7-31-2020

ECOPRENEURSHIP AS A SOLUTION TO ENVIRONMENTAL PROBLEMS: IMPLICATIONS FOR UNIVERSITY ENTREPRENEURSHIP EDUCATION

Yunita Ismail Masjud

President University, Indonesia, yunitaismail@president.ac.id

Follow this and additional works at: <https://scholarhub.ui.ac.id/jessd>

Part of the [Life Sciences Commons](#), and the [Social and Behavioral Sciences Commons](#)

Recommended Citation

Masjud, Yunita Ismail (2020). ECOPRENEURSHIP AS A SOLUTION TO ENVIRONMENTAL PROBLEMS: IMPLICATIONS FOR UNIVERSITY ENTREPRENEURSHIP EDUCATION. *Journal of Environmental Science and Sustainable Development*, 3(1), 97-113.

Available at: <https://doi.org/10.7454/jessd.v3i1.1041>

This Original Research Article is brought to you for free and open access by the School of Environmental Science at UI Scholars Hub. It has been accepted for inclusion in Journal of Environmental Science and Sustainable Development by an authorized editor of UI Scholars Hub.

ECOPRENEURSHIP AS A SOLUTION TO ENVIRONMENTAL PROBLEMS: IMPLICATIONS FOR UNIVERSITY ENTREPRENEURSHIP EDUCATION

Yunita Ismail Masjud¹

¹President University, Indonesia

*Corresponding author: e-mail: yunitaismail@president.ac.id

(Received: 4 June 2020; Accepted: 29 July 2020; Published: 31 July 2020)

Abstract

Environmental degradation is a consequence of using resources for economic purposes only. The impact of entrepreneurial activity, especially as industry, deteriorates the environment. University-offered entrepreneurship programs produce entrepreneur that can solve unemployment and low-income problems. By extension, more entrepreneurs will increase business activity and increasingly degrade the environment. The aims of this research were to examine the intentions of university students to become entrepreneurs using personal attitude, subjective norms, and self-efficacy as the driving factors; find the social intention of university students to become entrepreneur using empathy, self-efficacy, and exposure as inspirations; and explain the role of entrepreneurship education can play in environmental sustainability. In this research, the sample was chosen using quantitative methods from a population of President University, Faculty of Business students, Cikarang, West Java. The data collection method was a survey using a questionnaire, assessed by multiple regression data analysis. The results showed that entrepreneurial intention was significantly influenced by personal attitude, subjective norms, self-efficacy, and socioentrepreneurial intention. Internal factors significantly influenced students' ambitions to become entrepreneurs. In term of environmental sustainability, entrepreneurship education was needed to implement ecopreneurship approach.

Keywords: ecopreneurship; entrepreneur; entrepreneurial intention; social entrepreneurial intention.

1. Introduction

The definition of sustainable entrepreneurship is focused on the preservation of nature and support for community in the pursuit of future products, processes, and services for gain, where gain is broadly construed to include economic and non-economic gains to individuals, the economy, and society (Shepperd and Holger, 2011). Environmental degradation has increased and become the most prominent global issue of the 21st century. Concern for the environment is becoming increasingly important, especially as industry has become a sector that contributes

significantly to GDP as well as to environmental damage. According to data from the World Resources Institute (WRI), since the year 2000, there has been a decline in resource capacity to be used in business activities. Table 1 shows a decrease in resource capacity based on the WRI Pilot Analysis of Global Ecosystem, 2000.

Table 1. Declining Capacity of Global Ecosystem

Ecosystem	Declining Capacity
Agriculture	Degradation in 40% of agriculture land worldwide by erosion, salinization, nutrient depletion, biological degradation, and pollution
Coastal	Deterioration of about 30% of the world's coastal ecosystems by growing demand of housing, industry, and recreation. Pollution increased dramatically because of the use of fertilizers, industrial sewage, increased aquaculture
Forest	Global forest cover has been reduced between 20% and 50% Deforestation reduced level of biodiversity
Fresh water	Human activities have significantly disturbed the global water, carbon, and nitrogen cycles.
Grassland	Soil degradation and reduced biodiversity happen at world grassland

Source: [World Resource Institute, PAGE \(2000\)](#)

From Table 1, the carrying capacity of several ecosystems is diminishing in quality and quantity. A growing population needs more support from the ecosystem to fulfill their needs. Meanwhile, climate change is currently approximately 1 °C above the pre-industrial level, with a margin of error from 0.8 °C to 1.2 °C. It is estimated to reach 1.5 °C from 2030 to 2052 if it continues to increase at the current rate (IPCC, 2018).

