Anthropologist, 35(1-3): 36-46 (2019) DOI: 10.31901/24566802.2019/35.1-3.2037

Analysis of the Influence of Spiritual Intelligence in Achieving Student Engagement Using Regression Equation Modelling

S. Malini1* and R. Raju2

¹Department of Management studies, College of Engineering, Anna University, Chennai 600 025, Tamil Nadu, India ²Department of Industrial Engineering, College of Engineering, Anna University, Chennai 600 025, Tamil Nadu, India E-mail: ¹<maliniamudhan@gmail.com>; ²<rraju@annauniv.edu>

KEYWORDS Higher Education Institution. Spiritual Intelligence. Student Engagement. Critical Existential Thinking. Transcended Awareness. Conscious State Expansion

ABSTRACT Education system plays a major role in enhancing student's learning capacity by imparting knowledge and skills. In the present digital age engaging the students throughout the learning duration is a real challenge. Therefore effective Students Engagement (SE) is a crucial attribute for an educational institution. This study uses the influences of Spiritual Intelligence (SI) to achieve student's engagement for effective learning. The relationship between SI and SE has been tested and realised using Regression approach. The study was conducted in Higher Education Institution (HEI) across India. The data collected were analysed by Exploratory Factor Analysis (EFA) and various validity tests using SPSS. The analysis evidenced that spiritual intelligence supports student engagement in a positive manner.

INTRODUCTION

The higher education institutions are facing increased level of financial concerns in the recent days. There is also the commitment towards attracting, maintaining and turning the students into graduate citizens who could contribute to the country's development (Chundi and Feng 2017). The expectations of students, parents and the society continuously add fuel to this flame. In the due course engaging the students and keeping their thirst of knowledge live and satisfied throughout the duration of study is yet another challenge (Geetha 2019). Students' engagement deals with the active involvement of students in various tasks that eventually kindles their sensibility, emotions as well as cognition.

Disciplinary issues are also renowned and highly talked about problem in schools. Classroom discipline management refers to the control and behavior of students and teachers within the classroom environment. Discipline management entails the active management of students through motivating learning and positive social interactions. Teachers toil towards developing a positive learning culture, where the students are actively engaged in individual classroom management and learning process. They establish respectfulness,

good physical climate, behavioral control and ensure safety of the students through simple instructions and interactions with one another as required (Jeloudar and Yunus 2011; Akinyemi and Rembe 2017). Multiple studies focus on developing the students engagement through strengthening disciplinary aspects (Akinyemi and Rembe 2017; Ahmed et al. 2016). From the literature surveyed there seems to be a very feeble insight on the capacity of spiritual intelligence in achieving students' engagement. Spiritual intelligence (SI) significantly enhances the communication between teachers and students. SI also extends a helping hand in improving the disciplining strategies within the classroom. Thus in a way to improve students engagement through Spiritual Intelligence, this research, aims to establish the reliability of Spiritual Intelligence and Student Engagement.

Every year about one-third of all public high school students and right around one-portion of minorities neglect to graduate with their associate (Smyth 2006.) The way that more than 3 million students drop out of school each year and more than 1.2 million students neglect to graduate with a confirmation 4 years after they have entered secondary school makes this scourge a national concern (Steinberg and McCray 2012). As per Klein et al. (2012), these educational failures put the United

States, future monetary thriving, worldwide position, and physical wellbeing in danger. Given these recorded negative impacts at both individual and societal dimensions, the educational network must perceive the need to comprehend and react to the intricate relationship of the elements that keep on obstructing students in the basic leadership process in schools (Brenner-Kemp 2011).

This paper has been segmented into four parts. The first part introduces the problem followed by the relevant literature survey in the second part. The third and fourth part discusses the research methodology and discussion on the results respectively. This is followed by conclusion derived from the study.

Literature Survey

Spirituality and Religion are generally considered hand in hand with each other. Spirituality deals with a person's thinking and activity towards finding out personal significance of life (Jurkiewicz and Giaccalone 2004). It is more a private and personal self-reflection and realization. Whereas religion describes the social and general aspects of a person's view towards leading ones' life. Spiritual intelligence (SI) is concerned with interior life of spirit and mind including its association with the universe. SI means a capability of deep recognition of existential queries as well as deep insight into manifold levels of consciousness. Also, SI implies consciousness of spirit as the inspired life force of development or the origin of existence. The growth of life that starts from stardust, developing into mineral, vegetable, human and animal survival mean the significant growth in level of intelligence in the living organism rather than a mere random process. This realization could be known as 'spiritual'. SI appears as awareness developing into ever deepening consciousness of life, mind, body, matter, spirit and soul (Vaughan 2002; Ahmed et al.

