The relevance of social capital in efforts to develop entrepreneurship education

Herry Porda Nugroho Putro¹, Rusmaniah Rusmaniah², Mutiani Mutiani², Jumriani Jumriani²,
Bambang Subiyakto²

¹History Education Department, Faculty of Teacher Training and Education, Lambung Mangkurat University, Banjarmasin, Indonesia
²Social Studies Education Department, Faculty of Teacher Training and Education, Lambung Mangkurat University, Banjarmasin, Indonesia

ABSTRACT

Universities in Indonesia create millions of graduates, but the labor market does not absorb most graduates, so they become unemployed. One of the ways to overcome unemployment is through entrepreneurship education to encourage them to become entrepreneurs to create their jobs. The success of entrepreneurship is determined by utilizing capital, one of which is social capital. This study aimed to find out how the relevance of social capital in developing entrepreneurship education. This was a qualitative study, and data was gathered through in-depth interviews, observation, and documentation. Data analysis went through the stages of reduction, presentation, and conclusion drawing and was finally verified. The results of the research explained that the elements of social capital, including networks, norms, and trust were built through entrepreneurship education.

Keywords:
Entrepreneurial attitudes
Entrepreneurship education
Good relations
Purun village
Social capital

This is an open access article under the CC BY-SA license.

1. INTRODUCTION

Economic growth is one of the indicators of success in the development of a country [1]. Based on the results of the United Nations analysis, there is an opportunity for Indonesia to enjoy the demographic bonus in the next 10 years due to the demographic transition in the 2020-2030 period [2]. This will be realized if population growth is accompanied by an increase in income from the population [3]. So population growth but low-income levels are not helpful for economic development especially coupled with the problem of unemployment. Someone who belongs to the labor category is actively looking for job vacancies at a certain level with a specific salary but cannot get the job he wants [4]. When the unemployment rate increases, the poverty rate will also increase. This shows that poverty and unemployment are interrelated [5].

Based on Central Bureau of Statistics 2021 data explain open unemployment in February 2021 reached 6.26%. There was an increase compared to last year in February 2020, which was recorded at 4.94% [6]. If this is not addressed immediately, it will impact the poverty rate, which will increase [6]. The irony of education in Indonesia is that the higher a person's education, the more likely to become unemployed. So college graduates are not a guarantee of getting a job. Proven on Central Bureau of Statistics data that the number of unemployed is dominated by university graduates, namely Diploma I to III graduates 8.08% and bachelor degree 7.35% [6]. Universities in Indonesia have produced millions of graduates, but most of them
are not absorbed by the labor market and thus become unemployed. One of the ways to overcome unemployment is through entrepreneurship education to encourage them to become entrepreneurs to create their own jobs.

Education is part of a civilizing process. Education is also a community effort that aims to continue the tradition [7]. Entrepreneurship education provides a theoretical foundation on entrepreneurship and shapes the attitudes, behavior, and mindset of an entrepreneur. The implementation of entrepreneurship education in universities is carried out step by step and sustainable.

Presidential Instruction Number 4 years 1995 about The National Movement to Promote and Cultivate Entrepreneurship mandates the entire Indonesian community and nation to develop entrepreneurship programs [8]. The government is aware that the business world is the basis of the national economy so that it must continually be improved. This movement hopes that it will produce entrepreneurs with reliable, challenging, and independent characters. Education with entrepreneurial insight is characterized by applying principles and methodologies in the educational process to shape students' life skills through an integrated curriculum developed in each school.

The success of entrepreneurship is determined by the ability to utilize the capital owned. There are three types of capital in people's lives: economic capital, cultural capital, and social capital. The capital used is inexhaustible, namely social capital. This is based on the idea that social capital is productive and a resource both actual and potential that can be achieved in a positive relationship [9]. According to the positivist approach, social capital is a social network in which it contains reciprocal relationships that aim to build trust in a group [10]. Meanwhile, according to Putnam, social capital is part of a social life in which there are networks, norms, and beliefs [11]. These three elements encourage the achievement of common goals, especially in business development.

Results of previous research by Fahlevi show that the utilization of social capital to succeed in entrepreneurial efforts carried out by entrepreneurs [12]. One of the businesses that can be used as learning resources in entrepreneurship education related to social capital utilization is Purun Village. Therefore, utilization of social capital generates benefits for entrepreneurial groups. This article aims to determine how relevant social capital Purun Village, Palam Output, Cempaka Sub-district, Banjarbaru City, South Kalimantan Province, Indonesia is to develop entrepreneurship education based on this explanation.