Literature shows that business and industry are often viewed as one of the largest contributors to environmental degradation ([Cohen and Winn, 2007](#)). Market pressures have forced companies to pay more attention to such environmental factors. This has made it challenging for industries to not only pay attention to their economic data but also environmental aspects ([Djajadiningrat and Melia, 2004](#)). Industrial environmental management has begun implementing waste reduction programs, followed by recycling and reuse. In addition, the choice of production technology will also contribute to minimizing waste. The technology chosen must be compatible with the environment. With environmental

management, there is still waste, but it hopefully minimized. Its management is generally carried out by the companies themselves.

Business activity, or entrepreneurship activities, is a favorite choice for the younger generation. Entrepreneurship has been intensified to improve the welfare or economic conditions of the country. Therefore, the existence of entrepreneurs in a country is very important, and the government should increase their number of entrepreneurs.

Entrepreneurship activity concerned with the environment is called ecopreneurship. The term is a combination of eco (as in ecological) and entrepreneurship. Ecology is a branch of biology that studies the interaction between organisms and their environment, while entrepreneurship refers to business activities that use resources to produce goods and services. Thus, ecopreneurship is the search for new opportunities that help protect the environment in pursuit of environmental sustainability (McEwen, 2013). The question is, how to harness potential ecopreneurial innovation to solve environment degradation? Ecopreneurs need known the economic potential in environmental businesses. Some ecopreneurs are motivated by profit and start green businesses, while others have a sustainability orientation and are motivated by environmental urgency.

Universities, as educational institutions, could produce entrepreneurs by offering entrepreneurship courses. Entrepreneurs could be a source of jobs, create wealth for others, and find ways to better utilize resources. To protect the environment, universities may consider giving ecopreneurship scholarships to future entrepreneurs. Entrepreneurs would start businesses that consider environment from the first. Students studying entrepreneurship will not automatically become entrepreneurs. Many factors will influence their decisions after they graduate. Their intentions could be influenced by several factors. This paper will consider the economic and social intentions of ecopreneurial business students.

The objectives of this paper are to determine the intentions of university students to become entrepreneur based on personal attitude, subjective norms, and self-efficacy as factors, to find the social intention of university student to become entrepreneur using empathy, self-efficacy, and exposure as factors, and to promote ecopreneurship as a solution for environmental degradation caused by entrepreneur activities.

1.1. Ecopreneurship

Many definitions for ecopreneurship have been offered by scholars, but they are still under debate. The term ecopreneurship sometimes refers to “green entrepreneurship” or “environmental entrepreneurship” that combines two words, ecological and entrepreneurship. Ecopreneurship speaks to the potential for environmental impact caused by industries (Pastakia, 2002). The definition of ecopreneurship was proposed by Kirwood and Walton (2010) and is widely employed. It suggests entrepreneurs who found new businesses based on the principles of sustainability.

According to Galkina and Martin (2016), ecopreneurship research is still in the early stages, and the study of ecopreneurship remains open to contributions from other fields of study. Protecting the environment but still benefiting from it through in entrepreneurship activities could be implementing ecopreneurship. Research about ecopreneurship keeps increasing as more and more people become aware of the negative impacts of their businesses (Gunawan, 2012). Ecopreneurship research needs to build synergies with industries, local communities, and government institutions (Galkina and Martin, 2016).

Entrepreneurs need to pay attention to solving environmental problems (Scharper, 2002a). Entrepreneur could offer solutions to environmental problem by making their businesses more environmentally friendly even before they start. Ecopreneurs are entrepreneurs who run their businesses based on sustainability principles (Kirkwood and Walton, 2010). Actually, the debate about the differences between ecopreneur and entrepreneur are still active. According to Sasongko and Grisna (2016), ecopreneurs are the players and the companies with the creative and innovative skills to incorporate environment advancement into their core businesses.

McEwen (2013) showed ecopreneurs from several backgrounds. They could evolve as their businesses progressed, or market conditions forced them to comply with shifting environmental impacts, especially negative ones. The negative effect of entrepreneurial activities for economic development may derive from linear activities, which starting with how resources are used and disposed of. The new social and environmental business model involves a circular economy (Rodriguez_Garcia et al, 2019). The circular economy is a new business model that aims to achieve more sustainable and environmentally-friendly development, with a particular focus on urban and industrial waste to achieve a better balance and harmony among the economy, environment and society (Ghisellini et al., 2016). Some ecopreneurship approaches offered by Rodriguez-Garcia, Maria and Agustin, are shown in Table 2.

