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**Research Article** 

# Ameliorating University Students' Performance (Citizenship Behavior) Model Based on Big-Five Personality and Psychological Capital (PsyCap), Mediated by Students' Attitude Toward Dunning-Kruger Effect

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### ARTICLE INFO

#### **ABSTRACT**

Received:18 Dec 2024 Revised: 16 Feb 2025 Accepted:26 Feb 2025 This research was aimed at finding information on whether students' performance (CB) is directly or indirectly affected by their personality and PsyCap mediated by their attitude toward the Dunning-Kruger Effect (D-KE). A survey method was used by selecting randomly 305 university students, in Indonesia. Instruments were developed to measure students' CB (.667), personality (.846), PsyCap (.846), and attitude (.851), Data were analyzed by path analysis.

The research results revealed that it was found students' personality and PsyCap directly and significantly affected students' CB, however, both of those exogenous factors were found to negatively affect students' attitudes toward D-KE. The latter was expected logically since most students might perceive that they do not like their lecturers/professors infected by that cognitive bias phenomenon. Moreover, this attitude did not significantly affect students' CB. Considering those findings, it could be concluded that students' performance might be able to be maintained by developing campus policies that focus on students' personalities and strengthen their PsyCap, especially during the post-covid pandemic and freedom for learning programs, including some efforts to avoid or at least minimize the influence of Dunning-Kruger Effect.

**Keywords:** Citizenship Behavior, Psychological Capital, Attitude toward Dunning-Kruger Effect, and Path Analysis.

## INTRODUCTION

One of the programs created by the Ministry of Education, culture, research, and Technology of the Republic of Indonesia, during the covid19, was called "Freedom for Learning and Freedom Campus." This policy was directed to any university students, throughout the country, to select a program freely and with flexibility as fit as their condition and learning speed, and their capabilities as well. Therefore, these will come up with a variety of adaptive abilities to succeed in whatever is chosen by students. This will affect, logically, students' anxiety in finishing their programs. They have also been recognized by university authorities after following their internship program outside the campus approved by the head of study programs.

Considering those programs taken and followed by students, undoubtedly, will have some consequences on students' performances achieved by them in terms of students' learning outcomes which could be a similar concept that could be applied to any employees in corporations, called citizenship behavior (CB). As a concept that reflects someone' performance, could be used also in studying university students instead of corporate employees. Based on the integrative model proposed by Colquitt, et.al. (2019) and others, this CB could be predicted by around 14 variables one of which is sound to be most important and indirectly affects someone' CB personality.<sup>7,13,14,15.</sup>

Needless to say, personality, together with students' psychological capital (PsyCap)<sup>16,17</sup> and their attitude toward Dunning-Kruger Effect (DK-E) which relate to someone' cognitive bias toward his capability,<sup>4,5,6,8,11,12</sup> will explore

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studied, how strong each of those factors could be able to predict students' CB, of course after at the end of pandemic covid19. The interesting one of this study was the involvement of students' PsyCap which was hypothesized that those of its four dimensions (hope, optimism, resilience, and efficacy) could effectively have a vital role in determining students' CB (performance).<sup>9,10</sup>.

#### RESEARCH METHODOLOGY

Since this research was aimed at finding information about the instruments' reliability and validity in measuring students' CB, their personality, PsyCap, and their attitude toward the Dunning-Kruger Effect (D-KE), therefore a survey was used by involving around 305 university students throughout the country which selected randomly, Most of them are students from universities in Jakarta, private and public universities. Data was collected by using Google Forms which was filled in by students online and took around one and a half months to reach the target. Data, then, were analyzed by applying "item to scale correlation," through the Pearson Product Moment (PPM) formula due to its scores were polytomy (5-4-3-2-1) and the Alpha-Cronbach formula was used to calculate each of the instruments' reliability. All instruments have been validated respectively, students' performance or citizenship behavior/CB which was measured based on organizational and interpersonal CB which reflects students' performance, students' big-5 personalities which consisted of five factors like conscientiousness, agreeableness, extraversion, emotional stability, and openness, students' PsyCap that supported by four dimensions such as hope, optimism, resilience, and efficacy, and finally students attitude toward Dunning-Kruger Effect (D-KE) which reflected by knowledge, feeling, and action tendency toward D-KE. Data was analyzed by path analysis and since this research was exploration, therefore, statistical hypotheses were tested posteriorly.

