Relationship between Academic Buoyancy and Career Adaptability in 9th Grade Students

Diny Rachmayanti[1], Puji Lestari Suharso[2]

[1,2]Faculty of Psychology, Universitas Indonesia

Email: puji.prianto@gmail.com

Abstract

This research aimed to find the correlation between academic buoyancy and career adaptability in 9th-grade students. In Indonesia, 9th grade students are about to face a career transition as they soon will be graduated and enter the high school. During this transition, students are expected to have prepared for and adapt to imminent and future changes and challenges in their career. In order to successfully dealing with the transition, firstly they need to overcome every change and challenges that mostly arise at school in an academic setting. To this point, a term that reflects students' ability to deal with academic challenges, setbacks, and difficulties is academic buoyancy. In this research, Career Adapt-Abilities Scale (CAAS) developed by Savickas and Porfeli (2012) and Academic Buoyancy original scale from Martin and Marsh (2008) that has been developed by Nurafifah (2011) were administered to 597 students on the 9th grade from two public schools. Pearson Product Moment Correlation data analysis shows that there is a strong, positive and significant correlation between academic buoyancy and career adaptability ($r = .535$; $p < .001$). This result indicates that the higher the academic buoyancy of the students, the higher their career adaptability will be.

Keywords: *academic buoyancy, career, career adaptability, junior high school students*

1. Introduction

Career evolved throughout the process of human life, from birth to old age (Super, in Smart & Peterson, 1997). Career did not only refer to the work context, but also education. Super (1976) defined a career as a series of events that take place throughout ones' life. It includes various activities, positions, and roles that are performed in a job, voluntary activity, and education (Seligman, 1994).

Although career developed throughout the ages, adolescence is the most critical period in preparing for a career in the future (Savickas, 2005). According to the stages of career development proposed by Super (1997), individuals when entering the age of 14 are facing the transition from the growth stage to exploration stage. During the transition period, ones must be able to prepare themselves to adapt to the changes in the developmental task and role of the career in the exploration stage. Which, at this stage adolescents ideally run a series of career explorations to help them make the most appropriate educational and career choices based on their knowledge of self and the environment (Savickas, 2005). Therefore, ones' future career is important to be prepared during adolescence period because it involves a variety of career decision-making regarding their life, that might shape their career in the future.

According to Super (1997), Smart and Peterson (1997) concluded that 9th grade students who are mostly aged between 14-16 years old begin to face various challenges, probation, choices to make, identity changes, and situations that require adaptation in it. In addition, along with being faced with the transition stage of career development, they also face career transitions in their education. Students after graduating from junior high school should be ready to take a step in determining what kind of secondary education (high school or vocational school) they will choose.

As stated in the implementation of the educational curriculum in Indonesia, through the regulation No. 64 regarding high school students educational specialization groups, it has been established a

selection policy for choosing major (science, social science, language) that will be started since students in 10th-grade (sdm.data.kemdikbud.go.id). This required students at this transition to make a decision about what major they should choose even before experiencing each major available. Therefore, students need to make a lot of exploration regarding future career during their time as 9th-grade students to help them make the most appropriate educational and career choices. Furthermore, the right career decision that students make will play a big role in their future success.

In a world of change, students when facing transition in their career need the ability to adapt to the changes (Savickas, 2005). Ability to adapt to career context known as career adaptability played a role in the preparation and development of career (Savickas, 2005). Career adaptability defined as a psychosocial construct that signifies individual readiness and resources in accomplishing the task of current vocational development and anticipating vocational tasks in the future, vocational transitions, and personal traumas. Along with its development, Buyukgoze-Kavaz (2016) concluded Rottinghaus, Day, and Borgen (2005) and Savickas (1997, 2005) statements that career adaptability is often defined as individual readiness in overcoming changes and transitions over their life-span. For 9th-grade students, career adaptability can help them deal with the transition of education and to overcome the challenges that exist during the career exploration in regard to determine what career they want to pursue.