Table 2. Ecopreneurship Approaches

Approach	References	Definition
1	Gerlach, 2003, Pastakia, 1998, Petersen and Schaltegger, 2002a	“Ecopreneurship is based on implementing innovations in the environmental sector. The ecopreneur is aware of the environmental impact that their businesses exert on their surroundings and develops innovations that reduce this impact.”
2	Volery, 2019, Azzone and Noci, 1998, Porter and van der Linde, 1995, Holger, 2006	“Ecopreneurship is a strategic tool. The application of sustainable policies has a twofold benefit: it improves profit prospects and is kind to the environment.”
3	Anderson, 1998, Kyro, 2001, Cantino et al., 2017, Rodriguez-Garcia, Maria GG, and Agustin CC, 2019	“Ecopreneurship is a tool to transform society. Ecopreneurs play a key role in the evolution and development of institutions.”

Source: [Rodriguez-Garcia, Maria, and Agustin \(2019\)](#)

Using the first approach, entrepreneurship might use innovation to solve problems, and ecopreneurship would find innovations to solve environmental problems for entrepreneurial activities. The second approach shows how that the improvement of environmental knowledge helps ecopreneurs to change their business strategies to solve environmental problems. The last approach, by spreading environment concerns to the consumers, ecopreneur can change the society.

1.2. Entrepreneurial Intention

Entrepreneurial intention can be interpreted as a process of finding information that can be used to achieve a goal ([Indarti, 2004](#)). Entrepreneur is an economic term to describe a person who uses environmental resources to make goods or services. Entrepreneurs have an economics perspective to attract maximum profit at minimum cost. Naturally, people will try hard to get maximum profit from their business activity. In term of education, it is assumed that students

who learn about entrepreneurship intend to become entrepreneurs, but is it true? The intention of business student to become entrepreneur does not really happen. Factors that could be used for entrepreneurial intentions are personal attitude, subjective norm, and self-efficacy (Cruz et al., 2015). These three factors are personality characteristics, while other factors include demographic and environmental characteristics (Indarti, 2004). In this research, entrepreneurial intention is influenced by personal attitude, subjective norms, and self-efficacy.

Personal attitude indicates one's individual beliefs about becoming an entrepreneur (Linan and Chen, 2009). Shook and Bratianu (2010) state that the attitude of an individual toward a specific issue depends on his or her beliefs about the end result. The more positive the final result, the better the perception of it, and the better the perception, the firmer the intention to exercise specific behaviors. Personal attitudes toward entrepreneurship intentions can be seen from an individual's interests toward business opportunities, a positive view of the failure of his/her business, and toward business interests at risk (Cruz et al., 2015).

Subjective norms refer to perceived social pressures to perform certain behavioral actions (Solevik et al., 2012). Perceived social pressures to perform or not perform entrepreneurial behavior might be triggered by family, friends, teachers, lecturers, other possible role models. Subjective norms view important considerations by people who advise the individual to perform or not perform certain behaviors. They may be accompanied by a willingness to do or not do something that was considered important (Wedayanti and Giantari, 2016).

Self-efficacy is the belief that one has the skills to perform certain actions to achieve something (Urban, 2015). Self-efficacy is needed to encourage employees to believe in their ability to achieve their objectives or expected results (Rahmi et al., 2014). Self-efficacy is defined as an aspect of self-knowledge that is perhaps most influential in every day human life (Amlus, 2017). Self-efficacy is the belief that someone can master a situation and achieve positive results. Entrepreneurial self-efficacy is associated with a strong conviction to prepare a new enterprise, which necessarily includes the high confidence in one's ability to do the entrepreneurial task (Ip et al., 2017). The condition indicates that this concept requires a big attention to entrepreneurship research. In the context of social entrepreneurship, self-efficacy also means the personal desire of an individual to contribute toward solutions of social and environmental problems (Ip et al., 2017). Previous research also found that self-efficacy becomes an important antecedent to pro-social behavior such as blood donations (Hockerts, 2017). Furthermore, potential social entrepreneurs in emerging markets indicate a high level of

self-efficacy, since it will be related to successful innovativeness, which lead to social impact and sustainability (Ip et al., 2017, Urban, 2015).

1.3. Social Entrepreneurial Intention

Social Entrepreneurship is a term meaning to not only give something, but also teach something, to be more sustainable in the long-term. According to Tran and Korflesch (2018), social entrepreneurs create innovative solutions to immediate problems that will lead to sustainable social transformations, and concern larger social problems.

