

ARE ENTREPRENEURSHIP EDUCATORS CULTIVATING ENTREPRENEURS? ANALYSIS OF TRANSFORMATIONAL ATTRIBUTES

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ABSTRACT

The entrepreneurship educators' role is becoming very critical because they cultivate, educate and transform the potential entrepreneurs into ultimate business founders. As a transformational leader, entrepreneurship educator's role is of great importance that energetically persuades, inspires, stimulates, motivates and leads students for entrepreneurship with the provision of real-life business/entrepreneurial knowledge. This study has analysed whether the top entrepreneurship educators in the world have the required transformational leadership attributes. This study is descriptive in nature and has used quantitative survey as main research method. A questionnaire was sent to the top 100 entrepreneurship educators via email. After collecting the responses, descriptive statistics, factor analysis, and comparative analysis were run for attribution extents; and academic and practical experiences. The results indicate that most of the entrepreneurship educators possess transformational leadership attributes that are required to teach the entrepreneurship courses. The entrepreneurship educators combine their practical experiences with theoretical teaching practices to teach the students effectively. This study indicates some implications for the improvement of entrepreneurship educators' effectiveness in entrepreneurship teaching. Further, entrepreneurship educators' transformational attributes are required to be improved through educational and training programs more effectively.

Keywords: Entrepreneurship educators; Transformational leadership attributes; Idealized influence; Inspirational motivation; Intellectual stimulation; Individualized consideration; Entrepreneurship.

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1. INTRODUCTION

Entrepreneurship is progressively becoming a substantial component of economic environments, both at national and global levels (BarNir et al., 2011). Developing new entrepreneurs has been identified as a key strategic task in the policy programs of many nations (Taatila, 2010) and entrepreneurship education has great importance in this regard (Nasr and Boujelbene, 2014).

Studies reveal that entrepreneurship educators play a vital role in implementing entrepreneurial education in its true spirits (Ruskovaara and Pihkala, 2013). In this regard, entrepreneurship educators actively lead, motivate and inspire students' interest toward entrepreneurship by providing real-life business experiences (Hannon, 2005; Keat et al., 2011). Unfortunately, support for entrepreneurship in higher education lacks academic staff adequacy generally worldwide and specifically in Europe (Taatila, 2010). Europe (excluding United Kingdom (UK)) is having only 9% of the entrepreneurship educators shaping the direction of formal entrepreneurship (Hershman, 2015). From the European view, teacher training is being incorporated into national policies for teachers' professional development (European Training Foundation (ETF), 2010). Similarly, in the United States (US), formal entrepreneurship Ph.D. programs have been started to develop adequate academic staff who can join the team of apparently professional entrepreneurship educators (Hindle, 2007) Thus in the developed world, the education system has already started promoting entrepreneurship by developing the entrepreneurs and entrepreneurship educators who in turn will develop the student entrepreneurs too.

In regard to leadership in education, literature has been keen to explore the consequences of different leadership styles in educational institutions (Cetin and Kinik, 2015). Entrepreneurship also has a clear delineation for the behavioural approach to predict entrepreneurial behaviour (Cogliser and Brigham, 2004) where teachers may play a vital role as expert guide to promote expert learning processes enlightening students' creative thoughts, as well as their potential in entrepreneurial undertakings by interactive teaching (Wei and Guo, 2010). From now, it can be said that teachers as transformational leaders prepare students to develop their entrepreneurial potential. It is, therefore, essential to know either the entrepreneurship educators have transformational attributes fostering the students toward entrepreneurship. The results suggest some important implications: first, this allows assessing to what extent entrepreneurship educators possess transformational attributes, second for entrepreneurship educators' training needs and third for higher education institutions to recruit the teachers with optimal such attributes.

2. LITERATURE REVIEW

Entrepreneurship educators play a vital role in the realization of educational objectives for instance, entrepreneurship education (Birdthistle et al., 2007). The main aspect is what an educator does and which measurement tools the educator uses to recognize achieving entrepreneurship educational objectives (Keat et al., 2011). Researchers reveal that teacher functions as a leader in the classroom (Bolkan and Goodboy, 2009; Pounder, 2008). Some scholars also advise that leadership models established in business settings are also pertinent to study teacher's behaviour (Chory and McCroskey, 1999) and could be replicated in classroom settings (Baba and Ace, 1989; Pounder, 2003, 2008) where "instructors replace managers and participants or students replace subordinates in the leadership dyad" (Pounder, 2003, p. 9). As entrepreneurship education aims

