“Green entrepreneurship inclination among Generation Y: the road towards a green economy”

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Green entrepreneurship inclination among Generation Y: the road towards a green economy

Abstract

Green entrepreneurship is considered as one of the major drivers for the green economy. Due to the sustainable development issue, the concept of green entrepreneurship is gaining a significant momentum. This study investigates the inclination towards green entrepreneurship among 100 business students who represent the Generation Y cohort. Specifically, it aims to examine the effects of sustainable orientation, sustainable education and general self-efficacy on green entrepreneurship inclination. An empirical test was carried out and the findings showed that sustainable orientation and sustainable education are found to have statistically significant relationships with the inclination towards green entrepreneurship among generation Y. Self-efficacy on the one hand was found to be non-significant. It is anticipated that the findings of the study could serve as a guideline for the educators and policymakers in formulating curriculum and policies that are aligned with the go-green avowal.

Keywords: green entrepreneurship, Generation Y, green economy, entrepreneurial inclination.
JEL Classification: M10, M13.

Introduction

Green economy is considered as the trail to sustainable development, poverty eradication, and quality life (UNEP, 2011). Shifting towards green economy can assist in overcoming environmental related problem, the depletion of scarce natural resources, and the well-being of those at the bottom of the economic pyramid (Rahman, Amran, Ahmad & Taghizadeh, 2013). Ample of evidences also submit that heading towards a green economy has wide-ranging economic and social justification (Richomme-Huet & de Freyman, 2014). With such rationality, go-green concept has been echoing around the globe. Further, in heading towards green economy, green entrepreneurship is acclaimed as one of the key mechanisms that would be worthwhile to weight on. This push for sustainability has also resulted in the creation of a whole new entrepreneurship paradigm relating to how to conduct business in an environmentally responsible manner. Entrepreneurship has already been acknowledged as a significant channel for a better sustainable society (Rahman, Amran, Ahmad & Taghizadeh, 2013). The focus on comprehending environ-mentalism and sustainability business practices has exposed that green orientation can be worthwhile in terms of business bottom line and world natural resources. As such, green entrepreneurship is perceived as a progressively pertinent trend from a development perspective; nonetheless the enquiry on the literature suggests that it is yet largely under-researched (Pachaly, 2012).

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Green economy and sustainable growth can only be achieved by appropriately cultivating an elemental shift in the mind-set and attitude of the society for deep changes in the way viewing green practices, particularly in businesses. The focus on Gen Y is a deliberate effort to foster sustainable future business ventures. With roughly twice the size of generation X (Hewlett et al., 2009), Gen Y has grown-up in a world which is very dynamic, complex, and full of new things (Szamosi, 2006). In a study, which compares three generations, disclosed that 86 percent of Gen Y accepts as true that they should give back to the society through their work (Hewlett et al., 2009). The entrepreneurial spirit has been located more among the Gen Y compared to rest of the current generations (Szamosi, 2006). Therefore, Gen Y is seen as the prospective new breed of entrepreneurs and delving into their proclivity towards green entrepreneurship is presumed to be felicitous.

1. Literature review

The conceptual foundation of 'sustainable development' is seen as a development that meets the need of the present without compromising the ability of the future generations to meet their own needs (Brundtland, 1987). The concept of sustainable development brings in together the environmental, social, and economic issues into a single platform (Hopwood, Mellor & O'Brien, 2005). Since then, the concept of sustainable development has been evolved in various research areas including entrepreneurship. According to Ndubisi and Nair (2009), green entrepreneurship has been taken as a conduit for safeguarding the environmental degradation which is closely associated with sustainable business practices.

