VOICE AS STUDENT INVOLVEMENT INDICATOR AND PERFORMANCE IN ACADEMIC SETTING

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ABSTRACT

The present study aims to test whether involving low achiever students into student centered learning method in class would enhance student achievement. Low achiever students are indicated by their low GPA score. The study was conducted in a psychology course and involves 44 students. All students, despite their GPA score, were assigned to a series of group discussion each week. Student involvement in group discussion was measured with peer-rating scale at the end of the semester, and serves as an independent variable data. Student performance as dependent variable was measured with final test grade, and GPA score serves as moderator variable. Moderation analysis was tested using PROCESS by Hayes on SPSS 20. Result showed significant interaction between student involvement and performance among low achiever students (p<0.001, CI [37, 3798, 122,035]). This result also indicates that high achiever students do not rely on active involvement in classroom to enhance their performance output. Further implication of the current study will be discussed in the paper.

KEYWORDS

Voice, student involvement, performance, Indonesi

1. INTRODUCTION

The low-achieving students generally has struggled in the classroom to keep up with academic requirements. Low achievers have limitations in their ability and flexibility to apply their existing knowledge; thus they will likely to have difficulties in solving problems both theoretical and real-life situations (Leong, Yap & Tai, 2013). In many cases, low achiever students are at risk of drop out, especially for those who absent from home and school supports (VanAuker-Ergle, 2003). School support for low-achieving students may provide opportunities for student’s engagement and involvement with their schoolwork and their academic performance (Jönsson, 2018).

Student Involvement Theory by Astin (1984) argued that the more students involved in learning activities, physically or psychologically, the higher students will gain positive learning outcome. Student involvement reflected in student behavior, and it can be seen from several indicators such as how much students show perseverance completing assignment, and how much students spend time in class activity or interaction with other faculties. Several theory mentioned that student involvement also include non-academic activities, such as involvement in student organization (Bohnert, Aikins, & Edidin, 2007), athletic (Ahlfeldt, Mehta, & Sellnow, 2005), internship employment (Svanum & Bigatti, 2006), and use of campus facilities (Malinckrodt & Sedlacek, 1987) could increase their performance in class (Lahmer & Zulauf, 2000). The student involvement outside academic activity also brings positive impact in their lives as a whole as well. Involved in
extracurricular activities, for instance, could give positive impact to some aspects of the student lives (Chickering & Reisser, 1993; Pascarella & Terenzini, 2005; Utami, 2009).

Based on those findings, it is assumed that students would have good academic performance if they have the motivation to actively involve in every learning process, or is conditioned to actively involve in class. A particular learning technique could be considered by lecturers to be implemented in class so that students are motivated to actively involve in class. One of the possible learning techniques is student-centered learning technique. This technique is known to generate various positive impacts to students, such as improving student-teacher positive relationship, student positive identity, and student performance (Armbruster, Patel, Johnson, Weiss, 2009). Student centered instruction also proven to increase student’s active learning by methods such as cooperative learning (Lie, 2002), critical thinking exercises, or establishing forum for dialog (Estes, 2004).

Current research aims to see whether in-class group discussion as a student-centered learning technique could enhance student involvement in class, and whether this technique could improve low achiever student academic performance.

2. STUDENT VOICE IN THE PRESENT STUDY: FROM ORGANIZATIONAL TO ACADEMIC SETTING

Based on Fredricks & McColskey (2012) measurement of student involvement and engagement has large varieties which includes self-report scales, sampling techniques, teacher ratings, interviews, and observations. In this research, we seek other approach in measuring student involvement that is using voice behaviour, a variable that is widely explored in organizational psychology research, to measure student involvement in academic setting. In organizational setting, Morrison (2011) defined voice behaviour as discretionary behaviour in which an employee communicates his or her ideas, suggestions, concerns or opinions about work related issues with the intent to improve organizational or unit functioning. We think that voice behavior could be used to measure student involvement in this study, as the study was designed to measure student involvement in a class project that required the students to express their ideas and thoughts in a discussion group. This perspective is also supported by the notion from Absolum et al. (2009) that stated voice behaviour is a micro context or individualistic level behavior.