2. RESEARCH METHOD

This research uses a qualitative method. Qualitative research was chosen to understand the social conditions of the purun craftsmen by describing in detail and in-depth the actual conditions that occur in the field. The source of the data comes from 15 informants, namely purun craftsmen who are in Purun Village, Indonesia. Primary data was obtained with in-depth interviews by recording and taking notes. Another primary source is from observation and documentation in July 2021 in Purun Village, Palam Output, Cempaka Sub-district, Banjarbaru City, South Kalimantan Province, Indonesia.

Analysis of the data used in this study is the interactive model of Miles and Huberman, which consists of three steps of analysis, including data reduction, data presentation, and data verification [13]. First, data is reduced by copying the interviews results from the recorded form into written form to be reduced according to the required data about the relevance of social capital in Purun Village to develop entrepreneurship education. Next, the data presentation stage is carried out with narrative texts and descriptions of the relevance of social capital in Purun Village to develop entrepreneurship education. The next step is to conclude (verification) to answer the problem regarding the relevance of social capital in Purun Village to develop entrepreneurship education. Finally, the data validity test was carried out by triangulating sources by asking the same questions to several different informants. Triangulation methods were carried out using interview, observation, and documentation techniques regarding the relevance of social capital in Purun Village to develop entrepreneurship education.

3. RESULTS AND DISCUSSION

Entrepreneurship education in higher education is included in the compulsory courses that students must take to develop students' entrepreneurial insight. Entrepreneurship education aims to develop academic potential, personality, and mastering science and technology according to developments in the world of work. According to Sukidjo in cultivating entrepreneurship in schools, colleges, and communities, its purpose is to: i) Increase the number of entrepreneurs who have quality; ii) Realizing entrepreneurs to produce the ability and welfare of the community; iii) Cultivate the spirit, attitude, behavior and entrepreneurial ability, iv) Cultivate entrepreneurship awareness and have a solid and entrepreneurial solid orientation [14]. Through Ministry of Research, Technology, and Higher Education of the Republic of Indonesia with the program at universities to prepare prospective entrepreneurs. The program is in the form of non-formal education that is
oriented towards developing entrepreneurial skills like entrepreneurial student program, creativity student program, implementation of business work lecture, entrepreneurship internship program, and business incubator.

Entrepreneurship education positively affects the motivation for entrepreneurship among students [15]. The implementation of entrepreneurship education aims to develop entrepreneurial characteristics, including creativity, decision-making, leadership, social networking, time management, and collaboration. So, entrepreneurship education cannot be limited to lectures in the classroom, but by providing opportunities for students to experience firsthand how to start a business, run and observe entrepreneurs who are already running a business.

In running entrepreneurship, capital is needed, one of which is social capital. Social capital creates many benefits for society. The communities with a large stock of social capital benefit from, among others, lower crime rates, improved health, higher education, and faster economic growth [11]. In social capital there are important elements including social life networks, norms, and beliefs [16]. The benefits derived from social capital cannot be separated from its constituent elements, as happened in Purun Village. Social capital in business groups in Purun Village is formed by relationships with various parties, both to fellow purun craftsmen and outside the community in Purun Village. Elements of social capital that occurred in Purun Village can be used as a source of learning in the development of entrepreneurship education.

The first element of social capital is norms. Social capital has a role in business continuity in Purun Village. In the local community in Purun Village, social values are highly respected to maintain relationships. The high social value of the people of Purun Village makes people help each other. The craftsman group has a family system in running a business, pursuing profit and a sense of comfort for fellow members. Craftsman groups have norms or rules that aim to create order and justice. The rules in the crafter group are honest with each other every time they get a custom order. Norms are the basis for the formation of social capital because there is a reciprocal relationship between individuals and groups [17]. Social norms are guidelines and references in life that regulate people's behavior to create social conditions that are orderly, orderly, and fair [18]. Without norms, social life will be disorganized. Otherwise, the existence of norms will create good and mutually beneficial relationships and create order and justice for each other (reciprocity norms). Guidelines or rules in social life play an essential role in business continuity.