#### **RESULTS AND DISCUSSIONS**

Based on calculations, it was found descriptively that the average of students' CB which reflects students' performance, was 89.98 with its standard deviation (SD) being 8.12. it meant that students' CB mean was high when considering its theoretical mean with the range between lowest to highest was 25 -125 which meant that its average was high enough. This means that students' performance reflected by their CB was good in terms of their performances, especially how they behaved during the post-era of covid19 pandemic with a small range of SD. Empirically, this finding was interesting and could be used as an indicator that students, in this case, can adapt themselves successfully to the new era of digitalization, and be good for future academic policies developed by those campuses.

It appeared also when discussing students' big-5 personalities which found its average was 69.68 with an SD was 8.68, which meant that its mean was most accurate if its theoretical score range was between 19 to 95 and its average position was close to the 4<sup>th</sup> quartile of highest scores from this range with still small SD.

Considering the results of calculating the average student's PsyCap, it was found that the average student had a fairly positive PsyCap (around 131.02 based on a theoretical score ranging from 33 to 165 with its SD was 10.64) based on 4 dimensions namely hope, optimism, resilience, and efficacy were still stronger felt by students during the post-pandemic which proven by students were still have a high and positive PsyCap in dealing with lectures on campus.

Concerning students' attitudes towards D-KE, the average obtained is also quite interesting, namely the average student has a negative attitude towards D-KE (54.13 with its SD was 9.51 based on its theoretical scores between 18 – 90, it looked skewed negatively at the histogram), meaning that most students do not like it when their lecturers are infected with a "cognitive" disease. Bias," so they feel lied to during lectures. This result is under their expectations that they want to be taught by lecturers with high competence and professionalism, provided that they do not want to be taught by lecturers who are pretentious.

However, all of these results are meaningless, when the instrument measuring the variables is not validated. The results of the validation are encouraging because all successive variables have high-reliability coefficients after being calculated with the Cronbach alpha formula, namely the instrument measuring students' CB with a reliability of

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0.667, consisting of 25 items and only one item which was invalid after being tested through "item to scale correlation." <sup>23</sup>

Likewise, big-5 personality, obtained a reliability coefficient of 0.846 (19 items) and all items were valid, also found a reliability of 0.846 for the PsyCap measuring tool (33 items) but only one item was invalid, and finally the attitude variable towards D-KE (18 items) which has a reliability coefficient of 0.851 with one of invalid item. Based on all these findings, it can be concluded that all instruments are ready to be used as data collection tools when applied in quantitative studies as expected also by Thomas (2013), 19 Varma (2010), 20 and Wagnil & Young (1993). 21

In addition to those findings, it could be stated that the research results would be logically accepted as expected. Since this research was exploratory, therefore, hypotheses could not be ably stated as research hypotheses, reversely, it was stated as statistical hypotheses at the same time those hypotheses were tested based on those parameters being verified.

Furthermore, as shown from verification results found that those exogenous factors affected directly and significantly on students' CB which reflects students' performance during the post-covid19 pandemic. However, if correlational interpretation was applied, it was found that what has been suspected was a negative effect of personality and students' PsyCap on students' attitude toward D-KE which meant that the more accurate students' personality and the more positive their PsyCap tend to be more negative of students' attitude toward D-KE.

For example, most university students do not like to have their lecturers or professors who have been, implicitly or explicitly, infected by D-KE reflected by their cognitive bias. This phenomenon is characterized by lectures' gap between their performance or ability with their actual knowledge about what they believe be able to well perform.

