment</i>	<i>Vicarious experience</i>	<i>Dealing with self-emotion</i>	<i>Sincere and deeper self</i>	<i>Laughing at myself</i>	<i>Moral and social norms</i>	<i>Zeal during Academic interaction</i>	<i>Perception of Ability</i>	<i>Mingling with students</i>
Correlation	Social persuasion	1.000	.291	.293	.224	.212	-.012	.094	.188	.161	.063	.148	.070	.026
	Emotional intelligence	.291	1.000	.474	.290	.219	.155	.006	-.029	.049	.128	-.054	-.065	-.034
	Situational reaction	.293	.474	1.000	.330	.281	.129	.111	.149	.098	.044	.215	-.002	-.015
	Flexibility	.224	.290	.330	1.000	.246	.084	.069	.205	-.040	.042	-.081	.038	.022
	Enactive attainment	.212	.219	.281	.246	1.000	.159	.234	.367	.081	.064	.036	.096	.003
	Vicarious experience	-.012	.155	.129	.084	.159	1.000	.172	-.051	.158	.007	.155	-.036	.038
	Dealing with self-emotion	.094	.006	.111	.069	.234	.172	1.000	.615	.073	-.007	.114	.107	.063
	Sincere and deeper self	.188	-.029	.149	.205	.367	-.051	.615	1.000	.041	-.067	.099	.153	.023
	Laughing at myself	.161	.049	.098	-.040	.081	.158	.073	.041	1.000	.374	.393	.104	.165
	Moral and social norms	.063	.128	.044	.042	.064	.007	-.007	-.067	.374	1.000	.261	.277	.212
	Zeal during Academic interaction	.148	-.054	.215	-.081	.036	.155	.114	.099	.393	.261	1.000	.136	.019
	Perception of Ability	.070	-.065	-.002	.038	.096	-.036	.107	.153	.104	.277	.136	1.000	.545
	Mingling with students	.026	-.034	-.015	.022	.003	.038	.063	.023	.165	.212	.019	.545	1.000
Sig. (2-tailed)	Social persuasion		.002	.002	.012	.017	.453	.177	.030	.055	.267	.071	.243	.397
	Emotional intelligence	.002		.000	.002	.014	.062	.476	.388	.313	.103	.295	.259	.368
	Situational reaction	.002	.000		.000	.002	.101	.137	.069	.167	.332	.016	.493	.442
	Flexibility	.012	.002	.000		.007	.203	.247	.020	.345	.338	.211	.353	.414
	Enactive attainment	.017	.014	.002	.007		.057	.009	.000	.211	.264	.360	.172	.487
	Vicarious experience	.453	.062	.101	.203	.057		.043	.308	.058	.472	.062	.360	.355
	Dealing with self-emotion	.177	.476	.137	.247	.009	.043		.000	.235	.473	.129	.145	.267
	Sincere and deeper self	.030	.388	.069	.020	.000	.308	.000		.343	.254	.163	.064	.410
	Laughing at myself	.055	.313	.167	.345	.211	.058	.235	.343		.000	.000	.152	.050
	Moral and social norms	.267	.103	.332	.338	.264	.472	.473	.254	.000		.004	.003	.017
	Zeal during Academic interaction	.071	.295	.016	.211	.360	.062	.129	.163	.000	.004		.089	.426
	Perception of Ability	.243	.259	.493	.353	.172	.360	.145	.064	.152	.003	.089		.000
	Mingling with students	.397	.368	.442	.414	.487	.355	.267	.410	.050	.017	.426	.000	

a. Determinant = .073

Table 7. KMO and Bartlett's Test

<i>Kaiser-Meyer-Olkin Measure of Sampling Adequacy</i>		.60
Bartlett's Test of Sphericity	Approximate Chi-Square	245.615
	Degrees of freedom	78
	Significant P-Value	0.000

## 4.4.3 Estimates of the Variance under Extraction Communalities

Communalities indicate the amount of deviation in every one variable that is considered for by all components or factors. Extraction communalities are estimates of the deviation in every variable accounted for by the factors (or components) in the factor solution. As a rule, small values point out variables that do not fit well with the factor solution and should possibly be dropped from the analysis. Since Extraction communalities in Table 8. were close to 1 it is not required to completely remove any components at this stage.