The norms in Purun Village are to regulate each crafter and arrange buyers for the smooth production process so that orders can be completed on time not to disappoint customers. Besides that, to avoid loss or fraud to avoid loss or fraud, For prospective buyers, advance payment is requested so that craftsmen can complete product orders without worrying about potential customers who suddenly disappear. The norm of reciprocity that regulates will create smoothness in business continuity. The behavior of each businessman leads to the form of agreement norms. This is done to maintain the existence of the craftsmen so that an agreement must still be made even though it is not written, but the agreed norms are evidence in maintaining the relationship.

In entrepreneurship education, it is necessary to habituate disciplined attitudes to comply with applicable norms and values. So that entrepreneurial behavior will be formed. From a disciplined attitude towards applicable norms, as an entrepreneur, it is hoped to foster other attitudes such as being responsible, daring to take risks, time management, and meeting targets for business progress. This is because every norm has a penalty for violators both morally and materially, so an entrepreneur must take responsibility for every action and dare to take any risks faced from every action. Concerning time management and targets, every entrepreneur must have a forward orientation to develop their business. With a disciplined attitude in entrepreneurship education, someone tries to fulfill every target or plan made according to the specified time to raise the spirit of leadership, at least in himself. The spirit of leadership is closely related to entrepreneurial motivation, to be able to grow the spirit of leadership in entrepreneurship, students can participate in activities that train and improve high self-discipline in students, such as outbound activities, leadership training, participating in activities in positive student organizations, and training/entrepreneurship courses to add insight entrepreneurship [19].

The next element in social capital is the trust formed between fellow purun craftsmen from production to marketing. The trust is guarded by the craftsmen starting from trust in working together in groups then the occurrence of transactions or actions. Trust is an essential element in social capital because smooth relationships or transactions can be maintained to achieve goals. According to Pavlov, trust is an assessment that can determine a person in making decisions on certain transactions [20]. Mutual trust in others in a group will make it easier to solve social problems.

Trust is the main element in building relationships between individuals, especially in cooperation. Trust is also the main reason in social capital to achieve a goal. Trust is useful for maintaining good relations with each other because relationships cannot continue without trust. Trust will create a mutually beneficial relationship between the parties, the trust related to the decisions that someone in action will take.
In the continuity of the purun woven business, trust will be essential as a foundation in the relationship. Trust among fellow crafter group members is seen in each group member who gets an order to report to the group leader, and the decision to share it is left to the group leader. According to them, trust is essential because a good relationship will not happen without trust and openness between members. A good relationship will create respect and reputation among group members so it is effective in building and maintaining trust [21].

Trust will develop over time through continuous interactions. Open communication is the key to developing trust in an organization. Communicating the vision and goals of a group consistently will be able to achieve the group's goals in practice will realize the participation and involvement of group members. The transparency of a leader will increase the true view of a group. The leader's transparency will attract support and make it easier to give opinions in interactions with group members. This is very important in fostering the group that is led to achieving targets and goals. This is very important in fostering the group that is led to achieve targets and goals. The habit of doing transparency or openness can increase accountability, strengthen responsibility and lead to better decisions [22].

Transparency needs to be trained and accustomed to entrepreneurship education, namely honesty, fairness, mutual respect, respect, and commitment can increase social bonds and build trust. The attitude of sharing information and caring is built to be able to solve problems together [23]. This attitude will also build the trust of others to break transactions and relationships when entrepreneurship. Trust is formed not in a short time. It takes time to form the personal branding of an entrepreneur so that others can be trusted. This attitude needs to be formed as early as possible, not waiting after learning entrepreneurship. Suppose someone is known as an honest person. In that case, it will quickly grow the trust of others in him. Trust is the most important thing for an entrepreneur to determine sustainable cooperation both as business partners and consumers. The existence of trust shows that individuals or group members interact and cooperate in developing the following social capital networks.

A network is a system of communication channels to protect solid and extensive interpersonal relationships [11]. A social network is a unique set of relationships among several people with the additional trait, characteristic of the whole relationship, to interpret the social behavior of everyone involved. The social network in purun craftsmen is social relations with fellow purun craftsmen and outside of purun craftsmen. Examples of relationships between craftsmen can be seen from the various kinds of relationships carried out by the people of Kampong Purun, including the formation of business groups and the existence of networks in marketing and production networks. The interaction between craftsmen increases the close relationship that exists in cooperation and helping each other produce a network in protecting the continuity of the purun craft business. The network in marketing makes it easy to sell handicrafts. At the same time, the production network makes it easy for the manufacture of handicraft products to be completed properly.