Student Involvement by Astin (1984) and employee voice by Morrison (2011) and Van Dyne and LePine (1998) also have similarity in terms that these behaviors are reflected in observable behavior, not a motivational level concept. LePine and Van Dyne (1998) suggest that employee voice includes behaviors outside of work that are intentionally and give suggestions to improve work rhythm in groups. Meanwhile, Astin (1994) revealed how involvement does not merely a motivation but rather behavior that intentionally done by students. Those two concepts also focusing in express constructive behavior rather than criticize. Second, in order to do both of this behavior, individual must sacrifice some of their resources, both physical and psychological. In expressing an opinion, students must learn about the material that will be discussed in a group work. Speaking in front of many people, even though their peers, will have their own challenges because of the possibility of being rejected (LePine and Van Dyne, 1998). For some people, speaking in front of people can also cause anxiety (Beatty & Friedland, 1990). Thus, in this research, we measure student’s involvement using Van Dyne and LePine (1998) voice measurement with some academic setting modification.

2.1 Voice as students involvement and performance

Voice research in an academic setting mostly concern in macro context that is refers to all voice (ideas, views or perspectives) that are listened by teachers and school-wide (Parry, 2014). This macro-voice constructs refers to how students suggestion could make strategic decision for school or even reform it (Mitra, 2006; Mitra, 2004). Meanwhile a more micro context student voice
suggested and formulated by Johnson (1991), which concern about how voice in the educational process could empower students. Thus, they will have more positive experience toward the educational process. This concept also a line with Absolum, Flockton, Hattie, Hipkins, and Rose (2009) who see student ‘voice’ as a strategy to help students take more ownership of their learning, by gaining knowledge and understanding of assessment principles rather than just a tool for building up relationships.

This micro concept of voice is reciprocal with Astin’s (1994) concept of student involvement (SI). According to Astin (1994), student involvement is the amount of physical and psychological efforts that the students invest to the academic experience. It involves various forms of behavior, such as spends a lot of time to study, participate in campus activities, or interact with faculties. Fletcher (2005) later argued how this involvement could lead to meaningful student involvement. Meaningful student involvement is a process that make students engage in every aspect of school or academic situation. This engagement will strengthen students’ commitment to education, thus will lead to better academic achievement. Fletcher (2005) also emphasized that increasing student voice will encourage meaningful student involvement.

In this research, students with high voice indicates they are actively involved in group discussion. Meta-analysis by Gellin (2003) indicated that interaction between faculty members, including students with other students, will make them better in critical thinking. Thus, more active students in engaging voice behavior will make their performance better. Similar results were also found by Flowers (2004) that found how this in-class involvement will lead to better performance in African students. Better performance in involved students also coming from their engagement. When students want to be involved or discuss actively, this indicates that they have a better engagement in their academic experiences. This engagement then lead to better performance (Hernon & Dugan, 2004). Taken together, we formulated the following hypothesis:

Hypothesis: voice as student involvement will be positively influence student performance with GPA as moderator.

3. METHOD

3.1 Sampling

Sample from this study consisted of 59 students from a university in Jakarta who took the Research Methodology course. They were asked to make a group for the final task of making a research proposal. One group consists of 5-6 people and they have 4 months working on the research proposal. At the end of the course, they are then asked to measure the voice of a maximum of three of their colleagues in a group that has been determined randomly. One person is measured by 1-3 other colleagues. The questionnaire returned a total of 50 pieces and only 44 were processed because the data was missing and did not match the expected sample characteristics.

3.2 Measurement

3.2.1 Voice behavior

We measured voiced behavior with peer ratings using a measurement developed by Van Dyne and LePine (1998) with modifications to suit it in their peer group college context. One of the items is "He/She develops and makes recommendations on issues related to tasks in the work of this group". Participants then chose to rate their peers on a scale of 1 = “never” up to 5 = “always”. The selection of frequency form likert scales in accordance with recommendations from Whiting, Podsakoff and Pierce (2008), which suggests that the measurement scale for voice behavior, would be better if using a frequency scale. We have ensured that their data will be kept confidential and only processed in aggregate (not per individual) and will not affect their courses final mark. Each student has his own unique code written on the questionnaire. The researcher then matched one by
one each questionnaire data with a unique code on the voice behavior given by their respective friends.