mainly to enhance entrepreneurial orientation and to transform the individual's intentions towards business start-ups. Most of the educators implementing the entrepreneurial education are academicians having different forms of theoretical and practical entrepreneurship knowledge (Sommer and Haug, 2011). First, "entrepreneurship educators teach foundation principles, often considered "the soft stuff," of living with uncertainty, entrepreneurial mindset, decision-making, developing empathy, business design, culture, life-work balance, social responsibility, and leveraging failure" (Neck and Greene, 2011, p. 56). Second, "an entrepreneurship educator helps the students to find opportunities that they are passionate about and letting them develop these opportunities" (Powell, 2013, p. 108). Third, the entrepreneurship educators impart knowledge of real business practices through advising to prospective entrepreneurship students (Seikkula-Leino et al., 2015). Hence, "the teachers are in the central role in operationalizing entrepreneurship education, and more specifically, in finding the best practices" (Ruskovaara et al., 2011, p. 2).

As a transformational leader, entrepreneurship educator's role is of great importance that energetically leads and inspires students' interest for entrepreneurship with the provision of knowledge (Baba and Ace, 1989), skills (Renko et al., 2015; Taatila, 2010) and real-life business experiences (Hannon, 2005) influencing students' behaviours positively (Bolkan and Goodboy, 2009). Furthermore, transformational leaders "transform or change the basic values, beliefs, and attitudes of followers" (Podsakoff et al., 1990, p. 108) and "transforming the existing order of things as well as directly addressing followers' needs for meaning and development" (Conger, 1999, p.149). Thus, teacher's role as a transformational leader is of great importance to attract students intended towards entrepreneurship. Bass (1985) purposed four transformational leadership dimensions, namely idealized influence, inspirational motivation, intellectual stimulation and individualized consideration. These dimensions function separately in the transformation process and have been discussed in detail in the proceeding paragraphs.

Idealized influence is alike charisma through which leaders are seen perfect and worthy to be followed (Van Knippenberg and Sitkin, 2013). Building persuasive vision is an underlying task of transformational leadership models (Bass, 1985). The transformational leader works like a role model for followers (Van Knippenberg and Sitkin, 2013) because followers emulate the leader and take on his or her thoughts while the significance of a teacher as a role model is well recognized (Crosby, 2000). A teacher not only serves as a model in the classroom while teaching but also doing his or her entrepreneurial activities. Hence, the presence or known role model in the social circles like family, relatives or friends put strong influence (BarNir et al., 2011). Individuals compare their own circumstances and experiences, capabilities, motives and likely actions to discover individuals' own prospective future to those of the leaders (BarNir et al., 2011; Buunk et al., 2007). In the entrepreneurship context, through such an interaction between leader as teacher and follower as a student, expectations are probably to effect. The teacher as an entrepreneur should exemplify what students should learn from them through observing and imitating not just their teachers' sayings but from their practical and knowledge, attitudes, and skills they demonstrate.

Inspiration is an emotional element termed as change of heart or change of mind (Falcioni, 2001) while motivation is the process that initiates behaviour (Gilbert et al., 2016). Inspirational motivation entails communicating an inspiring vision and great performance anticipations (Van Knippenberg and Sitkin, 2013). Transformational leaders are often considered inspirational as they use inspirational appeals and lead with clear goals (Cogliser and Brigham, 2004), motivate others through generating enthusiasm and challenging (Cetin and Kinik, 2015) and like teacher he/she get the

students involved in the classroom for better motivation, confidence, and performance (Bolkan and Goodboy, 2009). They transform follower's personal values by fostering a climate where visions could be shared (Cetin and Kinik, 2015). Politis (2008) has indicated that "entrepreneurial teaching attempts to stimulate entrepreneurial activities through formal education, reflecting motivation and developing entrepreneurial knowledge" (p. 65). Such inspiration will be operationalized by the teacher as a leader or trigger resulting transformed intentions towards entrepreneurship.

Intellectual stimulation is the followers' encouragement "to challenge existing assumptions, to reframe problems, and to approach old situations in new ways" (Eisenbeiss et al., 2008, p. 1439). Transformational leaders contribute to creativity and innovation in organizations (Li et al., 2015) as a successful entrepreneurial trait (Baba and Ace, 1989; Cogliser and Brigham, 2004). Similarly, entrepreneurship educators improve students' creativity, innovativeness and risk-taking propensity for entrepreneurial activity by applying innovative teaching methods (Pihie and Bagheri, 2011). Followers (students) are empowered and encouraged to express their opinions and thoughts (Gilbert et al., 2016). Instead of criticism, leaders help and motivate the followers to modify or to build new ideas for problem-solving and solution provision (Kelloway et al., 2003). Idea generation and innovations are stimulated by getting engaged in behaviours like opportunity recognition, most importantly their implementation with intent towards new business start-up. Now the question is that who will engage the followers (students) in such a worthy activity? The only one is the leader (educator) who transforms innovative and entrepreneurial behaviour while educating the individuals.