In entrepreneurial activity, intention becomes a reliable predictor of behaviors that stem from the intention (Chipeta, 2015). According to Hockerts, 2017, four variables—empathy, self-efficacy, moral obligation, and perceived social support—promote the feasibility and desirability of one's social entrepreneurial intention. More research uses empathy, self-efficacy, and exposure as the independent variables for social entrepreneurial intention (Wilton and Venter, 2016). This research uses the latter three.

Empathy is how a human can feel the emotions of others. Empathy can lead to outcomes such as caring for and understanding others, validating the emotions of others (Jamil, 2014). A person with empathy will feel the same condition that they observe in others and lead to caring behaviors. In terms of social entrepreneurship, empathy is considered as the proxy of social entrepreneurship intention. It is a broader concept since it will consider social problems as the core orientation. Research also shows that empathetic people have a desire to help others who are suffering, and are motivated to start social ventures (Wilton and Venter, 2016).

Exposure means how closely the individual is exposed to an entrepreneurial activity. Exposure provides an individual not only familiarity, but an experienced network able to offer advice, insight, and encouragement toward entrepreneurial activities (Amanamah, 2018). The access to entrepreneurial networks has a positive influence on entrepreneurial intention to overcome fear, lack of experience, and various business activity challenges (Amanamah, 2018). In social entrepreneurship, exposure to social issues and past experience can lead to social entrepreneurial intention (Chipeta, 2015)

2. Methods

This research used a quantitative method. The population was students from President University, Faculty of Business, Cikarang, west Java. Sampling method was purposive method,

with the criterion that the student has taken an Entrepreneurship-related course at some point. Data collection method was a survey using questionnaire. The questionnaire was distributed online using Google Docs. The Likert scale was used in the questionnaire. Data analysis used multiple regressions with a t-test and F-test to assess the relationship between entrepreneurial intention and social entrepreneurial intention and the factors that influenced it. It determined the possibility of implementing ecopreneurship using the two-model approach, analyzing it in qualitative way.

The multiple regressions that used were:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \dots + \beta_n X_n + \varepsilon \quad (1)$$

Where: β_i = regression coefficient

ε = error

Model 1 Y = Entrepreneurial Intention

X_1 = Personal Attitude

X_2 = Subjective Norms

X_3 = Self-Efficacy

Model 2 Y = Social Entrepreneurial Intention

X_1 = Empathy

X_2 = Self-Efficacy

X_3 = Exposure

3. Results and Discussions

This research consisted of two sample sets from the same population, which were students of the Business Faculty, President University, Cikarang, West Java, Indonesia. Batch 2015–2018. Set Samples 1 and 2 were different and fulfilled different questionnaires at different times. Each set of the sample created a multiple regression model to show the relationship between independent and dependent variables.

The descriptive statistics of each variable from dataset 1 are shown in Table 3. The calculation for each variable used the total scale, and the average and standard deviation of the total scale for each variable. From Table 3, the average and standard deviations for each variable are almost the same.

Table 3. Descriptive Statistics for Set Data 1 (Entrepreneurial Intention)

	N	Minimum	Maximum	Mean	Std. Deviation
Total AT	355	11	25	19.31	3.303
Total SN	355	12	25	19.30	3.086
Total SEF	355	11	25	19.55	3.053
Total EI	355	11	25	19.02	3.190
Valid N (listwise)	355				

Source: Primary data

From set data 2, the descriptive statistics showed in Table 4. The average of each variable is between 17.00 until 19.00 with standard deviation in range 2.00–4.039.

Table 4. Descriptive Statistics for Set Data 2 (Social Entrepreneurial Intention)

	N	Minimum	Maximum	Mean	Std. Deviation
Total AT	334	9	25	19.07	2.530
Total SN	334	10	25	17.03	2.999
Total SEF	334	5	25	18.55	4.137
Total EI	334	5	25	17.11	4.390
Valid N (listwise)	334				

Source: Primary data

3.1. Model 1: Entrepreneurial Intention Model

Sample 1 consisted of 355 samples. Of the 355 respondents, 58% were female and 42% male. Batch 2015 provided 48%, Batch 2016 gave 38%, Batch 2017 11%, and Batch 2018 3%. They came from the Management study program (41%), Business Administration (31%), and Accounting (28%).

