

Team Learning, Team Performance, Entrepreneurial Intention, and Self-Regulated Learning in Entrepreneurship Education of UNUSA Students

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Abstract

In this paper the authors investigate the effect of Self-regulated Learning (SRL), team learning, and entrepreneurial intention on various assessment types in the context of an entrepreneurship class. The investigation was utilized with quantitative methods, and saturated technique was performed by collecting several samples from 135 students at Universitas Nahdlatul Ulama (UNUSA). The analysis is conducted with Partial Least Square, resulting in Positive relation of entrepreneurial intention and team learning strengthened by self-regulated learning (SRL). Whereas team learning and team performance is positively related to entrepreneurship intention. And psychological security strengthens the relationship between team learning and team performance.

Keywords : entrepreneurship education, self-regulated learning, team learning, team performance, psychological safety, entrepreneurial intention.

1.Introduction

Recently many institutions offer more than one course entrepreneurship with study programmes of half a year or more (R.Harms 2015). Sørheim and Rasmussen (2006) state that universities contribute through education of entrepreneur candidates, directly by commercialisation of research, also by being the seedbed for new ventures. Peterman and Kennedy (2003) point that entrepreneurship education programmes can significantly change the entrepreneurial intentions of students as participants. Hence, in addition to the direct effects of entrepreneurship education programmes through new start-ups, the students may repeat the entrepreneurial process many times during their entire working career, by starting new companies, new business areas in existing companies, by running their businesses more competently, or by assisting other entrepreneurs.

Experiential learning role becomes more significant nowadays, entrepreneurship education can apply this method to enable students experience and they can be exposed to real-life entrepreneurship context. On the theoretical side, we see that early customer integration in the

entrepreneurial process can be an example of the “socio-cognitive dynamics of entrepreneurial ideation” (Gemmell et al., 2012 p.1053). Meanwhile on the practical level we see an increasing number of startups that are created using the lean startup approach. The purpose of this paper to inquire the degree in which team learning affects the achievement of learning outcomes in the classroom also entrepreneurial intention of students. The research question is about the relative importance of SRL and team learning in group-based Entrepreneurship Education. The results can assist students and teachers to find effective learning strategies, and teachers and coaches to design effective didactical approaches for their classes.

2. Theoretical framework and hypotheses

This paper demonstrates the effects of team learning, team performance, psychological safety, SRL, entrepreneurial intention on various assessment types in the context of an entrepreneurship class. Data is collected from 135 students in 27 groups. Analysis performed with a two-stage structural equation modeling technique with the help of Smart-PLS software

2.1 Psychological Safety in Entrepreneurship Education

Studies show that psychological safety allows for moderate risk-taking, speaking your mind, creativity, and sticking your neck out without fear of having it cut off — just the types of behavior that lead to market breakthroughs. In entrepreneurship studies, self-efficacy refers to “the strength of a person's belief that he or she is capable of successfully performing the various roles and tasks of entrepreneurship” (Chen et al., 1998, p. 295).

A study of the impact of personality on risk taking found that openness was a predictor of risk taking in one's career (Nicholson, Soane, Fenton-O'Creevy, and Willman, 2005). Through psychological learning, enables team members to think and behave in creative ways, to engage trial-and-error learning, and to voice issues about content and team processes. Baer and Frese (2003) conceptualize PS as a moderator between the relationship of innovativeness and performance. Team learning according to Edmondson (1999, p. 353) is a team based “ongoing

process of reflection and action characterized by asking questions, seeking feedback, experimenting, reflecting on results, and discussing errors or unexpected outcomes of actions”.

In this paper, authors predict hypothesis of the effect of psychological safety and team performance on to team learning. According to previous findings we stipulate first hypothesis as follow:

H1. Psychological safety strengthens the relationship between team learning and team performance

2.2 Team Learning and entrepreneurial intention in entrepreneurship education

Entrepreneurial intention has become a dynamic field in entrepreneurship research (Fayolle and Linan, 2014), as “the best predictor of planned behavior has been proven by intention, especially when the behavior is rare, hard to observe, or involves unpredictable time lags” (Krueger et al., 2000, p. 411). In the early research by Sweet and Michaelsen (2007) highlighted a positive impact of team learning on individual learning, on new venture teams (Hill et al., 2014). In the context of an experiential classroom, teams that execute TL processes well should come up with solutions that are both valued highly by teachers and external clients. Second, TL can focus on team processes. This is an inside perspective on TL. In studies conducted by Schlaegel and Koenig (2014), provide a strong theoretical foundation. It posits that a person's future behavior is preceded by intention: the stronger a person's intention to engage in a specific behavior, the more likely it is that the actual behavior will be performed. Furthermore, the intention to perform a given behavior is the result of three cognitive antecedents: (i) attitude toward behavior; (ii) subjective norms; and (iii) perceived behavioral control. In line with these findings, we propose the following hypothesis :

H2a. There is positive relationship between team learning and team performance and students EI.