Sometimes SI seems to overtake common psychological development where, beyond self-consciousness, SI elevates the supremacy of consciousness of relationship with everybody, the world and all its living beings. In the view of a psychoanalyst, SI helps open the spirit and the heart. This aspect elucidates the mind and motivates the soul thus it links the individual human mind with the basic opinion of existence. SI needs discipline and practice to be inculcated within and once rooted it may assist a person for distinguish-

ing reality from delusion. It can be viewed as in any traditions as love, service or wisdom. SI is also linked to Emotional Intelligence (EI). Insofar spiritual process helps in developing interpersonal and intrapersonal sensitivity (Jimerson et al. 2003). Thus, focusing towards subjective feelings and thoughts and developing empathy is considered as the part of raising consciousness of interior spiritual life. SI based on the capability for viewing things from above one's perspective and for recognizing the association among belief, behaviour and perception. Refining of intelligence needs discipline and training; and hence, SI is no exception. Possibly SI may also assist a person for detecting hidden sources of joy and love under turmoil and stress of daily life.

While digging deep into the roots of Spiritual Intelligence it could be observed that it has emerged with a goal of incorporating Spirituality as well as Intelligence (Emmons 2000). SI is assumed as adoptive consumption of spiritual data with a goal of solving concerns, which take place in daily life (Zohar and Marshall 2000). According to Devi et al. (2017), SI is considered as the major kind of intelligence for it has capability to raise modification in individual, society and culture. Evolving SI will assist a person in attaining positive outlook as well as gaining internal peace (Wigglesworth 2002). This positive outlook and internal peace makes a complete modification in the behaviour of an individual. In a way it also enhances self-motivation and control of individual's actions alongside decreasing the greater levels of stress. People are subjected to increased level of stress mainly through the influence of contemporary lifestyle. King (2008) claims that SI might be measured with the help of four dimensions namely the Conscious State Expansion, Personal Meaning Production, Transcendental Awareness and Critical Existential Thinking. These constructs of SI have already been demonstrated by King (2008).

The construct Personal Meaning Production (PMP) suggests the capability to find out the personal meaning and purpose in all kinds of mental as well as physical experiences. Transcendental Awareness is considered as a key element of SI that indicates the feature of recognizing the spiritual aspect of life (Vaughan 2002). Conscious State Expansion is another state that highlights the expansion of Transcendental Awareness, where an individual attains the capability of gaining the spiritually insightful state by practicing activities such as yoga, relaxation and meditation techniques. Crit-

ical Existential Thinking is a capability of an individual for perceiving and understanding the concept of life. When students are made to experience SI their level of engagement and involvement with the day to day activities gets improved.

Student engagement purports the students' participation within and throughout the learning atmosphere. 'Student engagement' is best recognized as an association among the student as well as the following components of learning atmosphere: Adults at school; the school community; Instruction; and the student's peers. The curriculum for student engagement is a multifaceted or multi-dimensional construct, which may be estimated using all dimensions and dynamically interlinked. Student Engagement (SE) typically consists of three significant dimensions such as Behavioural engagement - concentrating on involvement in school, co-curricular and academic activities; Cognitive engagement – concentrating on students' investment levels in learning.

SE is a function of both the construct and the individual; while Emotional engagement - concentrates on the nature and extent of negative and positive reactions to classmates, academics, school and teachers. It differs in duration and intensity. For instance, a student can experience active involvement in one semester, but exhibit lesser involved in the next semester. Another case could be of a student who enjoy his/her classes, while doesn't show much interest on other co-curricular activities (Good and Brophy 2000). SE could be seen progressively as the key for addressing concerns like boredom, alienation, high rate of dropouts and low accomplishment. Student engagement could be achieved through Cognitive, Behavioural and Emotional Engagement as opined by Wang et al. (2011). Involved students are more probable to perform well on standardized assessments hence their probability to fail at school is considerably low (Neill 2008). The states that lead to SE by decreasing student boredom can contribute to a positive, creative and safe school atmosphere and culture. Study represents that lack of SE hinders students' advancement from the upper elementary schools to the middle school, and the level is even lower in the progression towards high schools. Several analyses evaluate that, by the time a student transits to high school, around 40-60 percent of young students show lower level of involvement. Provided the critical effects of disengagement, school administrators and educators are more interested in acquiring data on engagement and disengagement of students for analysis, assessment and remedial measures.

RESEARCH METHODOLOGY

This study employs a quantitative research approach. Stevens (2002) pointed out to deductive or quantitative approach as a research approach developed for testing set of hypothesis that has been proposed and derived by widespread analysis of existing literatures. The authors in this study have broadly analyzed the theories on Student Engagement, Spiritual Intelligence and relationship among Spiritual Intelligence and Student Engagement. They have also embraced the various proposed hypotheses that link all the factors of student engagement with each and every construct of SI. Hence, this research may be regarded to have quantitative approach. Reliability has to be established for any instrument to consider it appropriate for gathering primary data. Also, Cronbach alpha has been extensively used for measuring reliability of a research instrument.