Multiple regression model from the Sample set 1 was:

$$Y = 1.072 + 0.255 X_1 + 0.396 X_2 + 0.399 X_3 + e \quad (2)$$

Where: Y = Entrepreneurial Intention

X_1 = Personal Attitude

X_2 = Subjective Norms

X_3 = Self-Efficacy

These models already fulfilled the classical assumption, which were normality, heteroscedasticity, and multicollinearity. For the hypothesis about the influence of each independent variable on the dependent variable, significance at level of significance 0.05, but for the constant, the p-value was 1.072. It was not supported by data or not significance. The result of the F-test showed that that the significance of the three independent variables together influenced toward entrepreneurial intention. The power of this model showed by R^2 or coefficient of determination, which was 40.4%. The meaning is that the variation of entrepreneurial intention could explain 40.4% by personal attitude, subjective norm, and self-efficacy, with the rest explained by other variables.

The first variable showed that personal attitude had significant influence toward entrepreneurial intention. It indicates interest of the students in a business opportunity. The students have a positive view regarding the individual's belief in becoming an entrepreneur. Personal attitude indicates the higher the interest in new business opportunities, the more the intention for the entrepreneurship will rise. This result is in line with a study conducted by [Cruz et al. \(2015\)](#), which stated personal attitude carries significant influence toward entrepreneurial intention.

The second variable was that subjective norms had significant influence toward entrepreneurial intention. It indicates the norm of people around us and this norm play very important role in entrepreneurial intention. It demonstrated that the higher the belief in the role of the family, more support from friend and family can trigger the intention to become entrepreneur. This result is in line with the Cruz, 2015 study which stated that subjective norms have significant influence toward the entrepreneurial intention.

The last variable was self-efficacy, which had significant influence on entrepreneurial intention. It indicates that self-efficacy interpreted as a form of an individual's belief in their ability to perform an action can increase entrepreneurial intention. Self-efficacy can help business students to believe in their capabilities to run a business and succeed in becoming entrepreneur in the future. This result is in line with Cruz' study, which stated self-efficacy has significant influence toward the entrepreneurial intention. Personal attitude, subjective norms and self-efficacy had significant influence toward entrepreneurial intention. Moreover, this result ([Cruz et al., 2015](#)) respectively explained that personal attitude, subjective norms, and self-efficacy will influence entrepreneurial intention.

3.2. Model 2: Social Entrepreneurial Intention Model

Sample set 2 consisted of 334 samples. These were 63% female and 37% male. Batch 2015 was 52%, Batch 2016 42%, Batch 2017 3%. Batch 2018 was also 3%. The Management study program provided 38% of the students, Business Administration 30%, and Accounting 32%. The multiple regression model from Sample set 2 was:

$$Y = 1.073 + 0.253 X_1 + 0.397 X_2 + 0.344 X_3 + e \dots\dots\dots (3)$$

Where: Y = Social Entrepreneurial Intention

X_1 = Empathy

X_2 = Self-Efficacy

X_3 = Exposure

These models already fulfilled the classical assumption, normality, heteroscedasticity, and multicollinearity. For the hypothesis about the influence of each independent variable on dependent variable, the level of significance was 0.05, but constant was 1.073, not supported by data or not significant. The result of the F-test showed that the three independent variables together significantly influenced toward the social entrepreneurial intention. The power of this model shown by R^2 or coefficient of determination, was 40.4%, meaning the variation of entrepreneurial intention could be explained as 40.4% by personal empathy, self-efficacy, and exposure, and the rest explained by other variables.

Based on the results, empathy, self-efficacy, and exposure had significance influence on social entrepreneurial intention. This assertion is supported by the research of [Ayob et al. \(2013\)](#), [Hockerts \(2017\)](#); and [Wilton and Venter \(2016\)](#), whose results show empathy, self-efficacy, and exposure partially influenced social entrepreneurial intention. Empathy, self-efficacy, and exposure had simultaneously significant influence toward social entrepreneurial intention. This result was also supported by the same researchers and studies ([Ayob et al., 2013](#), [Hockerts, 2017](#), and [Wilton and Venter, 2016](#)) who all explained that empathy, self-efficacy, and exposure influenced social entrepreneurial intention.

3.3. Possibility of Ecopreneurship Implementation

From Models 1 and 2, the factors significantly influenced entrepreneurial and social entrepreneurial intentions. Personal attitudes, subjective norms, and self-efficacy significantly influenced entrepreneurial intention and empathy. The factors were the internal factors of the

entrepreneur himself. The dominant, or greatest, influence (from the value of variable coefficient) was self-efficacy. It showed that the beliefs of an entrepreneur have a big impact on their intention to do business. If the entrepreneur has an environmental perspective and increases their awareness about the environment, they could implement the environmental principles in their business.