Individualized consideration means to treat followers as individuals and assisting them differently in meeting their needs relating to thoughtfulness and mentorship (Bass, 1985). Transformational leaders identify individuals' specific needs and capabilities building one-to-one relation (Renko et al., 2015). Key indicators of such a style are "recognizing differences among people in their strengths and weaknesses, being an active listener, encouraging a two-way exchange of views and promoting self-development" (Cetin and Kinik, 2015, p. 521). Leaders with high individualized consideration engage followers in a behaviour that would be supportive of proceeding whatever action is needed for problem-solving and creative solutions (Li et al., 2015).

Thinking in a new way and offering new ideas face implicit or explicit criticisms and followers are often reluctant in front of their biased and abusive leaders (Li et al., 2015). In this regard, individualized concern supports, encourages and teaches in an exceptional way. One study exposed that the students appreciated discussed suggestions from teachers on the tasks they were doing (Sokol et al., 2015). Transformational teachers almost possess a progressive teaching style for active learning through discussion and motivation (Bolkan and Goodboy, 2009); and admiration and empowerment (Bass, 1985). In the context of teacher and student relation, implementation is more on the part of students rather than the teachers as students have to convert their ideas into opportunity identification and business start-up while the leader is responsible for fostering such an application-oriented and supportive behaviour.

3. METHODOLOGY

The current study involves assessment of transformational attributes through factor analysis. We followed the sampling rule of hundred recommended by Gorsuch (1983) and Kline (1979) for factor analysis consistent with the same analytical study of Cetin and Kinik (2015). Hence, the

targeted group of respondents for the study consists of 100 leading entrepreneurship educators from the US (61%), Europe including UK (34%), and Asia (5%) published at Hot Topics Community (Hershman, 2015). We selected our respondents on the basis of the percentage of the top entrepreneurship educators in each of the region for example, 61% of the top entrepreneurship educators are based in US followed by UK 17% and others (Europe 9% and Asia 3%) (Hershman, 2015). These entrepreneurs have been nominated by the tech executives, entrepreneurs and investors making up the Hot Topics community and meet one or more of the following criteria:

- Have worked within a Tier 1 university or business school
- Have helped shape the direction of formal entrepreneurship learning
- Have had articles of significant impact on the subject of entrepreneurship published in academic journals

A database for contact information of such entrepreneurship educators was created by searching their respective university's faculty section. Furthermore, this study employed questionnaire survey method for the purpose of data collection. The questionnaire was taken from Multifactor Leadership Questionnaire (MLQ) developed by Avolio and Bass (2004) which comprise different leadership behaviours. As per focus of this study, we used Bass's (1985) transformational leadership dimensions namely idealized influence, inspirational motivation, intellectual stimulation and individualized consideration. This instrument is basically developed in organizational context focusing leader and subordinates, but the application of organizational concepts in the classroom is warranted (Chory and McCroskey, 1999; Bolkan and Goodboy, 2010), thus we have replaced the subordinate with the students and asked the entrepreneurship educators about their leadership behaviour with the students. The modifications in the items were discussed with the senior researchers and were approved. The questionnaire was also reliable with Cronbach's alpha value of (.79) being in the acceptance range of 0.70 to 0.95 as suggested by (DeVellis, 2003).

The questionnaire contained two sections: the first one was about the transformational attributes while the second section comprised of demographics like age, gender, teaching and practical experiences. All the hundred entrepreneurship educators were sent an online link to the questionnaire as following the method used by Seikkula-Leino et al. (2015). They were asked to rate the frequency of their leadership descriptions using 5 points Likert scale (Not at all=1, Once in a while=2, Sometimes=3, fairly often=4, frequently, if not always=5). One-fifth of those e-mails (14) were undeliverable. In the first attempt we received 56 responses, then after two weeks a reminder was sent and in total, we received total 65 out of 86 responses (as 14 were undeliverable) with a 65% response rate. Following are some frequencies of respondents in Table 1.

Table 1: Frequencies of the Demographic Variables

	Gender		Age			Teaching experience (Years)			Practical experience (Years)		
	Male	Female	≤40	41-45	46≥	≤4	5-8	9≥	≤4	5-8	9≥
Account	51	14	14	34	17	13	22	30	20	9	36
Percentage	78.46	21.54	21.54	52.3	26.15	20.00	33.84	46.15	30.77	13.84	55.38

4. ANALYSIS AND RESULTS

The data has been analysed utilizing Factor Analysis technique in two steps. First is the factor extraction which provides the eigenvalues related to each linear factor. In Table 2 the eigenvalues associated with each factor of transformational leadership represents the variance explained by that specific linear factor along with the eigenvalues in terms of percentage of variance explained (so factor one describes 25.8% of total variance). It is clear that first few factors describe the large value of variance (especially factor 1) relative to subsequent factors which describe small values of variance. All of the factors with eigenvalues greater than 1 have been extracted accounting for 4 factors. In the second part of the Table 2 as labelled “Rotation Sums of Squared Loadings” the after rotation eigenvalues of the factors have been displayed. Rotation optimizes the factor structure and one result in equalizing the relative importance of four factors (Field, 2005). Before rotation, the first factor described a large amount of variance relative to the remaining three (e.g. 25.8% compared to 13.158%, 11.06%, and 8.722%). However, after extraction, the amount of variance accounts for 18.428%, (compared to 14.387%, 13.207 and 12.718% respectively).

Table 2: Factor Analysis Total Variance Explained

	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
Role model effect	3.096	25.800	25.800	2.211	18.428	18.428
Students’ faith in leader	1.579	13.158	38.957	1.726	14.387	32.815
Teacher –student association	1.327	11.060	50.017	1.585	13.207	46.022
Provision of vision	1.047	8.722	58.739	1.526	12.718	58.739
Awakening work potential	.918	7.647	66.386			
Helping students	.848	7.070	73.456			
Innovativeness	.796	6.631	80.087			
Problem solving	.637	5.304	85.391			
Nurturing ideas	.560	4.668	90.060			
Interest in students’ work	.507	4.228	94.288			
Assigning individual projects	.395	3.295	97.584			
Students’ involvement	.290	2.416	100.000			

Extraction Method: Principal Component Analysis

Secondly, we have used rotated component matrix, which shows the factor loadings for each variable onto each factor in Table 3. During the analysis process, we selected the option to suppress factor loadings less than 0.4 so the matrix contains only factor loadings more than 0.4 as the suppression of such factor loading cut-off point enable to make interpretations with considerable ease (Field, 2005). The questions loaded highly in the rotated component matrix assist in identifying the variable. The questions highly loaded in component 1 like innovativeness (.665), problem-solving (.568) and creating ideas (.716) seem to relate to intellectuality. Thus, these questions indicate the factor as teacher’s intellectual stimulation ability. The question loaded highly on component 2 provision of vision (.817), awakening work potential (.766) and helping students (.400) seem to be motivational

behaviour, and thus these questions constitute teachers' inspirational motivation. The question loaded highly on component 3 interest in students' work (.547), assigning individual projects (.687) and students' involvement (.784) seem to the question loaded highly on component 4 like role model effect (.604), students' faith in teacher (.703) and teacher –student association (.435) seem to charismatic, thus these questions constitute idealized influence.

Table 3: Factor Analysis Rotated Component Matrix

	Components			
	1	2	3	4
Role model effect	.177	.310	.066	.604
Students' faith in leader	-.201	-.051	.013	.703
Teacher –student association	.184	-.039	.345	.435
Provision of vision	.025	.817	-.038	.284
Awakening work potential	.055	.766	.248	-.210
Helping students	-.014	.400	.124	.048
Innovativeness	.665	.288	.079	.058
Problem solving	.568	.109	.065	.327
Nurturing ideas	.716	-.153	.063	.209
Interest in students' work	.366	.123	.547	-.178
Assigning individual projects	.339	.002	.687	-.255
Students' involvement	.342	-.075	.784	.156

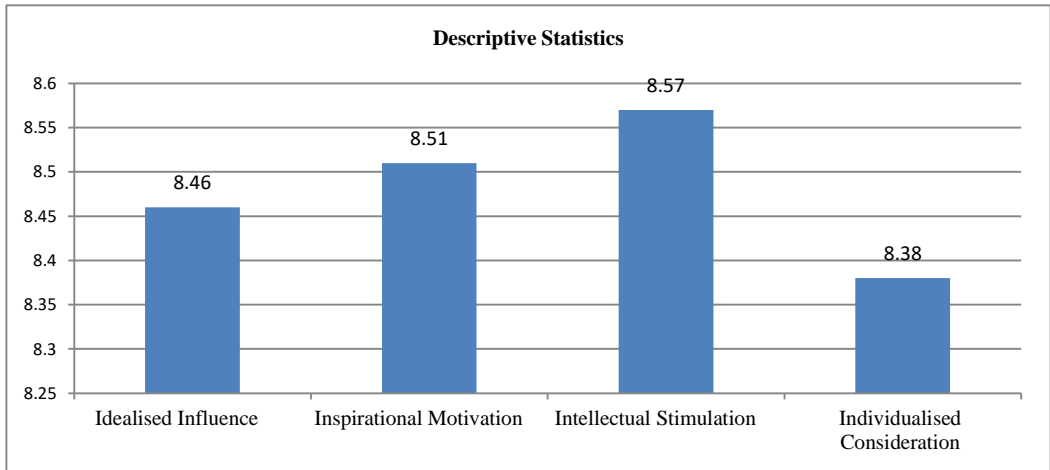
Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

Rotation Convergence: Rotation converged in 6 items

We transformed the questions into composite constructs for checking accumulative transformational leadership attributes. In the Figure 1 we have shown all of the variables under assessment with their mean values gained from descriptive analysis. Looking at the highest mean (8.57) for intellectual stimulation followed by inspirational motivation (8.51), idealized influence (8.46) and individualized consideration (8.38). We can conclude that all the variables strongly account for transformational leadership attributes among the entrepreneurship educators to cultivate potential entrepreneurs by teaching entrepreneurship.

Figure 1: Composite Constructs of Transformational Leadership



Analysis of the data reveals that the entrepreneurship educators have transformational attributes consistent with the organizational leaders across different dimensions of transformational leadership behaviour as illustrated in Table 4. The most optimal behaviour of the teachers is intellectual stimulation through which they nurture ideas, problem solving and innovativeness evidencing with (M= 4.03, SD= .33) and (M=4.08, SD=.72) for academic and practical experience respectively. They are well equipped with inspirational motivation to affect the student’s entrepreneurial inclination with the (M= 3.78, SD=.37) and (M=3.73, SD=.31) for academic and practical experience respectively. Teachers are also able to take interest in students’ work and get them involved in group work by individualized consideration with the (M=3.70, SD=.33) and (M=3.65, SD=.27) for academic and practical experience respectively. The teachers perceived themselves as capable to put charismatic effect as but with less than other attributes with (M=3.50, SD= .19) and (M=3.66, SD=.41) for academic and practical experience respectively. In controlling the teachers’ practical and teaching experience, entrepreneurship educators combine both the theory and practice in their teaching to put a transformational effect on students’ behaviours.

Table 4: Comparative Analysis

Transformational leadership descriptions	Academic experience (Years)		Practical experience (Years)	
	Mean	SD	Mean	SD
Idealized Influence	3.50	.19	3.66	.41
Inspirational Motivation	3.78	.37	3.73	.31
Intellectual Stimulation	4.03	.38	4.08	.72
Individualized Consideration	3.70	.33	3.65	.27

5. DISCUSSION

A better understanding of teachers' transformational leadership behaviour is prominently urgent if the entrepreneurship educators are responsible for transforming the students' entrepreneurial behaviours. However, the role of entrepreneurship educators has been challenged by different conceptions in a comprehensive learning context (Breugst et al., 2012) which have possibly notable impact and drive teacher's attitude (Hannon, 2006). Assessing teachers' perceived capacity to teach a particular subject can improve their positive attitude toward that subject and teaching effectiveness. As student's behavior depend on the thoughts formed by his or her believes and values about the basic purpose of education particularly entrepreneurship and entrepreneurship educator's role (Hannon, 2006). Hence, our study evidences this fact by showing that teachers perceive themselves having students' faith in them in terms of leadership behavior.

Furthermore, teacher's behavior reveals the affected learning environment and the influenced students' motivation (Pihie and Bagheri, 2011). Hence, it can be said that teachers' behavior is instrumental in impacting the students' behavior. Being transformational leaders, entrepreneurship educators define values and merits of entrepreneurship for students' personal and social development in a visionary context. As they teach entrepreneurship, so they establish vision among the students about an entrepreneurial venture which the students will have to accomplish along with the completion of their education. They give views on students' performance and nurture students' work potential with a high capacity of transformational leadership. In entrepreneurship context, whenever students need support, the teachers behave supportively with the students. In contrast, suppose students lacking visionary and nurturing support, may lead them to be less motivated toward entrepreneurship career. Hence, it is the inspirational motivation that increases attitudes and intention with increased chances that students will be an entrepreneur in the future (Souitaris et al., 2007). Additionally, our study evidences that entrepreneurship educators are considered transformational leaders as they put inspirational and motivational influence on students with a high capacity accumulatively.

Teachers as expert guide are expected to play a vital role in promoting expert learning process enlightening students' potential in entrepreneurial undertakings by interactive teaching (Wei and Guo, 2010). Teachers perceive themselves highly capable in performing the transformational role with the ability of intellectual stimulation to enhance students' entrepreneurship skills like innovativeness, creativity, and problem-solving. High intellectual stimulation seems to enable the teachers to deliver entrepreneurship education with innovative and challenging methods like experiential learning and creative problem solving based learning. In this way, the entrepreneurship educators establish a culture where students are nurtured for their ideas, encouraged for their mistakes, exploited for their special expertise.

Furthermore, the entrepreneurship educators are more expected to deal effectively with the complexities and challenges of teaching entrepreneurship (Tschannen-Moran and Hoy, 2001). Teachers with high individualized consideration took interest in their students work and consider students' mistakes as a part of entrepreneurship learning process. Entrepreneurship educators engage students in entrepreneurial activities to improve students' aptitude to cope with challenges faced

during new venture creation (Zhao et al., 2005). In this way, the teachers engaged in the learning process of a specific field (here: entrepreneurship) can involve their students in the process of teaching that field (Tschannen-Moran and Johnson, 2011). Thus, the results of this study show that entrepreneurship educators scored high in individualized consideration which might engage the students in entrepreneurial activities through group involvement and individual projects assignments.

In the context of controlling teachers' practical and teaching experience, the results of this study reveal that overall the entrepreneurship educators have transformational leadership behavior consistent with the entrepreneurs. From the teachers' perception, the results of Table 4 show they are collectively capable of performing all of the critical roles and tasks of a transformational leader. This can be explained that the transformational teachers perhaps combine the actual work experience with the academic teaching experiences as Bennett (2006) found that teachers' entrepreneurial explanations are subjective to their qualifications and working experience in business settings. Hence, the combination of entrepreneurship theory and practice can be assumed a unique attribute of the transformational leadership behavior of entrepreneurship educators, as it is argued that only a few teachers have personally entrepreneurship experience (Seikkula-Leino et al., 2015).

In summary, most of the entrepreneurship educators have revealed their transformational leadership attributes indicating that they teach in an entrepreneurial manner. Mostly they have scored highly in dimensions of transformational leadership attributes with the exception of two dimensions with moderate and one with low. They combine their practical experience with the theoretical teaching practices to teach the students effectively which cultivate and transform the potential entrepreneurs into business founders.

6. CONCLUSION, IMPLICATIONS AND RECOMMENDATIONS

The results of this study reveal that entrepreneurship educators are well equipped with transformational leadership behaviour. Through assessing teachers' transformational leadership attributes or behaviour, their teaching practices and performance can be predicted in the classroom setting (Bayraktar, 2011). This study might be helpful to understand the operationalization of entrepreneurship education and entrepreneurship by adding the transformational leadership dimensions in the educational content. These aspects of teachers' transformational behaviour need to be improved through more effective entrepreneurship educators' education and training programs. The policy divisors, as well as the institutions intending to invest in the development of entrepreneurship education, might also get assistance from the results of this study.

As teachers' teaching practices and performance can be predicted in the classroom setting (Adedoyin, 2015), so in the future, it can be researched that how the performance of entrepreneurship educators can be gauged through their transformational leadership behaviour. Continuous learning provides knowledge as well as real life experience to the students to solve emerging problems with creative solutions and motivate for interesting work (Taatila, 2010). Hence, a study can be conducted in the context of teachers' entrepreneurial attributes and its effect on students' entrepreneurial behaviour.

REFERENCES

- Adedoyin, O. O. (2015). Factor–analytic study of teachers’ perceptions on self-efficacy in Botswana junior secondary schools: Implications for educational quality. *European Journal of Educational Studies*, 2(2), 139-155.
- Avolio, B. J. & Bass, B. M. (2004). Multifactor leadership questionnaire. Manual and sampler set. (3rd ed.) Redwood City, CA: Mind Garden.
- Baba, V. V., & Ace, M. E. (1989). Serendipity in leadership: Initiating structure and consideration in the classroom. *Human Relations*, 42(6), 509-525.
- BarNir, A., Watson, W. E., & Hutchins, H. M. (2011). Mediation and moderated mediation in the relationship among role models, self-efficacy, entrepreneurial career intention, and gender. *Journal of Applied Social Psychology*, 41(2), 270-297.
- Bass, B.M. (1985). Leadership and performance beyond expectations. New York: Free Press.
- Bayraktar, S. (2011). Turkish preservice primary school teachers' science teaching efficacy beliefs and attitudes toward science: The effect of a primary teacher education program. *School Science and Mathematics*, 111(3), 83-92.
- Bennett, R. (2006). Business lecturers' perceptions of the nature of entrepreneurship. *International Journal of Entrepreneurial Behavior & Research*, 12(3), 165-188.
- Birdthistle, N., Hynes, B., & Fleming, P. (2007). Enterprise education programmes in secondary schools in Ireland: A multi-stakeholder perspective. *Education+ Training*, 49(4), 265-276.
- Bolkan, S., & Goodboy, A. K. (2009). Transformational leadership in the classroom: Fostering student learning, student participation, and teacher credibility. *Journal of Instructional Psychology*, 36(4), 296-307.
- Bolkan, S., & Goodboy, A. K. (2010). Transformational leadership in the classroom: The development and validation of the student intellectual stimulation scale. *Communication Reports*, 23(2), 91-105.
- Breugst, N., Domurath, A., Patzelt, H., & Klaukien, A. (2012). Perceptions of entrepreneurial passion and employees' commitment to entrepreneurial ventures. *Entrepreneurship Theory and Practice*, 36(1), 171-192.
- Buunk, A. P., Peiró, J. M., & Griffioen, C. (2007). A positive role model may stimulate career-oriented behavior. *Journal of Applied Social Psychology*, 37(7), 1489-1500.
- Cetin, M. O., & Kinik, F. S. F. (2015). An Analysis of academic leadership behavior from the perspective of transformational leadership. *Procedia-Social and Behavioral Sciences*, 207, 519-527.
- Chory, R. M., & McCroskey, J. C. (1999). The relationship between teacher management communication style and affective learning. *Communication Quarterly*, 47(1), 1-11
- Conger, J. A. (1999). Charismatic and transformational leadership in organizations: An insider's perspective on these developing streams of research. *The Leadership Quarterly*, 10(2), 145-179.
- Cogliser, C. C., & Brigham, K. H. (2004). The intersection of leadership and entrepreneurship: Mutual lessons to be learned. *The Leadership Quarterly*, 15(6), 771-799.
- Crosby, R. H. J. (2000). AMEE Guide No 20: The good teacher is more than a lecturer-the twelve roles of the teacher. *Medical Teacher*, 22(4), 334-347.
- DeVellis R. (2003) Scale development: theory and applications: theory and application. Thousand Oaks, CA: Sage.
- Eisenbeiss, S. A., Van Knippenberg, D., & Boerner, S. (2008). Transformational leadership and team innovation: integrating team climate principles. *Journal of Applied Psychology*, 93(6), 1438.