H2b. There is positive relationship between team performance and students EI.

2.3 Self-regulated Learning in Entrepreneurship Education

Cheng (2011) states that SRL is effective in increasing academic performance. He states “if learners do not have [SRL] abilities, they learn by depending on the guidance and monitoring of others and fail to achieve a high level of learning”. SRL is also effective in work-related

training (Sitzmann and Ely, 2011), creativity (Hirst et al., 2009), and is used by early-stage entrepreneurs (O'Shea and Buckley, 2010). It can be assumed that SRL is even more effective in situations where guidance and monitoring of others are difficult. These situations can arise when the learning goal is ambiguous, can change dynamically, and needs to be formulated internally. These conditions apply to the entrepreneurial context. Self-regulated learning Zimmerman (1989) is a didactical concept that emphasizes that a learners' abilities for meta-cognition, strategic action, and motivation (Ormrod, 2009) are a key to effective learning. Logically in running their business the gains and losses induced by the same stimulus (e.g., starting a business) will be evaluated against the background of a future without that stimulus. This expectation bias has three effects on the impact of EE on students' EI. First, as EE typically frames entrepreneurship positively in terms of gains compared against other career options, it will strengthen students' positive attitudes rather than any negative ones and therefore enhance the positive impact of attitudes on EI.

EE aims to help students develop the skills and competences to seize entrepreneurial opportunities. Thus, as students receive more EE, they should become more confident in their ability to create and evaluate entrepreneurial opportunities, and in their ability to secure the resources required to seize them. The more students know about entrepreneurship, the clearer will be their expectations of how entrepreneurship will influence their lives, which in turn will make their decisions less reliant on the entrepreneurship opinions of their social reference groups (Kautonen et al., 2015).

H3a. Self-regulated learning strengthens the relationship between team learning and students EI (Entrepreneurial Intention)

H3b. Self-regulated learning strengthens the relationship between team performance and students EI (Entrepreneurial Intention)

3. Method

3.1 Data collection and description of the sample

The data from this study are derived from 135 students at Universitas Nahdlatul Ulama (UNUSA). The investigation was utilized with quantitative methods, and saturated technique. We took several measures to avoid non response bias (NRB), including carefully designing the questionnaire, managing its length, and establishing the importance of the survey (Yu and Cooper, 1983). However, since NRB can not be ruled out in view of the achieved return rate, we employed archival and wave analysis (Rogelberg and Stanton, 2007).

To test the hypothesis, we used a two-stage structural equation modeling technique with the help of Smart PLS software. The first stage in SEM is to evaluate the measurement model, which includes analyzing the reliability and validity of the scale used; the second stage involves evaluation of the structural model itself. Descriptive analysis of the sample showed that 37 percent respondents were male, and 63 percent respondents were female. Respondents averaged 20.3 years of age.

3.2. Operationalization and method of analysis

The questions used in the survey were drawn from several previously published and validated scales. The use of questions from past questionnaires enhances the validity and reliability of the questionnaire (Bryman, 2008). Specifically, the survey questions used to measure psychological safety, team learning, team performance, self regulated learning and entrepreneurial intention were all taken from previously published surveys. A seven point Likert scale was adopted in order to measure the level of constructs used in this study.

Partial least squares structural equation modeling was utilized with the help of Smart-PLS to estimate the hypothesis. In terms of analysis, PLS-SEM is a two-step process involving assessment of the measurement and structural model (Anderson and Gerbing, 1988). First, the measurement model should be assessed by examining the internal consistency reliability, convergent validity (CV) and discriminant validity (DV) (Chin, 1998).

4. Findings

Based on the results of the measurement validity test, all measurement **items** (outer loading) meet the cut off value of 0.5. After testing the validity of the measurement, the next is to test the reliability by looking at the composite reliability score. Cutoff value from reliability is 0.7. The result of reliability test is no value that is below the cutoff value. This reflects that all variables meet reliability standards. The results of the analysis are summarized in Table 1

Table 1
Hypotheses Test Results

	Original Sample (O)	T Statistics (O/STERR)	Result
TL*PS ->TP	0.284865	3.031487*	Accepted
TP -> EI	0.215173	2.322409*	Accepted
TL -> EI	0.237536	2.659234*	Accepted
TL*SRL -> EI	0.205474	2.319934*	Accepted
TP*SRL -> EI	0.084257	0.853263	Not Accepted

In this path coefficient the cut off value can be seen in the t-statistical table. If t-statistics has a value greater than or equal to 1.96, the effect of the variable is significant, whereas if it is less than 1.96 it can be said that the effect of the variable is not significant.

Based on the hypotheses test results there are 4 hypotheses that have significant impacts, it is proven from the value of t-statistics when the score is more than 1.96, namely the result of hypothesis test supports hypothesis 2 where team performance has a significant impact on intention entrepreneurs. Third hypothesis is supported with the finding that the learning team has a significant effect on entrepreneur intention. Where the relationship between team learning and performance is higher when psychological safety is high, respectively lower when psychological safety is low. And the greater self-regulated learning the stronger the impact of team learning on entrepreneurial intention. Nevertheless there is a hypothesis that is not supported, namely Self-regulated Learning fail to moderate the relationship between team

performance and entrepreneurial intention, it is proven from the value of t-statistics which is less than 1.96.

5. Discussion

The purpose of this study is to analyze the impact of team learning, team performance, psychological safety, entrepreneurial intention in the entrepreneurship class. We found general support for a positive effect of team learning on entrepreneurial intention and positive impact of team performance on entrepreneurial intention. Our findings is supported by previous study conducted by Maresch et. al (2016), where students benefit more from entrepreneurial education. Through team learning students can exercise their skills to cooperate and collaborate with their team member to deliver the assignments and project from teachers. Though team performance has impact on entrepreneurial intention of student, this finding contradicts with previous study by Harms (2015) where team performance is not the indicator for students to have motivation to become entrepreneur in the future. In our finding, team performance has become the indicator to encourage students to become entrepreneur, favor by the psychological safe atmosphere during the monitoring and intervening of lecturers in the class and project execution.

SRL is an effective learning strategy, previous research highlighted a positive impact of team learning on individual learning (Sweet and Michaelson, 2007), on the effectiveness of new product development teams (Akgün et al., 2006). Hill et al. (2014) point out that team learning can be more effective than individual learning by bringing together a diversity of knowledge, experiences, and perspectives. TL can focus on team processes. This is an inside perspective on TL. Kayes et al. (2005) argue that teams that explicitly and systematically address teamwork challenges through TL can improve team performance. Prior experience of a subject allows a person to acquire and process new knowledge more efficiently than those with less exposure to the subject. Hence, during self regulating learning process students may have a

different mental framework from that which is suited to process information on entrepreneurship and their intention to become entrepreneur.

When we assessed the moderation of SRL on the impact of TP to EI, our finding does not support our hypothesis. SRL does not strengthen either weaken the impact of TP on EI. According to Cheng (2011) SRL elements consist of learners assess their strengths and weaknesses with regard to a specific learning task. Second, learners execute strategic planning and goal setting with regard to mostly self-chosen learning goals. Third, learners implement their learning strategy and continuously monitor its effectiveness. Finally, learners compare the actual final learning outcome with the intended learning outcome. SRL is effective in increasing students performance through their team (Cheng,2011). SRL is also effective in work-creativity (Hirst et. al., 2009), and is used by early-stage entrepreneurs (O'Shea and Buckley, 2010). However from our finding, it turned out good learning process does not strengthen the impact of team performance of students towards their motivational effects of goal setting in choosing entrepreneurship as their career option.

A good climate of PS can succeed team learning, it assists team members to think and behave in creative ways, to engage in trial-and error learning, and to voice issues about content and team processes. From the results it can be seen that PS successfully moderated the impact of team learning on team performance. Our hypothesis is supported, there is a co-development of PS and team learning that together impact on team performance: PS is based on trust (Kessel et al., 2012) and high-quality relationships (Carmeli and Gittell, 2009) that in turn develop through continuous successful episodes (Fink and Harms, 2012) of team learning and team performance. This co-development indicates that stand -out teams have a high level of TL and PS, and relatively unsuccessful ones may have a low degree of both.

The findings and limitations of the current research present a number of promising opportunities for future research. Based on the results of this study, the university should pay

more attention to the level of entrepreneurship education in the university through improvement in entrepreneurship curricula, provides infrastructure and facilitates students in conducting entrepreneurial activities and provide teachers of entrepreneurship by participating in various seminars and training so that their competencies can elevate.

There are some limitations in this study, therefore there are several suggestions for future research. In this study, the entrepreneurial intention only focused on Muslim students, so authors were not able to identify trends in the entrepreneurial intention level felt by non-Muslim students. So for further research, it would be better if researchers could find out the level of entrepreneurial intention seen from Islamic based universities and Non-Islamic based Universities. The researcher also realized that the number of samples did not meet the requirements, so the analysis technique must be replaced in processing the data. Therefore, further research should be able to use samples that are appropriate and meet the requirements.

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