

The Implementation of Role-Playing in Understanding Ponzi Scheme Investment

Maya Sari, Nugraha Nugraha
 Faculty of Business and Economics Education
 Universitas Pendidikan Indonesia
 Bandung, Indonesia
 mayasari@upi.edu, nugraha@upi.edu

Abstract—The practice of Ponzi schemes is still widely found today. This study aims to implement and develop role-playing method on learning Ponzi scheme investment for undergraduate students. In this semi-experimental study, there were 27 students involved and treated as sample who were selected randomly. A set of scenarios was given to the students within 10 sessions of two hours of lecturing and implementing role-playing. The role-playing was evaluated by using observation and reflection, questionnaires and focus group. The results showed that there was an enhancement of understanding the Ponzi scheme investment. It can create positive awareness about investment in Ponzi Schemes among undergraduate students but this method has not been able to develop financial skills effectively.

Keywords—*financial education; role-playing; investment; Ponzi scheme*

I. INTRODUCTION

The practice of Ponzi schemes is still widely found today. Ponzi scheme is known as an investment model that promises higher profits than the investment schemes in general [1]. The benefits did not come from well-run business, but they derived from other new investors' fund.

Ponzi scheme business model which always develops makes it difficult for society to distinguish from the real investment. The interesting phenomenon is where the investor's interest remains high, in fact, there are no investors who actually receive benefit from this investment. On the other hand, In Indonesia, from 1975 to 2016, the losses due to Ponzi schemes reached 126.5 trillion IDR and this amount is an accumulation of the total complaints reports around 2,772 people [2].

The high interest in the Ponzi scheme indicates low financial awareness. Financial awareness is a measure of understanding, knowledge and skills in managing finances. It is one factor that will affect a person's ability to acquire, understand and evaluate relevant information in making decision by understanding the financial consequences [3]. This ability is important for a better prosperous and quality of life [4].

Financial education is a strategic step to improve financial awareness. An effective financial education programs will create a financial awareness that encourages a positive attitude

in money management that will ultimately lead to the right financial decisions [5]. The success of the financial education program is influenced by the method of learning. The use of appropriate methods can improve participant motivation and be able to achieve educational goals effectively.

Role-play is an instructional technique that has been implemented in varying levels of popularity over the last four decades [6]. Role-play can be particularly effective in bridging the gap between academic knowledge and daily life [7]. The academic environment rarely provides the opportunity for expressing attitudes and feelings without logical justification [6].

Role-playing method has been derived from idea that the knowledge is constructed by learners in their attempt to understand their experiences [8]. Some research shows the role-play clearly achieved some skill and knowledge development in terms of both higher education and vocational skills [6]. Students who participated in the role-plays and collaborative exercises did better on subsequent standard evaluations than their traditionally instructed peers [9]. However, other studies show that the use of role-playing methods and lecturing methods do not show significant differences in improving students' knowledge and skills [10].

This research aims to implement and develop the role playing method on learning Ponzi scheme investment for undergraduate students. The students are a potential community group who is expected to be the target of financial education programs. They are expected to have sufficient knowledge and skills to make financial decisions, especially when they graduate from college and earn money.

II. METHOD

This study is a semi-experimental study that involved 16 male and 11 female undergraduate students of a public university in Bandung who had taken courses in Financial Management. They attended 10 sessions of two hours' class of lecturing and role playing. The role playing method was then evaluated using observation and reflection, questionnaires and focus groups.

The role playing scenarios were as follows:

- Students were given an explanation regarding the purpose of simulation and also described their role as an investor in the simulation.
- As investors each student was given a virtual capital as early investing. These funds could be used in whole or some part of investment activity depended of decision from each investor.
- If investors withdrew all their funds from an investment, the investor couldn't switch to other investments and investors were deemed to have resigned from the simulation activity.
- Students were introduced to two investment companies that would provide an explanation regarding profits, amount and prospects of the investment in the future.

Investors could invest in one or more types of investments in accordance with their choice and the amount of funds. In the process of the transaction, each investor was managed by representatives of the investment company. Each transaction was done by online.