Participation in social networks in Purun Village is found in informal activities such as social gatherings and other religious events. This activity provides an interactive space for traders and a forum to strengthen brotherhood ties among the community, whether it's purun craftsmen or not. Besides that, these activities also provide many economic benefits, namely expanding friendships in business relationships. Moreover, social interactions lead to reciprocal relationships in goodness based on norms, values, and beliefs to create social networks.

The exposure of social networks in entrepreneurship education is done by having a high social spirit such as helping each other, socializing, and establishing relationships with others. The social network formed will make it easier to run a business both for production and marketing. Thus, social networks play a role in the development of that business. A social network is a group of people who establish social relationships either directly or indirectly to achieve the expected entrepreneurial goals. In addition, social networks can help someone obtain the information needed for entrepreneurship. The wider one's social network can provide the support and motivation needed to increase entrepreneurship [24].

According to the research, the utilization of social capital is more dominant in the post-learning phase [25]. Meanwhile, this article explains that social capital is essential to build since the learning phase in entrepreneurship education, the goal is to shape entrepreneurial attitudes and behavior. Social capital is a necessary preparation before opening a business to be strengthened when entering the business world. From the analysis results, the researchers found that social capital is sufficient to be taken into account and utilized to support being an entrepreneur. Social capital will be adequate if it strengthens these three elements of social capital: value, network, and trust. Through entrepreneurship education, students can develop their potential by focusing their various activities in entrepreneurship. Through entrepreneurial activities carried out in Purun Village, it can be a real example that students can learn to carry out entrepreneurial activities. From the biased attitude towards entrepreneurship education, it will lead to an increase in interest in entrepreneurship, which tends to strengthen the entrepreneurial base.
4. CONCLUSION

The research revealed that the elements of social capital, including networks, norms, and trust built through entrepreneurship education. University is one of the educational institutions responsible for absorption in the world of work for its graduates, either looking for or creating jobs. With entrepreneurship education, social capital is needed to be built to form attitudes and behaviors that are important in entrepreneurship. The elements of norms are built with a disciplined attitude that will form disciplined attitudes and behavior, being responsible, dare to take risks, time management, and leadership. The element of trust is built by getting used to honesty, fairness, mutual respect, respect, and commitment can increase social bonds. Through the network element, entrepreneurial education is carried out by applying a high social spirit by helping each other, socializing, and establishing good relationships.

Increasing network capital for students by promoting learning transformation with stakeholder involvement requires synergy from various parties. Systemic steps and long steps to change the academic intellectual circle. Thus, it is imperative to pay attention to how the attitude of universities changes the orientation of learning in higher education. The essential purpose of education is to improve the quality of human life, describing knowledge that is practically useful for society. Thus, it is essential to pay attention to how the attitude of universities changes the orientation of learning in higher education. Universities through study programs can harmonize the needs of the world of work with fieldwork practices (or internship programs). So that student experienced on how to collaborate and optimize the competencies needed in the world of work.