The growth of ecopreneurship has been supported by various consumer groups, as has the strong demand for green products, especially in developed countries (Scharper, 2002b). But not all entrepreneurs are the same in terms of environmental concern. Environmental awareness is developed from childhood and continues to be an integral part of one's businesses (McEwen, 2013). Entrepreneurship education plays a critical and important role in harnessing the innovative potential of ecopreneurs and in improving environmental problems (Grant, 2011).

In ecopreneurship, beliefs of ecopreneurs would change the way of running businesses. Approaches to ecopreneurship are different from social entrepreneurship. Social entrepreneurship refers to innovative behavior by individuals or organizations in the private sector that place social goals at the center of their corporate strategies (Carraher and Welsh, 2016). The concept of social entrepreneurship in broadest sense for society, encompasses environmental issues (Rodriguez_Garcia, et al., 2019). From certain perspectives, social entrepreneurship includes environmental entrepreneurship (Bent-Goodley, 2002). The implementation of ecopreneurship in university entrepreneurship education requires more research but the motivation of Indonesian entrepreneurs in adopting green businesses and the role of business advisers advising green initiatives for start-up entrepreneurs are encouraged to be studied (Gunawan, 2019).

4. Conclusion

The conclusion of this paper showed the personal attitude, subjective norm, and self-efficacy significance influenced toward entrepreneurial intention of university students. Social entrepreneurial intentions of university student are significantly influenced by empathy, self-efficacy, and exposure. The factors that influence entrepreneurial intentions are internal factors. It means that the awareness and concern of entrepreneurs about environment could grow when implemented with an ecopreneurship approach.

Acknowledgement

Author would to thank to Hangka Panca Buana and Hanna Krisna Litasari, the students of the Faculty of Business, President University, Indonesia that shared their data for these papers.

Author Contribution

Yunita Ismail Masjud as author are fully handling the whole article.

References

- Amanamah, R. B., Acheampong, A., & Owusu, E. K. (2018). [An exploratory study of entrepreneurial intention among university students in Ghana](#). *International Journal of Scientific and Technology Research*, 7(1), 142.
https://www.researchgate.net/profile/Emmanuel_Owusu21/publication/326380788_An_Exploratory_Study_Of_Entrepreneurial_Intention_Among_University_Students_In_Ghana/links/5b48f4ebaca272c6093f6b66/An-Exploratory-Study-Of-Entrepreneurial-Intention-Among-University-Students-In-Ghana.pdf
- Amlus, M. H. (2017). [The Influence of Self-Efficacy on Entrepreneurial Intention among Engineering Students](#). *Universiti Malaysia Perlis*.
https://www.matec-conferences.org/articles/mateconf/abs/2018/09/mateconf_mucet2018_05051/mateconf_mucet2018_05051.html
- Ayob, N., Yap, C. S., Dewi, A. S., & Md Zabid, A. R. (2013). [Social entrepreneurial intention among business undergraduates : An emerging economy perspective social entrepreneurial intention among business undergraduates : An emerging economy perspective 1](#). *Gadjah Mada International Journal of Business*, 15(February 2016), 249–267.
<https://doi.org/10.22146/gamaijb.5470>
- Bent-Goodley, T. B. (2002). [Defining and conceptualizing social work entrepreneurship](#). *Journal of Social Work Education*, 38(2), 291–302.
<https://www.tandfonline.com/doi/abs/10.1080/10437797.2002.10779098>
- Carraher, S. M., Welsh, D. H. B., Svilkos, A. (2016). [Validation of a measure of social entrepreneurship](#). *European Journal of International Management*, 10(4), 386.
<https://www.inderscienceonline.com/doi/abs/10.1504/EJIM.2016.077421>