Table 8. Communalities

<i>Initial</i>	<i>Extraction</i>
1.000	.536
1.000	.658
1.000	.585
1.000	.501
1.000	.445
1.000	.871
1.000	.727
1.000	.832
1.000	.626
1.000	.529
1.000	.667
1.000	.743
1.000	.744

Extraction Method: Principal Component Analysis.

Table 9. Total Variance Explained

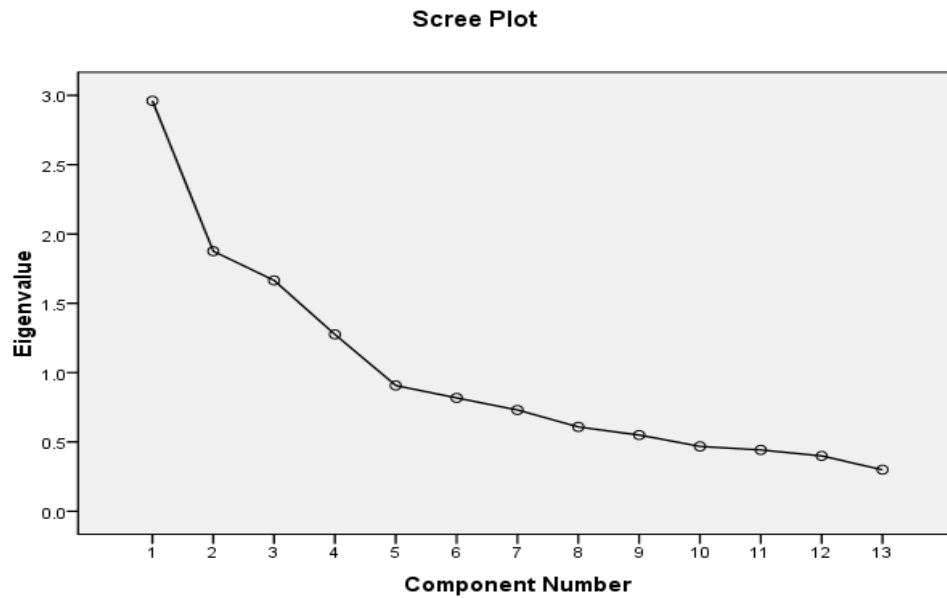
Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	Percentage of Variance	Cumulative Percentage	Total	Percentage of Variance	Cumulative Percentage	Total	Percentage of Variance	Cumulative Percentage
1	2.616	20.120	20.120	2.616	20.120	20.120	2.123	16.334	16.334
2	1.893	14.560	34.680	1.893	14.560	34.680	1.861	14.318	30.652
3	1.590	12.234	46.913	1.590	12.234	46.913	1.742	13.402	44.054
4	1.326	10.202	57.115	1.326	10.202	57.115	1.649	12.688	56.742
5	1.040	8.001	65.116	1.040	8.001	65.116	1.089	8.374	65.116
6	.802	6.167	71.283						
7	.723	5.559	76.842						
8	.692	5.326	82.168						
9	.690	5.308	87.476						
10	.572	4.403	91.879						
11	.401	3.086	94.965						
12	.365	2.804	97.769						
13	.290	2.231	100.000						

Extraction Method: Principal Component Analysis.

The total amount of variance is signified by Eigen value. It can be further explained by a given principal component. Starting from the first component, each subsequent component removes one variable in order to identify any correlation between others from the previous component. As a result, the first component elucidates the most variance, and the last component makes clear the least. From a quick glance of Table 4.9, the total variance explained by each component could be inferred. Component 1 is holding (2.616/13) % = 20.12% of the total variance. Because the same number of components is extracted as the number of items, the Initial Eigen values column is identical, but not different as the Extraction Sums of Squared Loadings column.

#### 4.4.4 Picking out the Optimum Number of Components to Extract

The prime objective behind running a PCA is to reduce or bring down a set of variables. It is better to have a constructive criterion for selecting the optimal number of components that are obviously smaller than the total number of items. Extraction option in SPSS allows specifying the extraction method and the cut-off value for the extraction. A principal component is the default extraction method in SPSS. It extracts uncorrelated linear combinations of the variables and gives the first-factor maximum amount of explained variance. All following factors explain smaller and smaller portions of the variance and remains uncorrelated with each other.



In an exploratory analysis, the eigenvalue is computed for every factor extracted and can be used to decide the number of factors to extract. A cut-off value of 1 is generally considered to determine the number of factors to be selected based on eigenvalues. Under the Total Variance Explained table 4.7, the first five components have an eigenvalue greater than 1 with a variance of 20.120 percent, 14.560 percent, 12.234 percent, 10.202 percent, and 8.001 percent respectively. The Scree Plot also confirms the same result. It plots the eigenvalue (total variance explained) by the component number.

The first component always has the highest total variance and the last component has the smallest of all time, but the largest drop is seen at Component 2 however extended to component 5, which exhibits an “elbow” joint in scree plot i.e., An inspection of the scree plot exhibited a clear break after the first component that extended till the fifth component. This is the marking point where it’s possibly not too beneficial to go on to further component extraction. The first five factors together account for 65.116% of the total variance. So the five component solution makes sense for the study and progress with the further analysis

#### 4.4.5 Component Matrix (a) to Extract Five Components or Factors

Table 4.10 reports the factor loadings for each variable on the unrotated components or factors. The Component Matrix has the same loadings as the eight-component solution, but instead of thirteen columns, it is only five columns now. At this stage, 5 components were extracted and the loadings above 0.3 are alone displayed.

Table 10. Component Matrix(a)

	<i>Component</i>				
	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
Situational reaction	0.619				
Enactive attainment	0.593				
Social persuasion	0.532				
Flexibility					
Emotions during Academic interaction		0.604			
Mingling with students		0.596		0.513	
Moral and social norms		0.548			
Laughing at myself					
Sincere and deeper self	0.535		-0.695		
Dealing with self-emotion			-0.632		
Emotional intelligence					
Zeal during Academic interaction				-0.543	
Vicarious experience					0.806

Extraction Method: Principal Component Analysis.

a. 5 components extracted.

#### 4.4.6 Factor Rotation

After extracting the factors, SPSS can rotate the factors to better fit the data. The most commonly used method of factor rotation is Varimax. It is an orthogonal rotation method that moves in a particular direction and produces factor loading that is either very high or very low. It is making it easier to match each item or variables with a single factor. The rotated component matrix is given in table 4.11. Missing values are replaced with the mean, which does not give-up the correlation matrix, but makes sure that we do not over penalize missing values. Also, all factor loadings are not displayed in the Rotated Component Matrix. The factor loading tables could be read without much effort when small factor loadings are suppressed. The default value is 0.1, but in this case, we will increase this value to 0.4. This spontaneously generates standardized scores in SPSS. It represents each extracted factor.

Table 11. Rotated Component Matrix(a)

	<i>Component</i>				
	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
Emotional intelligence	0.783				
Situational reaction	0.727				
Flexibility	0.651				
Social persuasion	0.552				
Sincere and deeper self		0.888			
Dealing with self-emotion		0.833			
Enactive attainment					
Zeal during Academic interaction			0.800		
Laughing at myself			0.775		
Moral and social norms			0.563		
Mingling with students				0.858	
Perception of Ability				0.836	
Vicarious experience					0.907

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

Table 4.9 exhibits the rotated factor loading for the 13 variables of work self-efficacy of Academician. It is understood from the table 4.9 that all the 13 statements have been extracted to five factors, namely F<sub>1</sub>, F<sub>2</sub>, F<sub>3</sub>, F<sub>4</sub>, and F<sub>5</sub>. These factors are discussed with identified new names in the following paragraph.

Five new factors were successfully identified and well constructed by using factor analysis and assigned as the factors affecting ethical living Work Self-Efficacy beliefs of Academician. Table 4.11 displays the name of the new factors identified from the Rotated Component Matrix. The first factor, vicarious experience shows the highest value of 0.907 from Varimax with Kaiser Normalization when it was extracted.

Table 12. Variable with the highest factor loading for Self-efficacy of Employees

<i>Factor</i>	<i>Name of the newly Extracted factor</i>	<i>Selected work self-efficacy statement (Variables)</i>	<i>Factor loading</i>	<i>Order of highest loading</i>
1.	Emotional intelligence	People, in general, have learned to accept the way I manage my emotions	0.783	V
2.	Sincere & deeper self	My emotions are a part of my sincere and deeper self.	0.888	II
3.	Zeal during Academic interaction	I feel guilty showing zeal during Academic interaction.	0.800	IV
4.	Mingling with students	I can mix with students more easily than others	0.858	III
5.	Vicarious experience	If they can do it, I can do it as well	0.907	I

It is clear from table 4.12 that “People, in general, have learned to accept the way I manage my emotions (Emotional intelligence), My emotions are a part of my sincere and deeper self(sincere & deeper self), I feel guilty showing zeal during Academic interaction(zeal during Academic interaction), I can mix with students more easily than others(mingling with students) and I feel low about how I manage my emotions(Vicarious experience)” with a factor loading of 0.783, 0.888, 0.800, 0.858 and 0.907 respectively, are the variables with the highest factor loadings under the factors F<sub>1</sub>, F<sub>2</sub>, F<sub>3</sub>, F<sub>4</sub> and F<sub>5</sub>. Therefore, these are the identified five variables which influence the work self-efficacy as expressed by Academician of Higher education) during the present study.

4.4.7 Normality Test

Given a set of data, the five new that affecting et5hical learning and Self-Efficacy beliefs among the Academician of Higher education were tested using the normality test to check if its distribution is normal. Table 4.13 shows the results of the normality test for the five new factors affecting Work Self-Efficacy among the Academician. In this study, the null hypothesis is that the data are normally distributed and the alternative hypothesis is that the data is not normally distributed. When the significance p-value for the variable is larger than 0.05 (p>0.05), then the data is normal [1].

Table 13. Tests of Normality

Factors / components extracted	Kolmogorov-Smirnov (a)			Shapiro-Wilk		
	Test Statistic	Degrees of freedom	Significance -p-value	Test Statistic	Degrees of freedom	Significance p-value
Emotional intelligence	.230	650	.000	.843	650	.000
Sincere & deeper self	.274	650	.000	.855	650	.000
Zeal during Academic interaction	.202	650	.000	.902	650	.000
Mingling with students	.251	650	.000	.805	650	.000
Vicarious experience	.250	650	.000	.889	650	.000

a Lilliefors Significance Correction

The test statistics were shown in the table. Here two tests for normality were run 1). Shapiro-Wilk test and 2). The Kolmogorov-Smirnov test. Since the p-value of both tests is 0.000, the alternative hypothesis is rejected and

concluded that the data does not come from a normal distribution. If the data are not normal, the present study goes ahead with a nonparametric version of the test, which does not assume normality. But more importantly, if the test which is running is not sensitive to normality, we may still run it even if the data are not normal.

4.4.8 Kruskal-Wallis Test for Model Fit

The non-parametric test using the Kruskal-Wallis Test had been carried out on all new five factors identified since these factors did not accomplish the normality assumption. The Kruskal-Wallis test was carried out to check and examine the mean difference on the demographic factors specifically years of experience on factors that affecting e6thical learning and works self-efficacy beliefs among the Academician.

List of grouping variable and its range are given below

1= Newly joined

2= Medium level of Experience

3= Highly experienced

The first alternative hypothesis statement is; there is a significant mean difference between years of experience on factors that affects works self Efficacy among the Academician of Higher education

Table 14. Mean Rank among Work Experience Group

<i>Works self-efficacy components Score</i>	<i>Work Experience Group</i>	<i>Mean Rank</i>
Emotional intelligence	1	49.31818
	2	51.80303
	3	50.38235
Vicarious experience	1	47.5
	2	49.28788
	3	54.58824
Sincere & deeper self	1	44
	2	50.37879
	3	56.92647
Zeal during Academic interaction	1	50.0303
	2	54
	3	47.55882
Mingling with students	1	46.4697
	2	54.37879
	3	50.64706