III. RESULTS

All student found it fun. The joy of role-play is the students can “became” anyone for a short time [11]. Most student also found it “challenging” because they have to think as an investor faced with various risks to increase their wealth. The challenge in role play derives since this method can create a realistic situation [12].

In the role play process, the students get the experience as an investor which earns very high returns in a short period of time, and at the same time they also get loss as one of the biggest risks in the investment of Ponzi scheme. The students' perceptions related to learning process are analyzed through focus group setting.

Fun and challenging learning situations are factors that can increase student learning motivation. High motivation will encourage achievement of learning objectives [13].

Table 1 shows the response of the participants on knowledge, skill and awareness development in the role-play. The results of the study showed that the majority of participants were able to identify the investment characteristics of the Ponzi scheme based on the transaction experience.

TABLE I. THE PARTICIPANTS' RESPONSES ON KNOWLEDGE, SKILL AND AWARENESS DEVELOPMENT IN THE ROLE-PLAY

	Yes	No	Do Not Know
Financial Knowledge			
Selected investment looks like Ponzi Investment in profits.	88,72%	9,87%	1,41%
Selected Investment looks like Ponzi Investment in Risk	76,41%	14,46%	9,13%

Table 1. Cont.

Financial Skill			
I have (further) developed my analytical skills as a result of the role-play.	48,72%	39,59%	11,69%
I have (further) developed my communication skills as a result of the role-play.	59,85%	35,02%	5,13%
I have (further) developed my research skills as a result of the role-play.	54,85%	38,46%	6,69%
Financial Awareness			
Decision to choose an investment in a real situation.	66,42%	32,31%	1,27%
Decisions to Recommended Ponzi Investment in Real Situations	73,11%	24,31%	2,58%

The level of understanding gained through this role playing method is relatively higher than the educational method in the classroom which is limited to the obtained information.

Role-playing is a participatory and experiential learning method that emphasises ‘learning by doing’ [14]. Role-play may also be used to encourage the practical application and integration of knowledge to a professional context without venturing into the work environment [15].

An interesting finding from this study is that investment experiences through role play can create positive awareness about investment in Ponzi schemes among students.

The results of the study show that through the role playing method, the majority of participants were able to develop financial awareness regarding the investment of a Ponzi scheme. The majority of participants realized that investment in a Ponzi scheme is a relatively unprofitable investment, because of the high risk inherent in this type of investment. The existence of a recognized risk causes them to have a positive attitude related to the investment. This positive attitude is reflected in the attitude of not choosing or recommending this type of investment if it is found in real situations.

Although the results of the study show that learning methods can improve knowledge, but this method has not been able to develop financial skills effectively. This is indicated by the low of analytical and research ability after implementing role-play. Both of these skills are needed to make the right financial decisions.

This finding is not in line with the research findings which state that besides increasing knowledge, role playing can also improve skills or abilities from a course of study [16].

IV. DISCUSSION

In role-playing, the participants enter a simulated scenario, assume a specific role, and behave as they expect they should in the circumstances. The result shows that role playing method can create a fun and challenging learning situation that can ultimately improve learning motivation. High motivation will lead to the achievement of expected educational objectives [17].

The objectives of the role-playing were to encourage students to practically apply their theoretical knowledge to a ‘real-life’ situation. The role-play was an opportunity for the

students to reflect on, review and integrate theoretical course material and achieve a greater understanding of stakeholder positions. The other objectives were to develop higher education skills such as research, analysis and written [18].

Role playing can develop financial knowledge and awareness among students. It can be applied to theoretical course material and develop higher knowledge. However, it cannot demonstrate their skills because it is required more steps and time.

Although the results of the study show that the education model through a Role Playing is able to develop knowledge and establish financial awareness, the method developed has not been able to develop financial skills in the majority of participants effectively. Various factors influence financial skills. Besides, knowledge, experience is also an important factor forming skills. Someone with investment experience will have the ability to make financial decisions appropriately. Based on this, improvements in the role playing based education model need to be done to provide participants with a broader experience. The corrections that can be made include (1) increasing the time allocation to provide an introduction to participants regarding the role playing method and (2) increasing the time allocation for implementing the method in the education process in order to provide a more in-depth experience as a basis for the formation of financial skills.