REFERENCES

[1] H. Ardiansyah, “The Effect of Inflation on Economic Growth in Indonesia (in Indonesian),” Journal of Economic Education (JUPE), vol. 5, no. 3, 2017, doi: 10.26740/jupe.v5n3.p25p.
[2] A. L. Abelianys, E. Alguer, D. E. Bloom, and K. Prettner, “The future of work: Meeting the global challenges of demographic change and automation,” International Labour Review, vol. 159, no. 3, pp. 285–306, 2020, doi: 10.1111/irl.12168.
[3] S. Moreland and E. L. Madsen, “Demographic Dividend Models,” in Africa’s Population: In Search of a Demographic Dividend, G. Groth and J. F. May, Eds. Cham: Springer International Publishing, 2017, pp. 453–467.
[4] M. Althudhori, “The Effect of HDI, GRDP And Total Unemployment On Poor Population in Jambi Province (in Indonesian),” Journal of Economics and Business, vol. 1, no. 1, pp. 113, 2017, doi: 10.33087/ekonomis.v1i1.12.
[5] O. A. Adelowokan, O. E. Maku, A. O. Babasanya, and A. B. Adesoye, “Unemployment, poverty and economic growth in Nigeria,” Journal of Economics & Management, vol. 35, pp. 5–17, 2019, doi: 10.22367/jem.2019.35.01.
[6] Central Bureau of Statistics, Indonesian Manpower February 2021 (in Indonesian). 2021, https://www.bps.go.id/pressrelease/2021/05/18/februari-2021--tingkat-pengangguran-terbuka--tpt-sebesar-6-26-persen.html
[7] B. Subiyakto and M. Mutian, “Internalization of Educational Values Through Community Activities as Social Science Learning Resources (in Indonesian),” Khazanah: Jurnal Studi Islam dan Humaniora, vol. 17, no. 1, p. 137, 2019, doi: 10.18592/khazanah.v17i1.2885.
[8] Government of Indonesia, “Instruction of the President of the Republic of Indonesia Number 4 of 1995 on the National Movement to Promote and Cultivate Entrepreneurship (in Indonesian).” Jakarta Pemerintah Republik Indonesia, 1995.
[9] S. I. A. Dwiningrum, “Social capital in educational development (theoretical and practical perspectives) (in Indonesian),” Universitas Negeri Yogyakarta Press, 2014.
[10] S. H. Han, S. W. Yoon, and C. Chae, “Building social capital and learning relationships through knowledge sharing: a social network approach of management students’ cases,” Journal of Knowledge Management, vol. 24, no. 4, pp. 921–939, 2020, doi: 10.1108/JKM-11-2019-0641.
[11] W. Pangestika et al., “The Role of Networks and Social Capital for Street Vendors on Jl. Laut Dendang, Deli Serdang Regency,” International Journal of Cultural and Social Science, vol. 2, no. 1, pp. 9–15, 2021.
[12] Mirdha Fahlevi Si and Yusnaidi, “Entrepreneurial Leadership, Self Efficacy, Innovation and Social Capital in Entrepreneurship in the Creative Economy Sector (in Indonesian),” Jurnal Bisnis dan Kajian Strategi Manajemen, vol. 4, no. 1, pp. 13–25, 2020.
[13] E. A. Mezzini, “Qualitative Data Analysis: An Overview of Data Reduction, Data Display and Interpretation,” Research on Humanities and Social Sciences, vol. 10, no. 21, pp. 15–27, Nov. 2020, doi: 10.7176/RHSS/10-21-02.
[14] Sukidjo, Cultivating Entrepreneurship (in Indonesian). Yogyakarta: Universitas Negeri Yogyakarta Press, 2011.
[15] R. Ningsih, “The Role Of Entrepreneurship Education In Increasing Entrepreneurial Motivation For Students (in Indonesian),” in Proceedings Of IUPM Univ Indraprasta PGRI, 2017, p. 60.
[16] E. Carrillo Alvarez and J. Riera Romaní, “Measuring social capital: further insights,” Gazette, vol. 31, no. 1, pp. 57–61, Jan. 2017, doi: 10.1016/j.gacet.2016.09.002.
[17] Y. Lee, I. P. Rianti, and M. S. Park, “Measuring social capital in Indonesian community forest management,” Forest Science and Technology, vol. 13, no. 3, pp. 133–141, Jul. 2017, doi: 10.1080/21580103.2017.1355335.
[18] J. J. Q. Low and O. B. Ayoko, “The Emergence of Spiritual Leader and Leadership in Religion-Based Organizations,” Journal of Business Ethics, vol. 161, no. 3, pp. 513–530, Jan. 2020, doi: 10.1007/s10551-018-3954-7.
[19] A. Pavlov, M. Mura, M. Franco-Santos, and M. Bourne, “Modelling the impact of performance management practices on firm performance: interaction with human resource management practices,” Production Planning & Control, vol. 26, no. 5, pp. 431–443, Apr. 2017, doi: 10.1080/09537287.2017.1306214.
[20] M. Kin, S. Fielke, K. Bayne, L. Klerck, and R. Nettie, “Navigating shades of social capital and trust to leverage opportunities for rural innovation,” Journal of Rural Studies, vol. 68, pp. 123–134, May 2019, doi: 10.1016/j.jrurstud.2019.02.003.
[21] B. Leprì, N. Oliver, E. Letouzé, A. Pentland, and P. Vinck, “Fair, Transparent, and Accountable Algorithmic Decision-making Processes: The Premise, the Proposed Solutions, and the Open Challenges,” Philosophy and Technology, vol. 31, no. 4, pp. 611–627, 2018, doi: 10.1007/s13347-017-0279-x.
The relevance of social capital in efforts to develop entrepreneurship... (Herry Porda Nugroho Putro)