Constructs Development and Hypothesis

According to Churchill (1979), construct development consist of three unique steps. They are:

- Domain selection
- Instrument Development
- Data collection and analysis

These three steps are further explained as implemented in this research study.

Domain Selection

Smith (2014) found that Spiritual Intelligence was initially discussed by Zohar and Marshall (2000). SI isn't religion or spirituality, nor is it spirituality meaning with religion. Religion is typified through a category system, which describes the spiritual followers and leaders of doctrine (Hildebrant 2011), it is concentrated on the beliefs and rituals with respect to consecrated inside institutions. Wilber (2006) reviewed numerous definitions as well as concepts of spirituality that provides four connotations: 1) greatest levels in any developmental lines like values, cognitive and needs; 2) separate line of growth – SI might be stated as faith in Fowler's 1995 level of Faith; 3) an unexpected peak experience or condition that might be performed by prayer or meditation as viewed in Underhill's work; and 4) special behaviour that may be provide at any state or stage like compassion, wisdom or love (Underhill 1984). The constructs of spirituality and intelligence are integrated through spiritual intelligence in forming new constructs. Superior awareness and outrival have provided a suggestion that spirituality stands in the investigation of life by the holy components. In predicting performance of SI, traditional adjustment and creation of valuable findings or products, SI introduces the power strained on certain spiritual matters. The constructs of SI could be capable of shedding light on the practicable harmfulness of spirituality based lifestyles or religious beliefs (Moosapour et al. 2013). There are four most significant constructs of SI which include:

i. Critical Existential Thinking (CET)

Consideration of CET originated from earlier declarations of a SI. Seemingly, Gardner (1993) has dedicated a year of research to explore CET and coming to conclude that SI didn't satisfy his eight criteria.

ii. Personal Meaning Production (PMP)

PMP has a capability to construct personal implication and purpose in all mental and physical experiences. It includes ability to generate and master a purpose of life. PMP was adoptive in reducing depressive symptoms, acting as shield against hopelessness and depression in the terminally ill and claimed to increase resilience.

iii. Transcendental Awareness (TA)

In his research. King (2008), stated TA as capability to determine transcendent dimensions of individual (transcendent self or transpersonal), physical world (holism, non-materialism) and the others during normal and waking condition of awareness, achieved by capability to find out their relation to individual as well as to the physical world.

iv. Conscious State Expansion (CSE)

King (2008) defined CSE as the capability for entering and exiting spiritual or higher levels of awareness (cosmic awareness, pure consciousness, oneness and unity) at individuals discretion (in meditation, prayer, deep contemplation and so on). Further, multiple researchers have found that engagement linked to the activities of school or student engagement has developed into the most significant deliberation associated to numerous educational results like attendance, behaviour, achievement, completion or dropout (Jimerson et al. 2009; Hart et al. 2011). The researchers Jimerson et al. (2003) and Appleton et al. (2008) have suggested that student engagement is multifaceted and emerges to an extent beyond school bonding and connectedness. There are several constructs of SE like: cognitive engagement; behavioral engagement (effort, persistence and extra-curricular activities); and cognitive engagement (liking for school and learning). Wang et al. (2011) have opined that the findings between the factors of student engagement are effective. Finn and Rock (1997) point out to the link between student engagement and students' academic outcomes.



Fig. 1. Conceptual model portraying the relationship between spiritual intelligence and student engagement

Source: Author

Hypotheses

Based on the objectives of the study the following hypotheses were developed to test whether the elements of Spiritual Intelligence positively influences the variables of Student Engagement.

- H1: There is a significant positive association between the elements of Spiritual Intelligence and Behavioural Engagement construct of Student Engagement.
- H2: There is a significant positive association between the elements of Spiritual Intelligence and Emotional Engagement construct of Student Engagement.
- H3: There is a significant positive association between the elements of Spiritual Intelligence and Cognitive Engagement construct of Student Engagement.

Instrument Development

The instrument designed by Hildebrant (2011) was modified and used by the author for measur-

ing Spiritual Intelligence (SI). Hilderbrant's scale has 24 items and determines spiritual intelligence with four most important constructs namely, Personal Meaning Production (PMP), Critical Existential Thinking (CET), Transcended Awareness (TA) and Conscious State Expansion (CSE). Similarly, the second part measures Student Engagement. For measuring Student Engagement, modified the instrument developed by Lam and Jimerson (2008) called SESQ (Student Engagement in School Questionnaires) instrument. Here, the Student Engagement (SE) constructs consist of three components such as Behavioural Engagement (BE), Emotional Engagement (EE) and Cognitive Engagement (CE). The modified scale of Student Engagement has 23 items.