### 3.2.2 Performance Measures

Mid Term and Final Term Examination as student performance. In this study, student performance will be measured by their midterm and final term exam for this course. We expect no relation between voice and midterm but high relation between voice and final term because the project was announced after the midterm examination. We hope the process in the project (which voice consisted in it) will be the one who affect final term exam. Thus, if we hypothesize voice as antecedent of student performance, it will only affect final term not the mid term.

### 3.2.3 Student Achievement: Grade Point Average (GPA)

Student Achievement is measured by their GPA. GPA is the essence of individual abilities, motivation and other aspects that directly describe the performance of someone at his college (Rode, Arthaud-day, Mooney, Near, Baldwin, Bommer, & Rubin, 2005). In educational research, GPA is one of the performance benchmarks most often used in the context of students (Richardson, Abraham & Bond, 2012). The GPA will be used as a moderator to see how the effect of voice on performance in low, moderate and high GPA students. We used GPA who did not contained this course to avoid bias and multicollinearity.

### 3.3 Data Analysis

Moderator analysis was used PROCESS by Hayes (2012) with bootstrapping 5000 to checked whether student achievement could moderate the role of voice to student performance.

### 4. RESULT

#### 4.1. Moderator Analysis Using Hayes

| IV       | Students Performance (n=44 orang) |
|----------|----------------------------------|
|          | coeff | se     | T      | p      |
| Voice    | 54.8859 | 18.9173 | 3.529 | .0061 |
| GPA      | 79.6917 | 20.9183 | 3.8097 | .0005 |
| Voice X GPA | -17.4977 | 6.4578 | -2.7096 | .0100 |
| Rsq      | 0.6067 |
| F        | 20.0419 |

The moderation test using PROCESS by Hayes shows a significant interaction between voice behavior and GPA on student performance (p <0.05, CI [-30.56, -4.435]). While voice behavior is known to have a significant role between student performance (p <0.001, CI [16.6216, 93.1502]) and GPA are also known to have a significant role with student performance (p <0.001, CI [37.3798, 122.035]).

The results of further analysis of the conditional effects of moderators on the relationship between the IV and DV indicate that in students with low GPA, the role of voice with their performance becomes significant. However, for students with moderate and high GPA, no significant role was found in the performance of students.
5. DISCUSSION

This primary aim of this study was to examine whether voice, or how students involved in discussion, will affect their performance in the final mark was supported by the data. This result amplified previous results that stated student involvement in class will give college student better results in their performance (Pascarena & Terenzini, 2000; Estes, 2004), or in this case in their final term test. When students involve more in in-class academic process, they tend to engage more, then lead them to a better mark in their test. This result also strengthen the possibilities of student voice to become one of student involvement.

The role of student voice on their mark was also moderated with student achievement (GPA). Students with high and middle GPA tend to not influenced by their voice behavior. Meanwhile they who have lower GPA, their final mark was significantly influenced by their voice behavior. One of the possible reason why this difference happened was because students with high GPA score usually have high internal achievement motivation (Komarraju, Karau, dan Schmek, 2009). This type of students do not rely on participating in class discussion to improve their performance. This type of students do not rely on participating in class discussion to improve their performance, since they already have their own learning style preference (Wiyono, 2008). According to Al Shawwa, Abulaban, Abulaban, Merdad, Baghlaf, Algethami & Balkhoyor (2015), high GPA students tend to study alone with no interruption situation than low GPA students who are more involved in social situation in learning. Hamann (2011) also stated that students with lower GPA tended to participate more than those with a higher GPA class discussion, whether it is a small or large group discussion. Thus, student involvement that consisted of social interaction tend to give more effect for students in low GPA. Low GPA students usually have low achievement motivation also (Cheng & Ickes, 2009), therefore actively participating in group discussion in class could help to enhance their learning output or performance. The result also consistent with finding from Kommaraju, Musulkin, Bhattacharya (2010) that mentioned students with low GPA prefer to have social interaction in order to get better learning result.

6. CONCLUSION

This result showed that actively engage in discussion make low achiever student got better performance. Even this result showed some sound findings regarding students’ voice and their performance, there are some issues still left for better research forward. This research only conduct in one courses in Psychology major. Another replication in other major might be done to make this result more robust.

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