Based on the implementation of regulation No. 64 above, students in 9th-grade must be ready to face the career transition, therefore career adaptability is needed. Basically, each student has the different adaptability to their career. This is due to a number of different factors that affect each student's career adaptability. To date, a number of studies have been conducted in an attempt to find factors that can improve career adaptability. As summarized by Hirschi (2009), factors found to affect career adaptability are age, gender, educational institutions, work experience, family, and socioeconomic status. Savickas (2012) states that there is another factor, namely resilience that is part of self-regulation and can be identified as one of the resources of career adaptability. Resilience is also one of the crucial variables in coping with the personal and structural barriers that arise along individual' career life (Bimrose & Hearne, 2012). Resilience is defined by Luthans (2002) as the

capacity that can be developed by a person to bounce or revive from adversity, conflict, and failure or even positive events, progress, and increased responsibility.

Studies on resilience and its linkages to career adaptability on students have been conducted by Buyukgoze-Kavaz (2016). The result indicates that resilient, hopeful, and optimistic students tend to describe themselves as people who are better able to adapt to their careers as they are more likely to prepare themselves for challenges in the future. In junior high school students, especially 9th-grade, resilience is more easily seen in the academic context due their daily life is most likely spent at school. Martin, Colmar, Davey, and Marsh (2010) affirms that in junior high school students, difficulties and challenges are often found in academic contexts such as decreasing motivation for school involvement. This is in line with Catterall's (1998) assertion that schools are an institution where academic challenges and pressures are everyday realities. Thus, for 9th-grade students the problems and barriers they commonly encountered refer to the academic context.

The development of resilience-related research, especially in the academic context is still more discussed in the clinical context (Buyukgoze-Kavaz, 2016; Martin & Marsh, 2008). Therefore, a more generalized measure of resilience is required. Martin and Marsh (2008) use the concept of academic buoyancy to replace resilience in academic context because it is considered more appropriate in describing students' capacity through their toughness in facing everyday obstacles and challenges in school.

Academic Buoyancy is described as a student's ability to cope with academic setbacks and challenges that generally occur in school life, such as poor grades, exam pressure, and difficulty in completing schoolwork (Martin & Marsh, 2008). These challenges arise alongside with the efforts students put in preparing their future career--in this case, to graduate and determine further education. Individual's buoyancy affects how they respond to the challenges, setbacks, difficulties, and pressures they encounter in academic settings; how eager individuals want to try to overcome them; as well as how diligent the individuals to achieve the goals they have set (Martin et al., 2010). Students who are not buoyant have more risk of experiencing greater difficulties in the pursuit of his career, especially problems facing the future career.

Martin et al., (2010) argue that there are five factors that play a role in academic buoyancy, namely self-efficacy, planning, control, anxiety, and perseverance. Pintrich (2003) states that these five factors are part of the motivational components associated with expectation, values, and affection that drive a person to perform an activity and persist the chosen activity. These factors are believed to be the substance of one's academic buoyancy depicting the capacity of students to be able to withstand challenges and academic setbacks (Martin et al., 2010).

Among the contributing factors of academic buoyancy, the self-efficacy factor that refers to one's self-beliefs about its ability to perform and persist in one's choice (Pintrich, 2003) can similarly be found in the career confidence as the dimension of the career adaptability. Likewise in other academic buoyancy factors such as control, planning, and persistence also contribute to the dimensions of career concern and career control that are part of career adaptability (Martin, et.al, 2010). According to this, researchers concluded there are several similar substances in the ability of career adaptability and academic buoyancy. Thus, it is suspected that academic buoyancy may be related to the adaptability of a person's career. But it is still left unknown, for there was no previous research conducted, whether the two variables are related to each other. Therefore, researchers want to know whether there is any correlation between academic buoyancy and career adaptability, especially in junior high school students.

This study measures two variables, namely academic buoyancy and career adaptability. The ability of students to face and manage all academic challenges to successfully overcome them is believed to improve student career adaptability in facing the transition and challenges of career development. Although it's known that academic buoyancy can be viewed as another version of academic resilience, which is positively related to career adaptability, it didn't state that buoyancy has the same kind of relation as academic resilience did. Moreover, still there is a need to find out because research about academic resilience was using more of clinical samples, that makes buoyancy which refers to the whole student regardless its background may tell a different result from larger samples. Thus, academic buoyancy in students is assumed to be related to their career adaptability.

Because of the demands of the 9th-grade students to be able to determine the choice of majors when entering the high school and research on the career adaptability over the years in Indonesia is more on the high school students (Indianti, 2015), this study aims to examine the relationship between academic buoyancy and career adaptability in 9th-grade students.