- Chipeta, E. M. (2015). [Social Entrepreneurship Intentions among University Students in Gauteng. NorthWest University.](#)
<http://repository.nwu.ac.za/handle/10394/16535>
- Cohen, B., & Winn, M. I. (2007). [Market imperfections, opportunity and sustainable entrepreneurship.](#) *Journal of Business Venturing*, 22(1), 29–49.
<https://www.sciencedirect.com/science/article/abs/pii/S0883902605000571>
- Cruz, L. D., Suprpti, S., & Yasa, K. (2015). [Aplikasi theory of planned behavior dalam membangkitkan Niat berwirausaha bagi mahasiswa fakultas Ekonomi Unpaz, Dili, Timor Leste.](#) *E-Jurnal Ekonomi dan Bisnis Universitas Udayana*, 4(12), 895–920.
<https://ojs.unud.ac.id/index.php/EEB/article/download/15136/12352>
- Galkina, T., & Martin, H. (2016). [Ecopreneurship–Assessing the field and outlining the research potential.](#) *Small Enterprise Research*, 23(1), 58–72.
<http://dx.doi.org/10.1080/13215906.2016.1188716>
- Ghisellini, P., Cialani, C., & Ulgiati, S. (2016). [A review on circular economy: The expected transition to a balanced interplay of environmental and economic systems.](#) *Journal of Cleaner Production*, 114, 11–32.
<https://www.sciencedirect.com/science/article/abs/pii/S0959652615012287>
- Grant, E. A. (2011). [An examination of environmental orientation, behaviors and perceived barriers in relationship to social structural variables.](#) Master's Thesis, Department of Sociology, Wichita State University.
http://soar.wichita.edu/xmlui/bitstream/handle/10057/3928/d11005_Grant.pdf?sequence=1
- Gunawan, A. A. (2012). [Ecopreneurship concept and its barriers: A literature review.](#) In *Proceeding Seminar Nasional Etika Bisnis UPI*, 1.
<https://repository.uibn.ru.nl/bitstream/handle/2066/187760/187760pre.pdf?sequence=1>
- Hockerts, K. (2017). [Determinants of social entrepreneurial intentions.](#) *Entrepreneurship Theory and Practice*, 41(1), 105–130.
<https://doi.org/10.1111/etap.12171>
- Indarti, N. (2004). [Factors affecting entrepreneurial intentions among Indonesian students.](#) *Journal of Indonesian Economy and Business*, 19(1), 57–70.
<https://dev.jurnal.ugm.ac.id/jieb/article/view/6585>

- Ip, C. Y., Wu, S. -C., Liu, H. -C., & Liang, C. (2017). [Revisiting the antecedents of social entrepreneurial intentions in Hong Kong](#). *International Journal of Educational Psychology*, 6(3), 301.
<https://doi.org/10.17583/ijep.2017.2835>
- Kirkwood, J., & Walton, S. (2010). [What motivates ecopreneurs to start businesses?](#) *International Journal of Entrepreneurial Behavior and Research*, 16(3), 204–228.
<https://www.emerald.com/insight/content/doi/10.1108/13552551011042799/full/html>
- Liñán, F., & Chen, Y. W. (2009). [Development and cross-cultural application of a specific instrument to measure entrepreneurial intentions](#). *Entrepreneurship Theory and Practice*, 33(3), 593–617.
<https://journals.sagepub.com/doi/abs/10.1111/j.1540-6520.2009.00318.x>
- Marire, E., Mafini, C., & Dhurup, M. (2017). [Drivers of entrepreneurial intentions amongst generation Y students in Zimbabwe](#). *International Journal of Business And Management Studies*, 9(2), 18.
<http://dergipark.gov.tr/download/article-file/440213>
- McEwen, T. (2013). [Ecopreneurship as a solution to environmental problems: Implications for college level entrepreneurship education](#). *International Journal of Academic Research in Business and Social Sciences*, 3(5), 264.
<http://connection.ebscohost.com/c/articles/89762499/ecopreneurship-as-solution-environmental-problems-implications-college-level-entrepreneurship-education>
- Pastakia, A. (2002). [Assessing Ecopreneurship in the Context of a Developing Country: The Case of India](#). Greenleaf Publishing.
<http://www.greenleaf-publishing.com>
- Rahmi, E. R., Yusuf, M., & Priyatama, A. N. (2014). [Hubungan antara Motivasi Intrinsik dan Self-Efficacy dengan Keterlibatan Kerja pada Karyawan Bagian Konveksi PT Dan Liris Sukoharjo](#). *Jurnal Ilmiah Psikologi Candradiwa*, 2(5).
<https://digilib.uns.ac.id/dokumen/detail/34032/Hubungan-Antara-Motivasi-Intrinsik-Dan-Self-Efficacy-Dengan-Keterlibatan-Kerja-Pada-Karyawan-Bagian-Konveksi-PT-Dan-Liris-Sukoharjo>
- Rodriguez-Garcia, M., Guijatto-García, M., & Carrilero-Castillo, A. (2019). [An overview of ecopreneurship, eco-innovation, and the ecological sector](#). *Sustainability*, 11(10), 2909.
<https://www.mdpi.com/2071-1050/11/10/2909>