Data Collection

Data collection is limited to Higher Education Institutions across India. This study has adopted a Descriptive Research Design for its analysis. In this research, stratified random sampling has been adopted. Higher education institutions in India have been selected from clusters that were categorized based on the geographic position, where the institutions are located. Data has been acquired from India's to top two major educational institutions based in Chennai and Delhi, which are prominent for providing superior higher education for students (Career India 2016). Primary data collection was made by sharing of questionnaires to the target participants by using online survey data collection equipment. The links of the online questionnaire survey tool created was circulated to 700 respondents. The research instrument developed consists of two parts namely Spiritual Intelligence and Student Engagement. These are considered as the two major variables for this research. The questionnaire begins with a section that collects demographical data of the respondents. Further to check the validity and readability of the items, the questionnaire was submitted to 5 faculty members for face validity and content validity to ensure that the items are clear and concise without ambiguity. Further, to ensure the usability of the items and reduce vagueness, the items were subjected to substantive validity (refer eq 1.)

$$CSV = \frac{(n_c - n_0)}{N} \qquad \text{Eq } (1)$$

 n_c – number of respondents indicating an item as essential

 n_0 – number of respondents indicating the item as non-essential

N – total number of respondents.

Based on the respondent's feedback, an item is retained or dropped. The general cut off value considered for such decision is 0.5. Using this approach number of items in Spiritual Intelligence scale and Student Engagement scale were reduced from 24 to 21 and from 23 to 20 items respectively. These items represent the content of spiritual intelligence and student engagement as detailed in Anderson and Gerbing (1991).

Non-response Bias

In this study, data were collected over a span of 15 weeks. The early wave group consisted of 240 responses, while the latter group consisted of 320 responses which were received in the last few weeks of the data collection. Thus, to overcome the non-response bias the responses received in the early and late waves were compared appropriately (Lambert and Harrington 1990). A pair wise ttest was carried out and the final sample obtained was divided into two parts, with respect to the dates on which they were received. The t-tests were performed on the responses for the 'Critical Existential Thinking' and 'Behavioural Effort' constructs, and these two groups yielded p-values of 0.521 and 0.187, respectively. The test results presents no evidence against the existence of nonresponse bias. Hence, using the collected data may not be an issue in this study.

Scale Refinement

The preliminary analysis was carried out using the Statistical Package for the Social Sciences (SPSS version 21) software (refer Table 1). Initially, scale validation was done in the exploratory factor analysis (EFA) using 175 responses. The EFA with Varimax rotation was used on the Spiritual Intelligence and Student Engagement constructs. Based on these findings, 6 items were removed from the Spiritual Intelligence instrument and 4 items were removed from the Student Engagement instrument that had either poor loading or high cross-factor loadings, through which the number of items dropped from 21 to 15 for Spiritual Intelligence scales and 20 to 16 for Student Engagement scale. The retained items were used for subsequent scale validation and Hypotheses testing. The results of EFA are given in Tables 1 and 2 respectively.

Validity Tests

The scale validity is study specific, hence, it must be carried out while choosing an instrument for a new study. The capability of the items to address concepts of validity like content validity and construct validity need to be checked equally (Hemsworth et al. 2008). The content validity and face validity of the items included in the instrument were checked during the initial screening with the help of 5 academic experts. To ensure construct validity, EFA was performed using principal component method and the results are given in Tables 1 and 2.

Table 1: Exploratory factor analysis of spiritual intelligence

	Rotated component matrix						
	-	Cor	istruct				
	1	2	3	4			
PMP1	.821	.133	.106	.108			
PMP2	.770	.072	.146	.117			
PMP3	.793	.092	071	.220			
PMP4	.844	.115	027	.151			
PMP5	.693	.253	.003	.110			
TA1	.050	.852	.021	.109			
TA2	.153	.881	.080	.134			
TA3	.128	.836	.048	.034			
TA4	.289	.746	.134	.110			
CET1	.049	.140	.860	.153			
CET2	.005	.062	.877	.101			
CET3	.045	.030	.860	.173			
CSE1	.207	.217	.168	.849			
CSE2	.191	.198	.074	.858			
CSE3	.236	.007	.339	.691			

Extraction Method: Principle Component Analysis.Rotation Method: Varimax with Kaiser Normalisation

To ensure reliability of the scale's consistency, Cronbach's alpha value was estimated for each variable. The reliability is used to assess the internal consistency of the question scales used

Table 3: Reliability and discriminant validity

	•					
Variable	Mean	STD	No.of items	Reliability (alpha)	AVISC*	Discriminant validity alpha - AVISC*
PMP	2.865	0.826	5	0.867	0.569	0.298
TA	2.947	0.810	4	0.877	0.642	0.235
CET	3.170	0.809	3	0.862	0.679	0.183
CSE	3.288	0.763	3	0.826	0.618	0.208
CE	2.897	0.710	7	0.951	0.734	0.217
BE	3.000	0.748	5	0.897	0.634	0.263
EE	3.274	0.794	4	0.883	0.651	0.232

^{*} AVIC = Average inter-scale correlation.

Table 2: Exploratory factor analysis of student engagement

	Rotat	Rotated component matrix		
		Construct		
	1	2	3	
CE1	.788	.080	.277	
CE2	.872	.011	.085	
CE3	.867	.055	.140	
CE4	.902	.064	.074	
CE5	.864	.149	.125	
CE6	.868	.144	.105	
CE7	.872	.094	.224	
BE1	.076	.793	.136	
BE2	.105	.824	.188	
BE3	.144	.789	.236	
BE4	.027	.860	.179	
BE5	.076	.822	.146	
EE1	.124	.208	.827	
EE2	.143	.239	.767	
EE3	.278	.206	.807	
EE4	.167	.191	.856	

Extraction Method: Principle Component Analysis. Rotation Method: Varimax with Kaiser Normalisation

for collecting the data (Cronbach 1951). If, the Cronbach's alpha value is greater than 0.7, then it is acceptable, and alpha values that are less than 0.6 indicated as unreliable scale (Nunnally 1978). As can be seen from Table 3, that the Cronbach's alpha values for the variables under study are ranging from 0.826 to 0.951, indicating very high reliability.

Discriminant Validity

This is a measure of the level up to which the each item loading of a construct is distinct and does not measure other constructs. Cronbach's alpha verses average inter scale correlations with positive difference indicates the discriminant validity. The results of discriminant validity for the

study is given in Table 3. On examination, the values highlighted that the scales developed in the study exhibit strong discriminant validity. Thus, the validity of scales used for eliciting responses from the target respondents has been confirmed.

RESULTS

The hypotheses were tested using Regression Analysis. The directional hypotheses (H₁ to H₃) have been converted into null and alternate hypotheses for testing. Multiple regression analysis was conducted to test the hypotheses and its results are depicted in Tables 4, 5 and 6. Here, the Spiritual Intelligence variables namely; Critical Existential Thinking (CET), Personal Meaning Production (PMP), Transcendental Awareness (TA) and Conscious State Expansion (CSE) were considered as independent variables and the level of student engagement in terms of Behavioural En-

gagement, Emotional Engagement and Cognitive Engagement were treated as dependent variables.

From the Table 4 it could be detected that the regression coefficient of the Behavioural Engagement and the four Spiritual Intelligence variables is 0.630. F-value of the regression equation is found to be 85.244 and it is significant at 0.000 level. This value indicates that the four factors of Spiritual Intelligence considered together have high degree of association with the Behavioural Engagement component of Student Engagement and hence it supports the Hypothesis (H_1) . The R^2 value of 0.397 explains the variability of the Behavioural Engagement by 39.7 percent. Thus from the R² and Fvalue, it is inferred that the Null Hypothesis ($R^2=0$) has been rejected. This also indicates the effectiveness of the regression model for Behavioural Engagement. It can also be seen from the coefficients of the predictor variables that Conscious State Expansion (CSE), Transcendental Awareness

Table 4: Regression model for behavioural engagement

	_					
Model	R	R^2	Adjusted R ²	Standard error of the estimate	F	Sig
1	.630	.397	.392	.58290	85.244	.000
Model		andardised -efficients		Standardised co-efficients	t	Sig.
-	В	SE		Beta		
1 (Constant)	.602	.145	5		4.144	.000
CSE	.230	.042	2	.235	5.542	.000
TA	.365	.035	5	.395	10.549	.000
CET	.044	.035	5	.048	1.260	.208
PMP	.148	.035	:	.164	4.234	.000

Table 5: Regression model for emotional engagement

Model	R	R^2	Adjusted R ²	Standard error of the estimate	F	Sig
1	.546	.298	.293	.66738	55.029	.000
Model		andardised -efficients		Standardised co-efficients	t	Sig.
	В	SE		Beta		
1 (Constant)	.936	.166			5.626	.000
CSE	.178	.048		.171	3.745	.000
TA	.115	.040		.118	2.912	.004
CET	.358	.040		.365	8.849	.000
PMP	.097	.040		.101	2.432	.015

Model	R	R^2	Adjusted R ²	Standard error of the estimate	F	Sig
1	.600	.360	.355	.57024	72.703	.000
Model		andardised -efficients		Standardised co-efficients	t	Sig.
	В	SE	_	Beta		
1 (Constant) CSE	.770 .376	.142		.404	5.416 9.252	.000

.000

.281

.044

Table 6: Regression model for cognitive engagement

(TA) and Personal Meaning Production (PMP) are very significant predictors of Behavioural Engagement.

.034

.035

.034

.000

.246

.038

TΑ

CET

PMP

The regression coefficient of the Emotional Engagement and the four Spiritual Intelligence variables is 0.546 as shown in the Table 5. Similarly the F- value of the regression equation was observed to be 55.029 and it was also significant at 0.000 level. This value indicates that the four factors of Spiritual Intelligence considered together have high degree of association with the Emotional Engagement component of Student Engagement and supports the Hypothesis (H₂). Moreover the $R^2(0.298)$ value explains 29.8 percent of variability of the Emotional Engagement. From the R² and Fvalue, it could be inferred that the $R^2 = 0$ (Null Hypothesis) has been rejected. Similarly this also highlights the regression model for Emotional Engagement to be very effective. In addition, the coefficients of the predictor variables like Conscious State Expansion (CSE), Transcendental Awareness (TA), Critical Existential Thinking (CET) and Personal Meaning Production (PMP) are also significant predictors of Emotional Engagement.

From the Table 6 it could be observed that the regression coefficient of the Cognitive Engagement and the four Spiritual Intelligence variables is 0.600. The F- value of the regression equation is 72.703 which is significant at 0.000 level. These values indicate that the four factors of Spiritual Intelligence considered together have high degree of association with the Cognitive Engagement component of Student Engagement. Moreover this also supports the third Hypothesis (H₃). It is inferred from the R²(0.360) value that 36.0 percent of the variability of the Cognitive Engagement could be explained. With respect to both R² and F- value,

it could be inferred that the $R^2\!=\!0$ (Null Hypothesis) has been rejected and thus the regression model for Cognitive Engagement is very effective. It can also be seen from the coefficients of the predictor variables that Conscious State Expansion (CSE) and Critical Existential Thinking (CET) significantly predicted the Cognitive Engagement.

-.006

7.136

1.110

.995

.000

.268

Thus on testing the hypothesized relationships shown in Figure 1 using Multiple Regression Equations, it was observed that there exists a strong association between Spiritual Intelligence and Student Engagement.

DISCUSSION

By considering the outcome of this analysis, a new dimension has been exposed for the future researchers to investigate more into the academic field of Spiritual Intelligence and Student Engagement. To highlight the practical importance, this research illuminates the extent to which the students belonging to the collegiate level, in particular, have spiritual intelligence. It also helps realise the extent of involvement and focusing in academics. On studying these aspects the educational institutions would enhance their present designing of curriculum such that it leads to an increased level of engagement and interest amidst students towards academics. Spiritual intelligence can be considered as an influential tool in individual's personality. It is fundamentally and strongly associated with developmental stages, and that is what, certainly, makes it no less significant and valuable than other intelligence divisions (Eldiasty et al. 2018). Amran and Dryer (2008) pointed out that spiritual intelligence as the competence to harness, exhibit, and represent spiritual resources, stan-

dards, and qualities to improve daily performance and interests. King (2008) claims that SI might be measured with the help of four dimensions namely the Conscious State Expansion, Personal Meaning Production, Transcendental Awareness and Critical Existential Thinking also significant predictors of Emotional Engagement. Jurkiewicz and Giaccalone (2004) stated that spiritual values are important for both teachers and students since it contributes to excel and develop. Study by Olson (2008) exhibited that spiritual well-being and intelligence has a positive impact on students' academic and overall performance. On the other hand, study by Smartt (a.n.d.) revealed a slight contrary non-significant relationship between spiritual intelligence and students' achievement, and also suggested that further research is necessary to make a clear statement regarding impact of spiritual intelligence in students' academic life. Most studies emphasize that spiritual intelligence can be considered as the experience based capability that empowers any person to accomplish increased knowledge and experience (Kulshrestha and Singhal 2017). Thus, present background to accomplish excellence, achievement and progress through life. Research by Davoudi (2014) emphasized a strong relationship between spiritual intelligence and the creativity of the students, which eventually enhance their overall educational achievement. Many studies exhibited a positive relationship between spiritual intelligence and students' achievement (Sharma 2017; Makwana 2015; De-Blasio 2012).

The findings of the research show that Spiritual Intelligence and Student Engagement have a positive association between each other. The students who have greater spiritual intelligence demonstrate greater level of student engagement towards the learning process.

CONCLUSION

The findings of this research highlight the positive association existing between Spiritual Intelligence and Student Engagement. The students who have greater spiritual intelligence exhibit greater level of Student Engagement towards the learning process.