V. CONCLUSION

This research aims to implement and develop the role playing method on learning Ponzi scheme investment for undergraduate students. The results showed that there was an enhancement of understanding the Ponzi Scheme Investment among undergraduate students. It also creates positive awareness about investment in Ponzi schemes among students. This method has not been able to develop financial skills effectively because it is required more steps to introduce and more time to implement the role-play method.

ACKNOWLEDGMENT

The author wishes to acknowledge to Ministry of Research, Technology, and Higher Education for funding this research and Universitas Pendidikan Indonesia for facilitate this research.

REFERENCES

- [1] T. Moore, J. Han, R. Clayton, "The postmodern Ponzi scheme: Empirical analysis of high-yield investment programs". International Conference on Financial Cryptography and Data Security 2012 Feb 27 (pp. 41-56). Springer, Berlin, Heidelberg.
- [2] A. Himawan, D. K. Hapsari, Total Kerugian Investasi Bodong di Indonesia Rp126,5 Triliun, [Online], Retrieved from <https://www.suara.com/.../total-kerugian-investasi-bodong-di-indonesia>
- [3] C. L. Mason, R. Wilson, Conceptualising financial literacy. © Loughborough University, 2000.
- [4] S. Marcolin, A. Abraham, Financial literacy research: Current literature and future opportunities, 2006.
- [5] D. Fernandes, J. G. Lynch Jr, R. G. Netemeyer, "Financial literacy, financial education, and downstream financial behaviors". Management Science. 2014 Jan 27, vol. 60(8), pp. 1861-83.
- [6] E. K. Armstrong, Applications of role-playing in tourism management teaching: an evaluation of a learning method. Journal of Hospitality, Leisure, Sport and Tourism Education, 2(1), 5-16, 2003.
- [7] A. M. Maddrell, "A scheme for the effective use of role plays for an emancipatory geography". Journal of Geography in Higher Education. 1994 Jan 1, vol. 18(2), pp. 155-62.
- [8] M. P. Driscoll, Psychology of learning for instruction, 2005.
- [9] J. P. McCarthy, L. Anderson, Active learning techniques versus traditional teaching styles: Two experiments from history and political science. Innovative higher education. 2000 Jun 1, vol. 24(4), pp. 279-94.
- [10] A. Hassanzadeh, A. Vasili, Z. Zare, "Effects of two educational method of lecturing and role playing on knowledge and performance of high school students in first aid at emergency scene". Iranian journal of nursing and midwifery research, vol. 15(1), p. 8, 2010.
- [11] P. Gray, Free to learn: Why unleashing the instinct to play will make our children happier, more self-reliant, and better students for life. Basic Books, Mar 5, 2013.
- [12] H. M. Huang, U. Rauch, S. S. Liaw, "Investigating learners' attitudes toward virtual reality learning environments: Based on a constructivist approach". Computers & Education. 2010 Nov 1, vol. 55(3), pp. 1171-82.
- [13] R. J. Marzano, J. S. Kendall, editors. The new taxonomy of educational objectives. Corwin Press, Dec 18, 2006.
- [14] M. Kebritchi, "Examining the pedagogical foundations of modern educational computer games". Computers & Education, vol. 51(4), pp. 1729-1743, 2008.
- [15] D. Francis, "The reflective journal: A window to preservice teachers' practical knowledge". Teaching and teacher Education, vol. 11(3), pp. 229-241, 1995.
- [16] F. J. Dochy, M. Segers, D. Sluijsmans, "The use of self-, peer and co-assessment in higher education: A review". Studies in Higher education. 1999 Jan 1, vol. 24(3), pp. 331-50.
- [17] K. C. Williams, C. C. Williams, "Five key ingredients for improving student motivation". Research in Higher Education Journal. Aug 1, vol. 12, 2011.
- [18] C. Beidatsch, S. Broomhall, "Is this the past? The place of role-play exercises in undergraduate history teaching". Journal of University Teaching and Learning Practice, vol. 7(1), p. 6, 2010.