- Sasongko, S., & Grisna, A. (2016). *Ecopreneurship implementation for environment and economic sustainability*. In *2016 Global Conference on Business, Management and Entrepreneurship*. Atlantis Press.
<https://www.atlantis-press.com/proceedings/gcbme-16/25866012>
- Schaper, M. (2002a). *The essence of ecopreneurship*. *Greener Management International*, 38(Summer), 26–30.
<https://www.jstor.org/stable/pdf/greemanainte.38.26.pdf?seq=1>
- Schaper, M. (2002b). *The challenge of the environmental responsibility and sustainable development: Implication s for SME and entrepreneurship academics*. In U. Fuglistaller, H. J. Pleitner, T. Volery and W. Weber (Eds.), *Radical changes in the world: Will SMEs soar or crash?* St.Gallen, Switzerland: Recontres de St. Gallen.
https://www.researchgate.net/profile/Emmanuel_Owusu21/publication/326380788_An_Exploratory_Study_Of_Entrepreneurial_Intention_Among_University_Students_In_Ghana/links/5b48f4ebaca272c6093f6b66/An-Exploratory-Study-Of-Entrepreneurial-Intention-Among-University-Students-In-Ghana.pdf
- Shepherd, D. A., & Holger, P. (2011). *The New Field of Sustainable Entrepreneurship: Studying Entrepreneurial Action Linking “What Is to Be Sustained” with “What Is to Be Developed”*. ET&P. Baylor University.
<https://journals.sagepub.com/doi/abs/10.1111/j.1540-6520.2010.00426.x>
- Shook, C. L., & Bratianu, C. (2010). *Entrepreneurial intent in a transitional economy. An application of the theory of planned behavior to Romanian students*. *International Entrepreneurship and Management Journal*, 6(3), 231–247.
<https://link.springer.com/article/10.1007/s11365-008-0091-2>
- Solesvik, M. Z., Westhead, P., Kolvereid, L., & Matlay, H. (2012). *Student intentions to become self-employed: The Ukrainian context*. *Journal of Small Business and Enterprise Development*, 19(3), 441–460.
<http://dx.doi.org/10.1108/14626001211250153>

- Tran, A. T., & Von Korflesch, H. (2018). [Social entrepreneurial intention: The case of national economics university student's original research article](http://www.journalresearchijf.com/wp-content/uploads/SOCIAL-ENTREPRENEURIAL-INTENTION-THE-CASE-OF-NATIONAL-ECONOMICS-UNIVERSITY%E2%80%99S-STUDENTS-27-34.pdf). *Advance Research Journal of Multi-Disciplinary Discoveries II Issue – Advance Research Journal of Multidisciplinary Discoveries*. *Advance Research Journal of Multi-Disciplinary Discoveries I*, 23, 27–34.
<http://www.journalresearchijf.com/wp-content/uploads/SOCIAL-ENTREPRENEURIAL-INTENTION-THE-CASE-OF-NATIONAL-ECONOMICS-UNIVERSITY%E2%80%99S-STUDENTS-27-34.pdf>
- Urban, B. (2015). [Evaluation of social enterprise outcomes and self-efficacy](https://doi.org/10.1108/IJSE-03-2013-0071). *International Journal of Social Economics*, 42(2), 163–178.
<https://doi.org/10.1108/IJSE-03-2013-0071>
- Wedayanti, N. P., & dan Giantari, I. (2016). [Peran pendidikan Kewirausahaan dalam memediasi pengaruh norma Subyektif terhadap Niat Berwirausaha](https://ojs.unud.ac.id/index.php/Manajemen/article/download/16295/11544). *E-Jurnal Manajemen Universitas Udayana*, 5(1), 533–560.
<https://ojs.unud.ac.id/index.php/Manajemen/article/download/16295/11544>
- Wilton, C., & Venter, R. (2016). [Identifying social entrepreneurial intent among students in South African Universities](http://wiredspace.wits.ac.za/handle/10539/21501), Faculty of Commerce, Law and Management, University of the Witwatersrand. Johannesburg.
<http://wiredspace.wits.ac.za/handle/10539/21501>
- World Resources Institute. (2000). [Pilot Analysis of Global Ecosystems \(PAGE\)](https://www.wri.org/publication-series/pilot-analysis-global-ecosystems). *World Resources Institute, Maryland*.
<https://www.wri.org/publication-series/pilot-analysis-global-ecosystems>
- Zaki, J. (2014). Empathy: [A motivated account](https://doi.org/10.1037/a0037679). *Psychological Bulletin*, 140(6), 1608–1647.
<https://doi.org/10.1037/a0037679>