Preparation for a career transition can't be done in a short time so it requires early efforts to find factors that can improve career adaptability, to be prepared as early as possible. This research can be a preliminary study to find the factors associated with career adaptability. The result can be implemented in the school setting through the various interventions, such as teaching method from teachers that promote and strengthen students' academic buoyancy. For example, providing a more encouraging and constructive feedback to those students who are struggling with academic difficulties. And therefore, helping them to make promotive steps in pursuing a career.

2. Methods

Sample. A total of 557 students in the 9th-grade (265 female, 232 male) enrolled in two public Junior High Schools in Depok voluntarily participated in this study. With regard to origin of school, 56.8% (*n*=339) were from school X and 43.2% (*n*=258) were from school Y. Participants' mean age was 14.64 years old, with the age distribution is in the range of 14 to 17 years old. Participants recruited using accidental sampling method and each signed the informed consent before proceeding with filling out the research instruments.

Research Design. This study used correlational study design to answer the research question regarding is there any relationship between academic buoyancy and career adaptability. A non-experimental study design with a quantitative approach was applied in this research, provided descriptive and correlational data between research variables. For data collection, this research used one-shot study method, thus involving single time measurement with research samples.

Instrument and Measurement. The research instrument used in this study was printed questionnaire as data collection tools for quantitative analysis, requiring participants to fill it out using paper-and-pencil format. The

questionnaire consisted of two scales to measure both research variables.

The 24-item (α=.889) Career Adapt-Abilities Scale (CAAS) was used to measure career adaptability (e.g. I'm looking for opportunities to develop myself) among students (Savickas & Porfeli, 2012). The scale is five points Likert-type scales in which each item is presented as a statement and followed with responses ranging from 1 (disagree) to 5 (strongly agree).

Academic Buoyancy scale (e.g. I tried different ways to understand the subject matter) with a total of 21 items (α=.728) was used to measure academic buoyancy among students (Nurafifah, 2011). The scale is four points Likert-type scale which items were presented as statements and followed with responses (1= Strongly disagree, 2= Disagree, 3= Agree, and 4= Strongly agree). Analysis of reliability and validity of the research instruments have been conducted by researchers. The CAAS was found to be high reliability (24-item, α=.889). Likewise, the Academic Buoyancy scale was found high reliability (21-item, α=.728). The result shows that all research instruments that were used in this study have established considerable to good reliability and validity. Therefore, the instruments are suitable to be used in this study.

Procedure. After obtaining approval from both schools' committee, we collected the data in the classroom by using the questionnaire that consists two scales (CAAS & Academic Buoyancy) and a brief demographic form, which was administered using paper-and-pencil format. Before each administration, participants were orally given the objective of this research and asked to sign the consent form provided in the questionnaire if they voluntarily agreed to be research participants. Several research assistants who have been briefed before explained the instruction and gave a little demonstration on how to respond to each presented item. After making sure that all participants had the perfect research instrument and understand the instruction given by research assistance, they were welcomed to fill the questionnaire.

Several analysis methods were applied in this study to process the data. The analysis consisted of three stages. First, descriptive statistics such as frequency, minimum and maximum score, means and standard deviations were calculated to get a demographic picture of the participants. Second, Pearson Product Moment Correlation was computed to determine the significance of a correlation between academic buoyancy and career adaptability. Third, an Independent Sample *t*-Test and One Way Analysis of Variance (ANOVA) were used to analyze the difference of career adaptability according to gender, age, and origin of school.

3. Results

From the data analysis using Pearson Product Moment Correlation method, as expected as the hypothesis that there is a positive and significant relationship between the two variables ($r = .535$; $p<.01$). The positive correlation indicates that the higher academic buoyancy, the higher the career adaptability among students. The result of regression indicated the career adaptability can be explained by 28.62% of the variance academic buoyancy ($R^2 =.2862$, $p<.01$).

In relation to the factors affecting career adaptability mentioned earlier, an additional analysis performed to see the further review between Academic Buoyancy and participants' demographic. Gender, age, and origin of school were put to the analysis using Independent Sample *t*-Test and ANOVA. Regarding gender differences, male ($M=93.98$, $SD=8.404$) and female ($M=93.28$, $SD=8.914$) did not differ significantly on levels of career adaptability, $t=-.951$, $p=$n.s. The main effect of age was not significant, $F(.763)=.515$, $p=$n.s. 14, 15, 16, and 17 years old participants did not differ in their career adaptability. Regarding origin school, students from SMPN X ($M=95.29$, $SD=8.563$) reported significantly higher levels of career adaptability than SMPN Y($M=91.28$, $SD=8.408$).