By considering the practical allegations of the research, this research gets into illumination to what extent the students particularly belonging to the collegiate level have spiritual intelligence and to what extent it involves towards focusing in aca-

demics. By doing this, educational organizations would be capable of designing their curriculum such that the engagement levels and interest between students towards academics is raised in that way allowing them to achieve better in academics.

Thus this study would help students as well as institutions achieve better in the academic segment. In future, this study may be extended in educational institutional beyond India and the reliability of the outputs might be compared with the current findings.

RECOMMENDATIONS

The current paper has made suggestions that comprise further research accomplishments in the sphere of spiritual intelligence in academic field. The current has also study put forward that new strategies need to be developed, strategies that possess the potential to progress the numerous core qualities and mental abilities such as the cognitive, emotional and spiritual intelligence that encourage various levels of consciousness. Thus, giving peak experiences, higher discipline and upright behaviour in students.

LIMITATIONS

The limitation of this study is that, for the current analysis Higher Education Institution (HEI) across India were alone considered. Another limitation is the inability to observe the personal experience of individual respondents as a result of adopting online survey tool for data collection.

REFERENCES

Ahmed A, Mohamed AA, Mahmood A et al. 2016. Spiritual intelligence (SQ): A holistic framework for human resource development. *Administration and Public Management*, 26: 60-77.

Akinyemi AF, Rembe S 2017. Challenges encountered by communities of practice in enhancing continuing professional teachers' development in high schools. *The Anthropologist*, 30(1): 8-16.

Amran Y, Dryer C 2008. The Integrated Spiritual Intelligence Scale (ISIS): Development and Preliminary Validation. Paper presented at the 116th Annual Conference of the American Psychological Association, Boston, MA. From http://www.yosiamram.net/papers (Retrieved on October 2015).

Anderson JC, Gerbing DW 1991. Predicting the performance of measures in a confirmatory factor analysis with a pretest assessment of their substantive validities. *Journal of Applied Psychology*, 76(5): 732-740.

- Appleton JJ, Christenson SL, Furlong MJ 2008. Student engagement with school: Critical conceptual and methodological issues of the construct. *Psychology in the Schools*, 45: 369-386.
- Brenner-Kemp S 2011. Student Voice in Educational Decision-Making Processes: A Key
- Career India 2016. Top 10 Cities for the Best Education in India. From https://www.careerindia.com/top-10-cities-the-best-education-india-011836.html (Retrieved on 15 October 2017).
- Chundi L, Feng Y 2017. Research trends on higher education internationalization in Mainland China: From the perspective of literature review. *The Anthropologist*, 29(2-3): 138-149.
- Churchill GA 1979. A paradigm for developing better measures of marketing constructs. *Journal of Marketing Research*, 16(1): 64-73.
- Cronbach LJ 1951. Coefficient alpha and the internal structure of tests. *Psychometrica*, 16(3): 297-334.
- David Hemsworth, Cristóbal Sánchez-Rodríguez & Bruce Bidgood 2008. A structural model of the impact of quality management practices and purchasing-related information systems on purchasing performance: A TQM perspective. *Total Quality Management, Business Excellence*, 19(1-2): 151-164.
- DeBlasio G 2012. An Examination of the Spiritual Intelligence and Social and Emotional Learning Skills of Public School Students in an Urban District. PhD Dissertation. USA: School of Professional, Western Connecticut State University.
- Devi RK, Rajesh NV, Devi MA 2017. Study of spiritual intelligence and adjustment among arts and science college students. *Journal of Religion and Health*, 56: 828-838.
- Eldiasty AM, Ibrahim AT 2018. The relationship between spiritual intelligence and a student's adaptation to college life: Implications for social work practice. *The Egyptian Journal of Social Work (EJSW)*, 1(5): 19 46.
- Emmons AR 2000. Spirituality and intelligence: problems and prospects. *The International Journal for the Psychology of Religion*, 10: 57–64.
- Fin JD, Rock DA 1997. Academic success among students at risk for school failure. *Journal of Psychology*, 82: 221-234.
- Fowler W 1995. Stages of Faith: The Psychology of Human Development and the Quest for Meaning. USA: Harner & Row.
- Geetha SN 2019. Examining the factors influencing the persistence of students. *Anthropologist*, 35(1-3): 1-9.
- Good TL, Brophy JE 2000. *Looking in Classrooms*. 8th Edition. New York: Longman.
- Hart SR, Stewart K, Jimerson SR 2011. The Student Engagement in Schools Questionnaire (SESQ) and the Teacher Engagement Report Form-New (TERF-N): Examining the preliminary evidence. Santa Barbara: University of California. Contemporary School Psychology (Formerly 'The California School Psychologist'), 15(1): 67-79.
- Hildebrant LS 2011. Spiritual Intelligence: Is it Related to a Leader's Level of Ethical Development? PhD Thesis. Minneapolis: Capella University.
- Jeloudar SY, Yunus AS 2011. Teachers' emotional intelligence and its relation with classroom discipline strate-

- gies based on teachers and students' perceptions. Journal of Psychology, 2(2): 95-102.
- Jimerson SR, Campos E, Greif, JL 2003. Toward an understanding of definitions and measures of school engagement and related terms. The California School Psychologist, 8: 7-27.
- Jimerson SR, Renshaw TL, Stewart K et al. 2009. Promoting school completion through understanding school failure: A multi-factorial model of dropping out as a developmental process. *Romanian Journal of School Psychology*, 2: 12-29.
- Jurkiewicz CL, Giaccalone RA 2004. A values framework for measuring the impact of workplace spirituality on organizational performance. *Journal of Business Eth*ics, 49: 129–142.
- King DB 2008. Rethinking Claims of Spiritual Intelligence: A Definition, Model, & Measure. Master's Thesis, Unpublished. Trent University: Ontario, Canada.
- Klein JI, Rice C, Levy J 2012. U.S. Education Reform and National Security. Independent Task Force Report No. 68. USA. From http://www.cfr.org/united-states/us-ed-ucation-reform-national-security/p27618 (Retrieved on DATE October 2015).
- Kulshrestha S, Singhal TK 2017. Impact of spiritual intelligence on performance and job satisfaction: A study on school teachers. *International Journal of Human Resource & Industrial Research*, 4(2): 1-6.
- Lam SF, Jimerson SR 2008. Exploring Student Engagement in Schools Internationally: Consultation Paper. Chicago, IL: International School Psychologist Association.
- Lambert DM, Harrington TC 1990. Measuring nonresponse bias in customer service mail surveys. *Journal of Business Logistics*, 11(2): 5–25.
- Makwana S 2015. Spiritual intelligence and job-satisfaction of higher secondary school's teachers. *Indian Jour*nal of Positive Psychology, 6(4): 429-431.
- Moosapour S, Mohammad Feizi, Hosein Alipour et al. 2013. Spiritual intelligence relationship with institutional citizenship behaviour of high school teachers in Ggerman city. *Journal of Business Management & Social Sciences Research*, 2(10): 72-76.
- Neill J 2008. Summarised extract from Neill (1994) Exploratory factor analysis of the short version of the adolescent coping scale perspectives of life in middle school. *The Qualitative Report*, 17(34): 1.
- Nunnally JC 1978. Psychometric Theory. 2nd Edition. New York: McGraw-Hill.
- Rasol Davoudi and Zahra Ataei Zanjani Nezhad. 2014. Relationship between emotional intelligence and creativity of secondary school students. European Academic Research, ii(6): 8613-8627
- Sharma S 2017. A study of relationship between spiritual intelligence and adjustment in relation to their age and family system of working women. *Indian Journal of Positive Psychology*, 8(3): 342-346.
- Smartt MJ (a.n.d.). The Relationship of Spiritual Intelligence to Achievement of Secondary Students. PhD Thesis. Lynchburg, VA: Liberty University.
- Smith B 2014. Spiritual Intelligence: Definitions and Measurements. USA: Fielding Graduate University.
- Smyth John 2006. 'When students have power': Student engagement, student voice, and the possibilities for school reform around 'dropping out' of school. *International Journal of Leadership in Education*, 9(4): 285-298.

Steinberg MA, McCray ED 2012. Listening to their voices: Middle schoolers' perspectives of life in middle school. *The Qualitative Report*, 17(34): 1-14.

Stevens JP 2002. Applied multivariate statistics for the social sciences. *Journal of Educational Statistics*, 47(2): 593-619.

Underhill E 1984. The Spiritual Life. Atlanta USA: Church

Publishing, Incorporated.

Vaughan F 2002. What is spiritual intelligence? *Journal of Humanistic Psychology*, 42: 16-33.

Wang MT, Willett JB, Eccles JS 2011. The assessment of

school engagement: Examining dimensionality and

measurement invariance by gender and race / ethnicity. <code>Journal of Psychology, 49: 465 - 480.</code>

Wigglesworth C 2002. Spiritual Intelligence And Why It Matters. Bellaire, TX: Conscious Pursuit Inc.

Wilber K 2006. Integral Spirituality: A Startling New Role for Religion in the Modern and Postmodern World. India: Integral Books.

Zohar D, Marshall I 2000. SQ - Spiritual Intelligence, The Ultimate Intelligence. NY: Bloom Burg.

Paper received for publication on March 2019 Paper accepted for publication on March 2019