1.1. Green entrepreneurship inclination. Natural environmental issues are gradually becoming an essential part of business. It has been asserted that

assimilating green business solutions that enhance value to organizations and their stakeholders should be made part of the basic system of business (Banerjee et al., 2003; Coddington, 1993). As such, addressing the natural environmental problems under the shade of "green" has become a matter of 'survival and prosperity' for every business (Baker & Sinkula, 2005). Schaper (2010) has also avowed that green standpoint of business creates resilient base for the creation and growth of worthwhile business. Many studies have revealed a strong relationship between environmental friendly business practices (e.g. environmental marketing) and firm performance (e.g. Miles & Covin, 2000; Baker & Sinkula, 2005). Beyond the views, Parry (2012) has defined the term 'green' as steps taken to lessen environmental dilapidation and to attain environmental sustainability. It has also been advocated that entrepreneurial spirit is significant in making green business innovations than regulations (Hockerts & Wüstenhagen, 2010). Researchers have also contended that to balance between planet, profit, and people, motivation plays a vital role in triggering sustainable initiatives (Masurel, 2007). Such motivations could also play contributory role to nurture green entrepreneurship businesses that could eventually promote green economy.

1.2. Sustainability orientation. Diverse range of views currently exist toward sustainability that encompasses, maintaining output to match the mounting demands, upholding a desirable way of life in the future; and focusing on the ecological balance (Li, Okoroafo & Gammoh, 2014a). A broad view of sustainability includes all of the above views and suggests that sustainability is to interact with the environment in such a way that the future generations will not be deprived (Biddle, 2011). Furthermore, it has been claimed that the triple bottom line approach, which captures the state of performance from economic, environmental and social dimensions, support to operationalize the sustainability (Seuring & Müller, 2008). Empirical research by Bruyere and Rappe (2007) demonstrated that individuals who have deeper environmental concerns hold greater aspiration to articulate these values by involving in the sustainability activities. In the context of sustainability research, Spence, Boubaker Gherib, Ondoua Biwolé (2008) indicated that individuals who contemplate to incorporate sustainability while concpetualizing the ventures apt to have high passion for sustainbility orientation. Sustainability orientation denotes the ideology that incorporates environmental and societal considerations in business operations (Kuckertz & Wagner, 2010). It has been revealed that the concept of sustainability orientation developed from the view point of sustainable entrepreneurship (Dean & McMullen, 2007). In a study, Kuckertz and Wagner (2010) revealed positive influences of sustainability orientation on the entrepreneurial intention among the university students. It has also been contended that sustainability orientation has an emotional and inspirational component in the context of entrepreneurship (Kuckertz & Wagner, 2010). It is therefore conjectured that:

H1: Sustainability orientation among Gen Y will have a positive impact on green entrepreneurship inclination.

1.3. Sustainable education. The detection of the entrepreneurs' characteristics and the knowledge on the entrepreneurial profile of prospective entrepreneurs has been getting utmost prominence in the development of entrepreneurially oriented educational programs and start-up processes. Educational programs claimed to have noteworthy effect on the entrepreneurial attitudes of the potential entrepreneurs (Schroder & Schmitt-Rodermund, 2006). As stated by Soutaris, Zerbinati & Al-Laham (2007), educational programs assist to grow the entrepreneurial intentions and attitudes of the prospective entrepreneurs in terms of learning and inspiration. Given the amplified consciousness in sustainability subject matter as well as the relevance of sustainability issues in venture creation, sustainable business practices have been incorporated in entrepreneurship education. It is alleged that the concept of sustainable education will assist to foster the change in the mind-set (Sterling, 2001). Scholars believe that sustainable education will encourage a paradigm shift in thinking, teaching, and learning for a sustainable world (Richmond, 2009). Therefore, sustainability education is seen as an agent by which the development of more sustainable practices and lifestyles can be achieved (Sterling, 2010). Based on this contention, it is hypothesized that:

H2: Sustainable education will have a positive influence on green entrepreneurship inclination among Gen Y.

1.4. Self-efficacy. Self-efficacy, or self-confidence, is based on individuals' self-perception of their skills and abilities. This concept mirrors an individual's deepest thoughts on whether they have the abilities to perceive important task, as well as the belief that they will be able to successfully translate those skills into a chosen outcome (Bandura, 1994). Self-efficacy is associated to one's human capital (Becker, 1964) which may be general or specific to the tasks (Davidsson & Honig, 2003). According to Wood and Bandura (1989), self-efficacy denotes to the acceptance in individual abilities to initiate the motivation, perceptive resources, and courses of action necessary to come

across specified situational demands. Luszczynska, Gutiérrez-Doña & Schwarzer (2005) argue that self-efficacy is related to positive and negative emotions which can augment one's motivation and proclivity towards certain things. It has been also considered as a vital component of social cognitive theory and appears to be a significant variable in student learning, as it affects students' motivation and learning (van Dinther, Dochy & Segers, 2011). Self-efficacy has also been studied as the predictor of entrepreneurial intentions and behaviors. According to Wilson, Kickul, and Marlino (2007), those with high self-efficacy have higher degrees of belief that they possess a viable idea for a new venture. It can therefore be inferred that those with high self-efficacy are more likely to believe that they also possess an actionable green entrepreneurship idea. Therefore, it is hypothesized that:

H3: High self-efficacy among Gen Y will have a positive impact on green entrepreneurship inclination.

2. Methodology

2.1. Sample. The research was conducted under the non-contrived setting (nature environment), among university students who are enrolled in the Bachelor of Management program. They are chosen given that students in this program are exposed to various business management and entrepreneurship courses. A total of 100 students participated in this study via convenience sampling.

2.2. Measures. The sustainability orientation consists of ten items adopted from Lorsch and Morse (1974), Westerberg et al. (1997), and Sitkin and Weingart (1995) which have been used to integrate perception of risk with perception of success. Sustainability education is measured via ten items which were adopted from Lee, Chang and Lim (2005), Linan, Rodriguez-cohard, and Rueda-Cantuche (2011). The measurement for Self-Efficacy was adapted from Schraw and Dennison (1994). All these variables were measured on five point Likert scale, ranging from "1 = Strongly Disagree" to "5 = Strongly Agree". While the dependent variable of this study, Green Entrepreneurship Inclination has been measured on five point Likert scale, ranging from "1 = Not True" to "5 = Exactly True".

2.3. Sample profile. The demographics of the respondents tabulated in Table 1 depicts that the majority of the respondents (59 percent) belong to the age group between 21-23 years old. In terms of race, almost half of the respondents (52 percent) were Malay, 27 percent were Chinese and 21 percent were Indians. Among all the respondents, 50 percent were in their fourth year, 26 percent of them were in their third year, while the remaining 24 percent were in their first and second year of studies.

Table 1. Demographic profile

Variable	Frequency	Percentage
Gender		
Male	36	36.00
Female	64	64.00
Age		
18-20	3	3.00
21-23	59	59.00
24 and above	38	38.00
Race		
Malay	52	52.00
Chinese	27	27.00
Indian	21	21.00
Others	0	0.00
Year of study		
First year	4	4.00
Second year	20	20.00
Third year	26	26.00
Fourth year	50	50.00

2.4. Data analysis and result. This study utilized Partial least squares (PLS) analysis using the SmartPLS 2.0 software (Ringle et al., 2005). The Partial least squares is a second-generation multivariate technique which permits to assess both the measurement and structural models by minimizing error variance (Fornell & Cha, 1994). The suggested two-stage analytical procedures by Anderson and Gerbing (1988) have been carried out in this study. As such, the measurement model (validity and reliability of the measures) and the structural model (testing the hypothesized relationship) were examined. To test the significance of the path coefficients and the loadings a bootstrapping method (1000 resamples) was used.

2.5. Measurement model. Assessment of the measurement model includes the examination of convergence validity and discriminant validity of the research framework. Factor loadings, composite reliability (CR), and average variance extracted (AVE) were examined to assess convergence validity. Convergence validity examines if a specific item measures a latent variable which it is supposed to measure (Urbach and Ahlemann, 2010). While checking the loadings, four items from Self-efficacy and four items from Green entrepreneurship inclination were deleted considering the minimum cut-off value 0.5, as suggested by Hair, Hult, Ringle, & Sarstedt (2013). The AVE of all the constructs were above 0.5 (ranged between 0.50 and 0.688) recommended by Barclay, Thompson, Higgins (1995) and CR were higher than 0.7 (ranged between 0.77 and 0.95) as suggested by Nunnally (1978). Table 2 illustrates the loadings, AVE, and CR values of this study, indicating that the measurement model is reliable and demonstrated adequate convergence validity.

Table 2. Measurement model

Constructs	Items	Loading	AVE	CR
Sustainable orientation	SO1	0.825	0.688	0.957
	SO10	0.890		
	SO2	0.831		
	SO3	0.866		
	SO4	0.913		
	SO5	0.786		
	SO6	0.786		
	SO7	0.791		
	SO8	0.747		
	SO9	0.846		
Sustainable education	SE1	0.658		
	SE10	0.727		
	SE2	0.587	0.500	0.908
	SE3	0.706		
	SE4	0.753		
	SE5	0.682		
	SE6	0.805		
	SE7	0.838		
	SE8	0.610		
	SE9	0.665		
Self-efficacy	GSE3	0.697	0.634	0.774
	GSE6	0.884		
Green entrepreneurship inclination	GEI1	0.812	0.572	0.912
	GEI11	0.689		
	GEI12	0.748		
	GEI2	0.886		
	GEI4	0.894		
	GEI5	0.870		
	GEI7	0.512		
	GEI8	0.529		

Discriminant validity was subsequently assessed to ascertain the degree to which items differentiate among constructs or measure distinct concepts (Ramayah & Rahbar, 2013). Table 3 shows that the square root of the AVE of the latent variable exceeded the correlations of other constructs. The cross loading of all the items illustrates that loading of each item is higher than its cross loadings (see Appendix). The result suggests adequate convergence and discriminant validity of the measurement model.

Table 3. Discriminant validity

	GEI	GSE	SE	SO
GEI	**0.756**			
GSE	-0.169	**0.796**		
SE	0.343	-0.103	**0.707**	
SO	0.811	-0.193	0.276	**0.830**

2.6. Structural model. Structural model represents the relationship between latent variable that hypothesized in the research model (Duarte & Raposo, 2010). The main assessment conditions for the structural model are the R^2 measures and the level of significance of the path coefficients as it explains endogenous latent variables variance (Hair, Ringle & Sarstedt, 2011). In PLS, R^2 result signifies the amount of variance in the construct in question that is explained by the model. The individual path coefficients of the PLS structural model can be inferred as standardized beta coefficients of ordinary least squares regression (Hair, Hult, Ringle & Sarstedt, 2013). In this study, path coefficients of the structural model have been measured and bootstrap analysis was carried out to assess the statistical significance of the path coefficients. R^2 value of Green entrepreneurship inclination was 0.673 suggesting that 67.3 percent of the variance in Green Entrepreneurship Inclination can be explained by Sustainability orientation, Sustainability education, and Self-efficacy. This value has been considered as substantial by Cohen (1988). The Sustainability orientation (β = 0.774, p < 0.01) and Sustainable education (β = 0.128, p < 0.05) were found to have positive significant relationships with Green entrepreneurship inclination. Self-efficacy however was found to have a negative relationship with Green entrepreneurship inclination (β = -0.006), hence, hypothesis H3 was not supported.

3. Discussion

As stated at the outset, the aim of the study is to examine the effects of sustainability orientation, sustainability education and self-efficacy on green entrepreneurship inclination among Gen Y. Based on the findings, the study has found evidence of the important roles of sustainable orientation and sustainable education on green entrepreneurship inclination among Gen Y.

Creating new green products that provides value to the customer, taking up necessary risk for the venture, utilizing the better opportunity, and implanting green business ideas into the venture represent the inclination towards the green entrepreneurship business. Most of the Gen Y entrepreneurs in Malaysia, presume to have inclination to be green entrepreneurs. It is also important to mention that the Malaysian Gen Y entrepreneur have strong desire to be the owner of the green business. Perhaps it is due to the fact that Malaysian social and economic environment is highly supportive of green entrepreneurship. Knowledge on green entrepreneurship business, which represents the state of sustainable education also plays instrumental role for the green entrepreneurship inclination. In Malaysia, the country is focusing more on green issues, which are directed and suggested by the government itself. To popularize the go-green concept among all levels of society, the government has taken up many ini-

tiatives, which also includes disseminating knowledge on green business. In fact the Gen Y entrepreneurs of Malaysia possess necessary abilities, practical details, and required knowledge for the green entrepreneurship business. In addition, the information given by the online expert encourages the Gen Y entrepreneurs to be more enthusiastic and creative. All these knowledge regarding the green business essentially increases the sustainable orientation among the Gen Y entrepreneurs. Therefore, sustainable orientation coupling with sustainable education plays important role for the Gen Y Malaysian entrepreneurs to be inclined towards the green entrepreneurship business.

Self-efficacy on the other hand appeared to have no significant impact on green entrepreneurship inclination. A plausible reason could be that self-efficacy may predict entrepreneurial intention in general but not specifically green entrepreneurial intention. The importance of this study lies in its effort to unearth the important roles of sustainable orientation and sustainable education in developing green mind set and attitudes towards establishing green ventures. Exploring the green entrepreneurship inclination among Gen Y could also assist the government to design a tailor-made awareness program or curriculum structure that could give a greater focus on green and sustainable education. All these initiatives are hoped to eventually create more green businesses in the country which could subsequently realize the vision towards greening the economy. A cornerstone of green economy is to ensure that economic activities fully reflect the green agenda and this can only be achieved via fostering green entrepreneurship inclination and mindset among the younger generations. It is believed that despite the adoption of incentives and sanctions to push towards this, a softer measure to facilitate this transformation is to nurture and entice the younger generation to embrace green ideology via green venture creation.

This study perhaps can be used as guideline to understand the state of green entrepreneurship in Malaysia. The policy makers and educational institutions may take up the framework to come up with realistic solution for the future generation. The study will also open up scope for the future researchers to explore more relevant dimension which could lead towards the green entrepreneurship business. However, this framework may be tested in other countries to explore the state of green entrepreneurship inclination.

Conclusion

It is an avowal that environmental sustainability can be achieved by discarding the orthodox approach to economic development which has abused the environment so far. As such, suitable design of measures to address green orientation and environmental concerns is essential. It is presumed that with the understanding of the factors that could influence the development of green entrepreneurship proclivity among Gen Y nascent entrepreneurs, suitable measures and policy can be formulated and crafted to allow this agenda to take root. However, to have a shift towards the green economy for the sustainable future, it is important to have sustainable orientation and sustainable education among the Gen Y entrepreneurs in Malaysia, that might perhaps lead to offer a better living place to the coming generation not only in Malaysia but in the globe.

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References

1. Anderson, J.C. & Gerbing, D.W. (1988). Structural equation modeling in practice: A review and recommended two-step approach, *Psychological Bulletin*, 103 (3), pp. 411-423.
2. Baker, W.E. & Sinkula, J.M. (2005). Environmental marketing strategy and firm performance: effects on new product performance and market share, *Journal of the Academy of Marketing Science*, 33 (4), pp. 461-475.
3. Baker, W.E. & Sinkula, J.M. (2005). Market orientation and the new product paradox, *Journal of Product Innovation Management*, 22 (6), pp. 483-502.
4. Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
5. Banerjee, S., Charles, S.G. & Easwar, I. (1995). Shades of green: a multidimensional analysis of environmental advertising, *Journal of Advertising*, 24 (2), pp. 21-32.
6. Barclay, D.W., Thompson, R. & Higgins, C. (1995). The partial least squares (PLS) approach to causal modeling: personal computer adoption and use an illustration, *Technology Studies*, 2 (2), pp. 285-309.
7. Becker, G.S. (1964). *Human capital: A theoretical and empirical analysis, with special reference to education*. Chicago, University of Chicago Press.
8. Biddle, I. (2011). Operations management for a sustainable future, *BusiDate*, 19 (1), pp. 2-5.
9. Brundtland, G.H. (1987). *Report of the World Commission on environment and development: our common future*, United Nations.
10. Bruyere, B. & Rappe, S. (2007). Identifying the motivations of environmental volunteers, *Journal of Environmental Planning and Management*, 50 (4), pp. 503-516.

11. Coddington, W. (1993). *Environmental Marketing*, McGraw-Hill, New York, NY.
12. Cohen, J. (1988). *Statistical power analysis for the behavioral sciencies*: Routledge.
13. Compeau, D.R., Higgins, C.A. & Huff, S. (1999). Social cognitive theory and individual reactions to computing technology: a longitudinal-study, *MIS Q*, 23 (2), pp. 145-158.
14. Davidsson, P. & Honig, B. (2003). The role of social and human capital among nascent entrepreneurs, *Journal of Business Venturing*, 18 (3), pp. 301-331.
15. Dean, T.J. & McMullen, J.S. (2007). Toward a theory of sustainable entrepreneurship: reducing environmental degradation through entrepreneurial action, *Journal of Business Venturing*, 22, pp. 50-76.
16. Duarte, P.A.O. & Raposo, M.L.B. (2010). A PLS model to study brand preference: an application to the mobile phone market. *Handbook of Partial Least Squares*: Springer, pp. 449-485.
17. Economic Planning Unit Malaysia (EPU) (2010). Tenth Malaysia Plan 2011-2015. Retrieved February 21, 2011, from: http://www.epu.gov.my/html/themes/epu/epu/images/common/pdf/ec.
18. Economic Planning Unit Malaysia (EPU) (2013*). Initiatives towards Green Economy in Malaysia. First Asia-Pacific Regional Meeting on the 10YFP*, 7-8 November.
19. Fornell, C. & Cha, J. (1994). Partial least squares. In R.P. Bagozzi (Ed.), *Advanced methods of marketing research*, Oxford, UK: Blackwell, pp. 52-78.
20. Hair Jr., J.F., Hult, G.T.M., Ringle, C. & Sarstedt, M. (2013*). A primer on partial least squares structural equation modeling (PLS-SEM)*. SAGE Publications, Incorporated.
21. Hair, Hult, Ringle & Sarstedt (2013). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. UK: Sage Publishers.
22. Hair, Ringle, & Sarstedt (2011). PLS-SEM: Indeed a silver bullet, *The Journal of Marketing Theory and Practice*, 19 (2), pp. 139-152.
23. Hewlett, S.A., Sherbin, L. & Sumberg, K. (2009). How Gen Y & Boomers will reshape your agenda, *Harvard Business Review*, 87 (7/8), pp. 71-76.
24. Hockerts, K. & Wustenhagen, R. (2010). Greening Goliaths versus emerging Davids – Theorizing about the role of incumbents and new entrants in sustainable entrepreneurship, *Journal of Business Venturing*, 25 (5), pp. 481-492.
25. Hopwood, B., Mellor, M. & O'Brien, G. (2005). Sustainable development: mapping different approaches, *Sustainable development*, 13 (1), pp. 38-52.
26. Kuckertz, A. & Wagner, M. (2010). The influence of sustainability orientation on entrepreneurial intentions – Investigating the role of business experience, *Journal of Business Venturing*, 25 (5), pp. 524-539.
27. Lee, S.M., Chang, D. & Lim, S.-B. (2005). Impact of entrepreneurship education: a comparative study of the US and Korea, *The International Entrepreneurship and Management Journal*, 1 (1), pp. 27-43.
28. Li, S., Okoroafo, S. & Gammoh, B. (2014a). The role of sustainability orientation in outsourcing: antecedents, practices, and outcomes, *Journal of Management and Sustainability*, 4 (3), p. 27.
29. Li, S., Okoroafo, S. & Gammoh, B. (2014b). Institutional environment, managerial attitudes and environmental sustainability orientation of small firms, *Journal of Business Ethics*, 111 (4), pp. 461-476.
30. Linan, F., Rodriguez-Cohard, J.C. & Rueda-Cantuche, J.M. (2011). Factors affecting entrepreneurial intention levels: A role of education, *International Entrepreneurship and Management Journal*, 7 (2), pp. 195-128.
31. Lorsch, J.W. & Morse, J.J. (1974). *Organizations and their members: A contingency approach*. New York: Harper & Row.
32. Luszczynska, A., Gutierrez-Dona, B. & Schwarzer, R. (2005). General self-efficacy in various domains of human functioning: Evidence from five countries, *International Journal of Psychology*, 40 (2), pp. 80-89.
33. Martin, C.A. (2005). From high maintenance to high productivity: What managers need to know about Generation Y, *Industrial and Commercial Training*, 37 (1), pp. 39-44.
34. Masurel, E. (2007). Why SMEs invest in environmental measures: sustainability evidence from small and medium-sized printing firms, *Business Strategy and the Environment*, 16 (3), pp. 190-201.
35. Miles, M.P. & Covin, J.G. (2000). Environmental marketing: a source of reputational, competitive, and financial advantage, *Journal of Business Ethics*, 23 (3), pp. 299-311.
36. Min, H. & Galle, W.P. (1997). Green purchasing strategies: trends and implications, *International Journal of Purchasing and Materials Management*, 33 (3), pp. 10-17.
37. Moorthy, M.K., Peter, Y., Chelliah, M.K. & Arokiasamy, L. (2012). Drivers for Malaysian SMEs to go green, *International Journal of Academic Research in Business and Social Science*, 2 (9), pp. 74-86.
38. Ndubisi, N.O. & Nair, S.R. (2009). Green entrepreneurship (GE) and green value added (GVA): a conceptual framework, *International Journal of Entrepreneurship*, 13, pp. 21-34.
39. Nunnally, J.C. (1978). *Psychometric theory* (2nd ed.). New York: McGraw Hill.
40. Pachaly, M.V.W. (2012). *Barriers and Triggers to Green Entrepreneurship: An Exploratory Study*. Unpublished thesis, Erasmus University Rotterdam.
41. Parry, S. (2012). Going green: the evolution of micro-business environmental practices, *Business Ethics: A European Review*, 21 (2), pp. 220-237.
42. Rahman, S.A., Amran, A., Ahmad, N.H. & Taghizadeh, S.K. (2013). Organizational supports to Business Success: Ensuring the well-being of BoP entrepreneurs, *International Journal of Conceptions on Management and Social Sciences*, 1 (1), pp. 34-39.

43. Rahman, S.A., Amran, A., Ahmad, N.H. & Taghizadeh, S.K. (2014). GrameenPhone: Creating a Win-Win at the Base of the Pyramid in Bangladesh, *Global Business and Organizational Excellence*, 33 (5), pp. 41-53.
44. Ramayah, T. & Rahbar, E. (2013). Greening the environment through recycling: An empirical study, *Management of Environmental Quality: An International Journal*, 24 (6), pp. 782-801.
45. Richomme-Huet, K. & de Freyman, J. (2014). What sustainable entrepreneurship looks like: an exploratory study from a student perspective, *Social Entrepreneurship: International Studies in Entrepreneurship*, 29, pp. 155-177.
46. Richmond, M. (2009). *Foreword: In A review of contexts and structures for education for sustainable development – Learning for a sustainable world*, ed. A. Wals, 3. Paris: UNESCO.
47. Ringle, C.M., Wende, S. & Will, A. (2005). *Smart-PLS 2.0 (beta)*. Retrieved from: www.smartpls.de.
48. Schaper, M. (2010). Understanding the Green, *Making ecopreneurs: Developing sustainable entrepreneurship*, 7.
49. Schroder, E. & Schmitt-Rodermund, E. (2006). Crystallizing enterprising interests among adolescents through a career development program: The role of personality and family background, *Journal of Vocational Behavior*, 69 (3), pp. 494-509.
50. Schraw, G. & Dennison, R.S. (1994). Assessing metacognitive awareness, *Contemporary Educational Psychology*, 19, pp. 460-475.
51. Seuring, S. & Müller, M. (2008). From a literature review to a conceptual framework for sustainable supply chain management, *Journal of Cleaner Production*, 16 (15), pp. 1699-1710.
52. Sitkin, S.B. & A.L. Pablo (1992). Reconceptualizing the determinants of risk behavior, *Academy of Management Review*, 17 (1), pp. 9-38.
53. Souitaris, V., Zerbinati, 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), pp. 566-591.
54. Spence, M., Boubaker Gherib, J.B. & Ondoua Biwolé, V. (2008). A framework of SME's strategic involvement in sustainable development. In: Starik, M., Wüstenhagen,R., Hamschmidt, J., Sharma, S. (Eds.), *Advances on Research in Corporate Sustainability*. Edward Elgar, Boston, MA, pp. 49-70.
55. Sterling, S. (2001). *Sustainable education*. UK: Green Books Ltd.
56. Sterling, S. (2010). Learning for resilience, or the resilient learner? Towards a necessary reconciliation in a paradigm of sustainable education, *Environmental Education Research*, 16 (5-6), pp. 511-528.
57. Szamosi, L.T. (2006). Just what are tomorrow's SME employees looking for? *Education + Training*, 48, pp. 654-665.
58. Talbot, M. (2012). Farm diversification and farm tourism in Wales: The experience of entrepreneurial farmers, *Regions Magazine*, 285 (1), pp. 22-25.
59. UNEP (2011). *Towards a green economy: Pathways to sustainable development and poverty reduction: United Nations*. Retrieved February 10th, 2014 from: http://www.unep.org/greeneconomy/Portals/88/documents/ger/ger_final_dec_2011/Green%20EconomyReport_Final_Dec2011.pdf.
60. Urbach, N. & Ahlemann, F. (2010). Structural equation modeling in information systems research using partial least squares, *Journal of Information Technology Theory and Application*, 11(2), pp. 5-40.
61. Van Dinther, M., Dochy, F. & Segers, M. (2011). Factors affecting students' self-efficacy in higher education, *Educational Research Review*, 6 (2), pp. 95-108.
62. Van Kannel-Ray, N. (2006). Guiding principles and emerging practices for environmentally sustainable education, *Curriculum and Teaching Dialogue*, 8 (1/2), pp. 113-123.
63. Walker (2012). Gen Y grads more likely to launch start-ups, *USA Today*. Retrieved March 3rd, 2014 from: www.usatoday.com/money/smallbusiness/story/2012.
64. Westerberg, M., Singh, J. & Hackner, E. (1997). Does the CEO matter? Anempirical study of small of Swedish firms operating in turbulent environ-ments, *Scandinavian Journal of Management*, 13 (3), pp. 251-270.
65. Wilson, F., Kickul, J. & Marlino, D. (2007). Gender, entrepreneurial self-efficacy, and entrepreneurial career intentions: Implications for entrepreneurship education, *Entrepreneurship Theory & Practice*, pp. 387-406.
66. Wood, R. & Bandura, A. (1989). Impact of conceptions of ability on self-regulatory mechanisms and complex decision making, *Journal of Personality and Social Psychology*, 56 (3), p. 407.
67. York, J.G. & Venkataraman, S. (2010). The entrepreneur-environment nexus: Uncertainty, innovation, and allocation, *Journal of Business Venturing*, 25 (5), pp. 449-463.

Appendix: Cross loading

	GEI	GSE	SE	SO
GEI1	0.812	-0.087	0.284	0.669
GEI11	0.689	-0.029	0.161	0.526
GEI12	0.748	-0.079	0.178	0.602
GEI2	0.886	-0.134	0.243	0.737
GEI4	0.894	-0.303	0.358	0.734
GEI5	0.870	-0.134	0.237	0.715
GEI7	0.512	0.056	0.302	0.393
GEI8	0.529	-0.252	0.354	0.419

Cross loading (cont.)

GSE3	-0.103	0.697	-0.053	-0.167
GSE6	-0.159	0.884	-0.103	-0.149
SE1	0.130	-0.122	0.658	0.071
SE10	0.088	-0.145	0.727	0.044
SE2	0.136	-0.059	0.587	0.156
SE3	0.174	-0.067	0.706	0.187
SE4	0.177	-0.254	0.753	0.129
SE5	0.277	-0.043	0.682	0.138
SE6	0.342	-0.158	0.805	0.237
SE7	0.299	-0.036	0.838	0.205
SE8	0.319	0.059	0.610	0.401
SE9	0.151	-0.019	0.665	0.100
SO1	0.684	-0.180	0.204	0.825
SO10	0.749	-0.121	0.262	0.890
SO2	0.651	-0.221	0.203	0.831
SO3	0.715	-0.266	0.271	0.866
SO4	0.753	-0.143	0.255	0.913
SO5	0.624	-0.160	0.174	0.786
SO6	0.630	-0.123	0.243	0.786
SO7	0.658	-0.199	0.276	0.791
SO8	0.587	-0.017	0.168	0.747
SO9	0.656	-0.155	0.223	0.846