BIOGRAPHIES OF AUTHORS

Herry Porda Putro is currently an Associate Professor at the Department of History Education, Faculty of Teacher Training and Education, Lambung Mangkurat University, Banjarmasin, Indonesia. He earned his Bachelor's degree (History) from Diponegoro University, Semarang, Indonesia in 1988; Earned a Postgraduate M.P.d (History Education) in IKIP Jakarta, Jakarta, in 1995; and Doctorate (Social Sciences Education) from the Indonesian University of Education, Bandung, Indonesia in 2006. His main research directions are history, social studies, culture, and education. He can be contacted at email: pordabanjar@ulm.ac.id.

Rusmaniah is currently a Lecturer at the Department of Social Studies Education, Faculty of Teacher Training and Education, Lambung Mangkurat University, Banjarmasin, Indonesia. Her Bachelor degree (Geography Education) from Lambung Mangkurat University, Banjarmasin, Indonesia, in 2013; She bagged his Post Graduate M.Pd (Social Studies Education) at Lambung Mangkurat University, Banjarmasin, Indonesia in 2016. Her main research directions are Education, Social Studies, and Social Sciences. She can be contacted at email: rusmaniah@ulm.ac.id.

Mutiani is currently a Doctoral Student at Social Studies Education, Universitas Pendidikan Indonesia, Bandung, Indonesia. Her Bachelor degree (History Education) from Lambung Mangkurat University, Banjarmasin, Indonesia, in 2012; She bagged his Post Graduate M.Pd (Social Studies Education) at Universitas Pendidikan Indonesia, Bandung, Indonesia 2015. Her main research directions are Education, Social Studies, and Social Sciences. She can be contacted at email: mutiani@upi.edu.

Jumriani is currently a Lecturer at the Department of Social Studies Education, Faculty of Teacher Training and Education, Lambung Mangkurat University, Banjarmasin, Indonesia. Her Bachelor degree (Sociology Education) from Lambung Mangkurat University, Banjarmasin, Indonesia, in 2016; She bagged his Post Graduate M.Pd (Social Studies Education) at Lambung Mangkurat University, Banjarmasin, Indonesia in 2018. Her main research directions are Education, Social Studies, and Social Sciences. She can be contacted at email: jumriani@ulm.ac.id.

Bambang Subiyakto is currently a Full Professor at the Department of Social Studies Education, Faculty of Teacher Training and Education, Lambung Mangkurat University, Banjarmasin, Indonesia. He earned his Bachelor's degree (History) from UGM Yogyakarta, Indonesia in 1985, Earned a Postgraduate M.Hum. (History) at the faculty of Culture, Gadjah Mada University, Yogyakarta, Indonesia in 2000; and Doctorate (Social Sciences Education) from the Indonesian University of Education, Bandung, Indonesia in 2015. His main research directions are history education, social studies, social science, and education. He can be contacted at email: bambangsbb@ulm.ac.id.

[23] J. Mason, “Intelligent Contracts and the Construction Industry,” *Journal of Legal Affairs and Dispute Resolution in Engineering and Construction*, vol. 9, no. 3, p. 04517012, Aug. 2017, doi: 10.1061/(ASCE)LA.1943-4170.0000723.

[24] F. Wang, E. A. Mack, and R. Maciewewski, “Analyzing Entrepreneurial Social Networks with Big Data,” *Annals of the American Association of Geographers*, vol. 107, no. 1, pp. 130–150, Jan. 2017, doi: 10.1080/24694452.2016.1222263.

[25] E. Tohani, S. Sumarno, and Y. Suryono, “Utilization of Social Capital in Community Entrepreneurship Education: A Study on the Vocational Village Education Program (in Indonesian).” *Jurnal Pembangunan Pendidikan: Fondasi dan Aplikasi*, vol. 3, no. 2, pp. 151–166, 2016, doi: 10.21831/jppfa.v3i2.7534.