Most of them are pretending to understand which is really what they don't because they never learn about the topics or issues being taught or examined. Those characteristics will cause students to tend to a kind of stupidity process which should be avoided in preparing for graduation to be more logical and intellectual. This is the reason why students' personality and their PsyCap negatively and directly affected students' attitudes toward D-KE (see figure below about the empirical structural path model).

Nevertheless, based on the figure below, it could be seen that students' attitudes toward D-KE directly affected students' CB, but its effect only has a significant level at 0.244, which meant that it was significant only around 24% from 100%, it was too high in probability error level, based on statistical point of view and its effect could be neglected, or closed to be by chance. Its effect was found not significant which meant that students' attitude variation could not be guaranteed also affected the fluctuation of students' performance variation where students did not know whether their lecturers/professors would perform due to their real capabilities.

Moreover, most importantly, this exploratory research, showed that students' attitudes proved to be the bad mediator between students' personality (big-5) and PsyCap and students' CB. It is suggested that this attitude could be removed from the exploratory model due to its effect proved to be by chance, for this case. Since this was an exploratory study, it is hard to find other research results as a comparison to look for a position in trying to elaborate the novelty of these empirical findings as theoretical contributions for further research.

These findings have great credibility to be applied as a new thought involving the dangerous concept of the Dunning-Kruger Effect which should be removed from any academic influences at every campus. It came up with the empirical model as seen in the figure below, meaning that it could be calculated of its indirect effects on students' personality and students' PsyCap on students' CB due to its mediated factor, i.e. students' attitude toward D-KE was found not significant or only significant at 0.24. And then, its total effect can not be computed as well.

Therefore, the optimistic one could be shared from these findings is in trying to explore a new structural path model, it could not be recommended to add into a model some variables that conceptually have negative psychological views from respondents involved, such as stress, for instance, in predicting employees' performance.

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However, these findings have a wonderful and great implication, especially for some campuses, in Indonesia particularly, in developing a campus policy to strengthen its programs called Freedom for Learn and Freedom campus (MKBM) stated by the government.

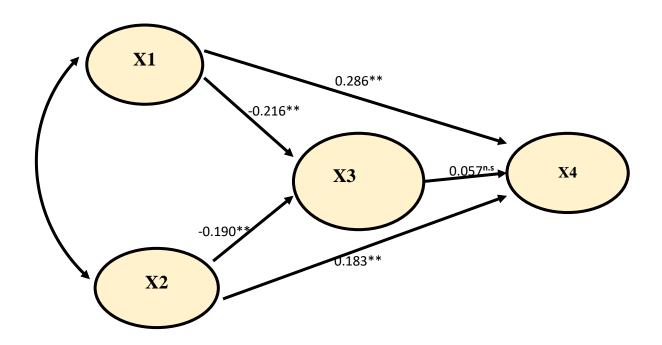


Figure 1. Structural Path Empirical Model

X1: Personality; X2: PsyCap; X3: Attitude; X4: CB

\*\* P < 0.01; n.s = non-significant

Since this was exploratory research which was the original findings (Putrawan, 2019),<sup>22,23</sup> therefore, on this occasion, all findings are not able to be compared to other findings as part of the discussion.

# **CONCLUSION**

Based on those findings, it could be concluded that all instruments are eligible to be applied for quantitative research supported by each of-item validity. Items validity is developed based on the concepts of content validity which is written based on each variable conceptual definition described by experts. It meant that all developed items were confirmed by these empirical findings discussed above. Moreover, one-dimensionality was also indicated by the high reliability coefficients found which are reflected by its inter-correlation among items that build a reliable instrument. This conclusion implied that any researcher could utilize these instruments which have been proven scientifically, therefore, no further questions regarding the application of these instruments.

Considering those findings, it could also be concluded that students' performance might be able to be improved by developing several campus policies that focus on students' personalities and strengthen their PsyCap, in terms of the vital role of its dimensions such as students' hope, optimism, resilience, and efficacy, especially during the post-covid pandemic and freedom for learning programs, including some efforts to avoid or at least minimize with removing the influence of Dunning-Kruger Effect.

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## Conflict of Interest: None.

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