- European Training Foundation (ETF) (2010), "A pilot action on entrepreneurship education: High level reflection panel", working paper presented at the Fifth Cluster Meeting, 18-19 March, Zagreb.
- Falcioni, J.G., 2001. Editorial: heart and minds. *Mechanical Engineering* (4th April).
- Field, A. P. (2005). *Discovering statistics using SPSS* (2nd edition). London: Sage.
- Gilbert, S., Horsman, P., & Kelloway, E. K. (2016). The motivation for transformational leadership scale: An examination of the factor structure and initial tests. *Leadership & Organization Development Journal*, 37(2), 158-180.
- Gorsuch, R. L. (1983). *Factor analysis* (2nd ed.). Hillsdale, NJ: Erlbaum.
- Hannon, P. D. (2005). The journey from student to entrepreneur: A review of the existing research into graduate entrepreneurship. In *IntEnt2005 Conference*, University of Surrey, UK
- Hannon, P. D. (2006). Teaching pigeons to dance: sense and meaning in entrepreneurship education, *Education + Training*, 48(5), 296 – 308.
- Hershman, J. (2015). The 100 Leading Professors In The Field Of Entrepreneurship. Retrieved from <https://www.hottopics.ht/stories/education/the-100-top-professors-of-entrepreneurship-worldwide/>
- Hindle, K. (2007). Teaching entrepreneurship at university: from the wrong building to the right philosophy. *Handbook of Research in Entrepreneurship Education*, 1, 104-126.
- Keat, O. Y., Selvarajah, C., & Meyer, D. (2011). Inclination towards entrepreneurship among university students: An empirical study of Malaysian university students. *International Journal of Business and Social Science*, 2(4) 206-220.
- Kelloway, E. K., Barling, J., Kelley, E., Comtois, J., & Gatien, B. (2003). Remote transformational leadership. *Leadership & Organization Development Journal*, 24(3) 163– 171.
- Kline, P. (1979). *Psychometrics and psychology*. London: Academic Press.
- Li, C., Zhao, H., & Begley, T. M. (2015). Transformational leadership dimensions and employee creativity in China: A cross-level analysis. *Journal of Business Research*, 68(6), 1149-1156.
- Nasr, K. B., & Boujelbene, Y. (2014). Assessing the impact of entrepreneurship education. *Procedia-Social and Behavioral Sciences*, 109, 712-715
- Neck, H. M., & Greene, P. G. (2011). Entrepreneurship education: known worlds and new frontiers. *Journal of Small Business Management*, 49(1), 55-70.
- Pihie, Z. A. L., & Bagheri, A. (2011). Teachers' and students' entrepreneurial self-efficacy: Implication for effective teaching practices. *Procedia-Social and Behavioral Sciences*, 29, 1071-1080.
- Podsakoff, P. M., MacKenzie, S. B., Moorman, R. H., & Fetter, R. (1990). Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors. *The leadership Quarterly*, 1(2), 107-142.
- Politis, D. (2008), "Does prior start-up experience matter for entrepreneurs' learning? A comparison between novice and habitual entrepreneurs", *Journal of Small Business and Enterprise Development*, 15(3) 472-89.
- Pounder, J. S. (2003). Employing transformational leadership to enhance the quality of management development instruction. *Journal of Management Development*, 22(1), 6–13.
- Pounder, J. S. (2008). Full-range classroom leadership: Implications for the cross-organizational and cross-cultural applicability of the transformational-transactional paradigm. *Leadership*, 4(2), 115-135.
- Powell, B. C. (2013). Dilemmas in entrepreneurship pedagogy. *Journal of entrepreneurship education*, 16, 99-112.

- Renko, M., El Tarabishy, A., Carsrud, A. L., & Brännback, M. (2015). Understanding and measuring entrepreneurial leadership style. *Journal of Small Business Management*, 53(1), 54-74.
- Ruskovaara, E., & Pihkala, T. (2013). Teachers implementing entrepreneurship education: classroom practices. *Education+ Training*, 55(2), 204-216.
- Ruskovaara, E., Pihkala, T., Rytkölä, T., & Seikkula-Leino, J. (2011). Entrepreneurship in entrepreneurship education—practices in Finnish basic and secondary education level. In ICSB World Conference Proceedings (p. 1). International Council for Small business (ICSB).
- Seikkula-Leino, J., Satuvuori, T., Ruskovaara, E., & Hannula, H. (2015). How do Finnish teacher educators implement entrepreneurship education? *Education+ Training*, 57(4), 392-404.
- Sokol, A., Gozdek, A., & Figurska, I. (2015). The Importance of Teacher Leadership in Shaping the Creative Attitudes of Students. *Procedia-Social and Behavioral Sciences*, 197, 1976-1982.
- Sommer, L., & Haug, M. (2011). Intention as a cognitive antecedent to international entrepreneurship—understanding the moderating roles of knowledge and experience. *International Entrepreneurship and Management Journal*, 7(1), 111-142.
- Souitaris, V., Zerbini, S., & Al-Laham, A. (2007). Do entrepreneurship programmes raise entrepreneurial intention of science and engineering students? The effect of learning, inspiration and resources. *Journal of Business venturing*, 22(4), 566-591.
- Tschannen-Moran, M., & Hoy, A. W. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education*, 17(7), 783-805.
- Tschannen-Moran, M., & Johnson, D. (2011). Exploring literacy teachers' self-efficacy beliefs: Potential sources at play. *Teaching and Teacher Education*, 27(4), 751-761.
- Van Knippenberg, D., & Sitkin, S. B. (2013). A critical assessment of charismatic—Transformational leadership research: Back to the drawing board? *The Academy of Management Annals*, 7(1), 1-60.
- Tautila, V. P. (2010). Learning entrepreneurship in higher education. *Education+ Training*, 52(1), 48-61.
- Wei, Y., & Guo, W. (2010). Construction of the entrepreneurship education teachers based on the characteristics of business education level. *International Education Studies*, 3(2), 91.
- Zhao, H., Seibert S. E., & Hills, G. E. (2005). The mediating role of self-efficacy in the development of entrepreneurial intentions. *Journal of Applied Psychology*, 90(6), 1265–1272.