4. Discussion & Conclusion

Discussion. The main result explained that academic buoyancy and career adaptability is positively and significantly related. The academic buoyancy of the students on the 9th-grade appeared to be related to their adaptability in a career. Students with high academic buoyancy will most likely to have a high level of career adaptability. It means that students' ability to persistently strive and bounce back from difficulty in their academic, as well as facing the challenges and obstacles during school is playing a role on how students respond to change and transition in career, namely career adaptability.

The result of this study shows that buoyant students will likely be more adaptable in their career.

Resources of adaptability, namely career concern, career control, career curiosity, and career confidence (Savickas & Porfeli, 2012) that makes students adaptive in their career can similarly be found in factors underlying the formation of academic buoyancy (Martin et al., 2010).

Additional analysis regarding factors affecting career adaptability denotes that students from SMPN X have better career adaptability. This result indicates that the origin of school proved to have affected career adaptability among students through the acquisition of significant mean differences of 9th-grade students from two different schools. This result is supported and consistent with Patton and Lokan's (2001) opinion that differences in educational institutions that individuals follow have an important role in students' career adaptability. Nevertheless, what's interesting about this finding is that the difference appears in schools that are both public schools located in one area, Depok.

According to the data found in the field, it can be concluded that among other demographic variables, only the origin of schools showed a significant mean difference in career adaptability among the students. Although both schools are located in the same area and adjacent locations, the significant result may occur due to the difference of each school in carrying out education to students. It is also supported and in accordance with the conclusion of Hirschi (2009) that educational institutions act as factors affecting career adaptability. It probably can happen due to a different school's program, as well as in implementing education through facilitating students with career-related knowledge. The application of curriculum, teacher teaching methods, a routine of teaching and learning activities in both schools may be different so that the results obtained in the field consistent with the previous study from Patton and Lokan (2001) that the factor of school origin affects the student's adaptability in a career. Thus, this can explain that students in different schools may establish different career adaptability.

Despite the research was prepared as well as possible, there are several limitations emerges along the research process, especially during data collection. At first, there were 660 participants in this study, but 63 participants turned out didn't give a full answer to the research questionnaire so it must be eliminated from the analysis process. There is situational condition contributing to the loss of

almost 10% of the participants. The first one is students' physical condition because the research being held at school hours, and then followed by the class situation that wasn't conducive enough due to the noises from in and outside the classroom.

For further research, it would be better to expand the samples under the same population so that we can get a broader and more comprehensive picture of the relationship between the two variables in Indonesia. Also, further research can also investigate whether the relationship between the two variables found in this study can be more meaningful as in examining to what extent academic buoyancy can affect or predict career adaptability.

Conclusions. Based on the analysis of the relationship between academic buoyancy and career adaptability, we come to the conclusion that there is a strong, positive and significant relationship between academic buoyancy and career adaptability in 9th-grade students. This indicates that the higher the academic buoyancy of the students, the higher their career adaptability will be, and otherwise. From this results, it is important for students on the 9th-grade to be buoyant throughout their academic year in school to better the chance to develop career adaptability in regard to responding adaptively to the imminent and future changes and challenges throughout their living.

References

Afifah, R. (2013, January 7). Counseling teachers have a big responsibility. *KOMPAS.com.* Retrieved from http://edukasi.kompas.com/read/2013/01/07/17550254/guru.bk.punya.tanggung.jawab.besar

Brown, S. D. & Lent, R. W. (2013). *Career development and counseling putting theory and research to work.* Canada: John Willey & Sons, Inc.

Catterall, J. S. (1998). Risk and resilience in student transitions to high school. *American Journal of Education, 106,* 302-333.

Creed, P. A., Fallon, T., & Hood, M. (2009). The relationship between career adaptability, person and situation variables, and career concerns in young adults. *Journal of Vocational Behavior, 74*(2), 219-229.

Gunawan, W. (2013). Pengaruh Sumber-sumber Efikasi Diri dan Efikasi Diri Pengambilan Keputusan Karier Terhadap Adaptabilitas Karier, *Tesis,* Fakultas Psikologi, Universitas Indonesia.