Table 15. Kruskal-Wallis Test among different work experience

	Test Statistics				
	<i>Emotional intelligence</i>	<i>Vicarious experience</i>	<i>Sincere &amp; deeper self</i>	<i>Zeal during Academic interaction</i>	<i>Mingling with students</i>
Chi-Square statistic	0.154687	1.185312	3.760481	0.920229	1.438865
Degrees of freedom	2	2	2	2	2
Asymptotic Significance	0.925572	0.552857	0.152553	0.631212	0.487029
A	Kruskal Wallis Test				
B	Grouping Variable: work experience				



Table 4.14 gives an idea about the results of the Kruskal-Wallis test for the five new factors that determining ethical living and works self-efficacy beliefs among the Academician. SPSS results are given in Table 4.14 and 4.15. Furthermore, the mean rank (i.e., the "Mean Rank" column in the Ranks table) of the works self-efficacy beliefs components Score for each Work Experience Group can be taken into account to compare the effect of the different works self-efficacy beliefs components. Medium work experienced group who has secured with a high mean rank score in all components as compared to experienced. Fresher are employees with high self-efficacy and they all will work hard to learn how to perform new tasks because they are confident that they will be successful.

Whether all Work Experience Group who have different scores for each self-efficacy component can be assessed using the Test Statistics table presents the result of the Kruskal-Wallis H test. That is the chi-squared statistic, the degrees of freedom of the test and the statistical significance of the test (" Asymptotic Significance" row). The p-value for all five factors  $\geq 0.05$  at the assumed level of significance. Therefore, the null hypothesis is accepted. Since there was no significant mean difference, it is concluded that Academician of Higher education with different experience have no difference of opinion on Emotional intelligence, Sincere & deeper self, Zeal during Academic interaction, Mingling with students and Vicarious experience that determine works self-efficacy ( $p > 0.05$ ).

Table 16. Mean Rank among Work Experience Group

	<i>Work Experience Group</i>	<i>Mean Rank</i>
Works Self Efficacy score	1	42.68182
	2	52.81818
	3	55.83824

Table 17. Kruskal-Wallis Test among different work experience

<i>Test Statistics</i>	
<i>Works Self Efficacy</i>	
Chi-Square	3.775051
Degrees of freedom	2
Asymptotic significance	0.151446

A Kruskal Wallis Test

B Grouping Variable: work experience

The Kruskal-Wallis H test was conducted to examine whether there is a statistically significant difference between works self-efficacy in general and each category of work experience group. Test results were presented in table 4.16 and 4.17. The mean rank for experienced spent more effort in prospecting their job was 55.83824 compared to fresher only 42.68182. Highly experienced spent more confidence in managing workplace experiences, course of action and a wide array of situations compared to fresher. A Kruskal-Wallis H test clearly pointed out that self-efficacy did not differ significantly with different category of Work Experience Group,  $\chi^2 = 3.775051$ ,  $p = 0.151446$ , with a mean rank pain score of 42.68182 for Work Experience Group 1, 52.81818 for Work Experience Group 2 and 55.83824 for Work Experience Group 3

**5. Conclusion**

This research has made to learn about the principal determinants of work self-efficacy and ethical living of Asian Academician. It allows us to conceptualize the strength of self-efficacy and how its relative variables are contributing to learning and performance in the workplace. Emotional intelligence, Sincere & deeper self, Zeal during Academic interaction, Mingling with students and Vicarious experience that determines works self-efficacy were identified as major components to determine self-efficacy in the workplace of Academician. These factors constitute a set of behaviours and practices in the workplace. Teamwork, expressing sensitivity, managing politics and handling pressure are also considerable variables that change a wellbeing of academician. As compared to fresh or newly joined, highly experienced have more confidence and beliefs about the accomplishment of given the task and the fulfillment of an obligation. The ethical living of academicians can only be achieved as a result of self-efficacies that shape their lives. Thus self-efficacy in all forms influence Academician's thoughts, emotions, actions, and motivation.

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