Hirschi, A. (2009). Career adaptability development in adolescence: Multiple predictors and effect on the sense of power and life satisfaction. *Journal of Vocational Behaviour. 74,* 145 – 155.

Indianti, W. (2015). Dukungan sosial dan regulasi diri dalam belajar untuk membangun adaptabilitas karir pada mahasiswa baru Universitas Indonesia. Disertasi. Fakultas Psikologi. Universitas Indonesia.

Issacson, L. E., & Brown, D. (1997). *Career information, career counseling and career development* (6th ed.). USA: Allyn & Bacon

Kaplan, R. M., & Sacuzzo, D. P. (2009). *Psychological testing - principles applications and issues* (7th ed). Belmont, CA: Wadsworth Cengage Learning.

Kavas, A. B. (2016). Predicting career adaptability from positive psychological traits. *The Career Development Quarterly, 64,* 114-125. doi:10.1002/cdq.12045

Kementerian Pendidikan dan Kebudayaan Republik Indonesia. *Salinan Peraturan Menteri Pendidikan dan Kebudayaan Republik Indonesia Nomor 64 Tahun 2014.* Retrieved from http://sdm.data.kemdikbud.go.id/SNP/dokumen/SPM/Permen%20Nomor%2064%20Tahun%202014.pdf

Kumar, R. (2014). *Research methodology: A step by step guide for beginners.* London: Sage Publications Ltd.

Martin, A. (2002). Motivation and academic resilience: Developing a model for student enhancement. *Australian Journal of Education, 46*(1), 34-49

Martin, A. J., Colmar, S. H., Davey, L. A. & Marsh, H. W. (2010). Longitudinal modeling of academic buoyancy and motivation: Do the '5Cs' hold up over time?. *British Journal of Educational Psychology, 80,* 473-496. doi:10.1348/000709910X486376

Martin, A. J., Ginns, P., Brackett, M. A., Malmberg, L. E., & Hall, J. (2013). Academic buoyancy and psychological risk: Exploring reciprocal relationships. *Learning and Individual Differences, 27,* 128-133. doi:10.1016/j.lindif.2013.06.006

Martin, A. J. & Marsh, H. W. (2008). Academic buoyancy: Towards an understanding of students' everyday academic resilience. *Journal of School Psychology, 46,* 53-83. doi:10.1016/j.jsp.2007.01.002

Nasta, K. A. (2007). *Influence of career self-efficacy beliefs on career exploration behaviors.* Retrieved from http://dspace.sunyconnect.suny.edu/bitstream/handle/1951/42318/Kristen NastaMastersThesis.pdf?sequence=1

Nugraheny, D. E. (2013, July 24). Displacement of high school education majors should be done immediately. *Solopos.com.*

Nurafifah, F. (2011). Self-efficacy sebagai mediator pada hubungan gaya identitas dengan academic buoyancy. *Tesis,* Fakultas Psikologi, Universitas Indonesia.

Patton, W. & Lokan, J. (2001). Perspectives on Donald Super's Construct of Career Maturity. *International Journal for Educational and Vocational Guidance 1: 31-48. 2001.*

Pintrich, P. R. (2003). Motivation and classroom learning. In W. M. Reynolds & G. E. Miller (Eds.), *Handbook of psychology: Educational psychology* (pp. 103–122). Hoboken, NJ: Wiley.

Putwain, D. W., Connors, L., Symes, W., & Douglas-Osborn, E. (2012). Is academic buoyancy anything more than adaptive coping? *Anxiety, Stress, and Coping: An International Journal, 25*(3), 349-358. doi:10.1080/10615806.2011.582459

Savickas, M. L. (2005). The theory and practice of career construction. In S. D. Brown, & R. W. Lent (Eds.), *Career development and counseling: Putting theory and research to work,* (pp. 42-70). Hoboken, NJ: John Wiley

Savickas, M. L. (1997). An integrative construct for lifespan, life-space theory. *The Career Development Quarterly, 45,* 1-14.

Seligman, L., (1994). *Developmental Career Counseling* (2nd ed.). California: Sage

Smart, R. & Peterson, C. (1997). Super's career stages and the decision to change careers. *Journal of Vocational Behavior, 51,* 358-374.

Super, D.E. (1976). *Career education and the meaning of work.* Monographs on Education, Washington, DC: