

The Relationship between Resilience and Innovative Work Behavior among College Students

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Abstract

Purpose: The aim of this study is to prove the relationship between resilience and innovative work behavior among college students.

Research methodology: Both variables in this study are measured using Innovative Work Behavior (IWB) Scale from Janssen (2000) and Connor-Davidson Resilience Scale (CD-RISC) from Connor & Davidson (2003) that was distributed through Google Form link. The data analysis is done with the support of the 25th version of SPSS (Statistical Package for Social Science).

Results: Resilience has a significant correlation with innovative work behavior among college students.

Limitations: No strict controls of questionnaire administration, the questionnaire consists of 6 different measurements from the research team, and can't be fully generalized to the college students population.

Contribution: New findings of correlation between two variables among new samples.

Keywords: Resilience, Innovative Work Behavior, College Students

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1. Introduction

The fourth industrial revolution started with the fast-upcoming technology that changed most of human activities and tradition. Every aspect, including educational and human resources, are supported to go side by side with digitalization. To benefit the opportunities that are created by a variety of technology, a lot of organizations in private sectors transform their strategy orientation. It is predicted that by 2025, the ability and development of machine technology and algorithm or digitalization will be much bigger and expand massively than a few years back. The working time that is created by machines will parallel the working time that is created by humans themselves ([World Economic Forum, 2020](#)). This fact aligns with globalization as a situation that needs to be faced by every employee and also future employees.

Globalization demands flexibility and ability to innovate with the increasing working pressure. With the shift of public practices caused by globalization, humans as workers need the ability to adapt and innovate in the changing environments. Innovation itself had been the major point from an organization since the 15th century. The role played by innovation is very important to produce organization success in implementing novel ideas, doing creativity and transforming their business to adapt in an ever-changing environment ([Jamrog et al., 2006](#); [Athota & Malik, 2019](#))

The changes that happened in a few decades can be viewed from how professions are more organized and reflected through global competition, work restructuring and organization hierarchy that became more horizontal. As a result, employees and workers in a variety of roles and hierarchy in the organization are pressured to train themselves to behave innovatively in facing activities and work demands. After doing a few research that includes innovative work behavior, in a profession that does not require routines and as the outcome of challenges in working environment, it is considered as a significant contributor to organization performance ([Muchiri et al., 2020](#); [Naranjo-Valencia et al., 2016](#); [Shanker et al., 2017](#); [Abukhait et al., 2020](#)).

Innovative behavior ([West & Farr, 1989](#); [Scott & Bruce, 1994](#); [Kleysen & Street, 2001](#); [Yuan & Woodman, 2010](#)) alone is a construct related to individual characteristics of employees, especially in activities. It is defined as a compilation of actions that is done purposely to generate, promote and realize new ideas in working roles, a group of employees aimed to give benefits to every role in an organization ([Janssen, 2000](#); [Wojtczuk-Turek, 2012](#)). [Muchiri et al. \(2020\)](#) explained that innovative work behavior increasingly getting attention from researchers because it is defined to have a contribution to the continuity and performance of organization ([Amabile, 1988](#); [Amabile et al., 2004](#); [Bos-Nehles et al., 2017](#); [De Vries et al., 2016](#); [De Jong & Den Hartog, 2010](#); [Yindong & Xinxin, 2013](#)). This is the point that matters align with the business environment and organization development to be more of a dynamic and full of challenges working environments. This also underlies the innovative work behavior that is shown by employees to adjust their vision and model of organization with the development of technology that happens constantly and operational problems related in the working environment.

Innovative work behavior among employees can be considered as a solution of organizational continuity from the problems that arise in the business or organizational competitive environment ([De Jong & Den Hartog, 2007](#)). [Millar & Anderson et al. \(2004\)](#) explained that there are a few factors that affect innovative work behavior in individual level such as personal characteristics of proactive attitude, self-confidence and originality, motivation and cognitive ability and also resilience ([King et al., 2016](#)), in working level, such as job characteristics, in working group level, such as organizational team climate and group members characteristics and in organization level, such as tradition, strategies and organization structures that affect innovative work behavior of employees ([Sameer & Ohly, 2017](#)).

In a working environment, product and process of innovation is needed to explain and solve problems and challenges that emerge. Therefore, understanding innovative work behavior among college students, including the process of generating and realization of ideas as a learning strategy or organizational purposes is an important matter because college students are future employees. This fact aligns with the explanations that the ability to do innovation inside an organization depends on each individual ([Chen et al., 2013](#)). College students are future employees so that they are the main source of innovation that might happen in future organizational context. Before colleagues enter the working environment, university is an institution that can be the place to develop this long term behavior, and also develop core values and behavior as young adults ([Bowman, 2012](#)), purposely to increase the working quality of colleagues in the future. A few of the mentioned behaviors are having passion and gut in pressured circumstances and also behaving innovatively in solving problems or assignments ([Rhamdhani, 2018](#)), and also developing innovative work behavior ([Martin et al., 2017](#)).

Innovative work behavior is an important matter to colleagues, [Zhong & Liu \(2014\)](#) mentioned that every capability that is needed by them is crucial to survive in the working environment, but unfortunately is not possible to develop in a short period of time. One of the solutions to facilitate this condition is to give experience through education, organization and social life, likewise training since they are in a college environment which was a transition period to adulthood ([Etikariena, 2020](#)). [Zhong & Liu \(2014\)](#) also explained that to develop the mentioned innovative work behavior, college context had the valid atmosphere and tools that support the development so that it is the right strategy to escalate their ability to innovate in the future working environment ([Chen & Yin, 2017](#); [Messmann & Mulder, 2011](#)).

University is a contributor and producer of innovation, creating novel product and service, unique and improvised, support with experts and human resources such as potential individuals to generate innovation, to the environment or organization ([Al-Husseini & Elbeltagi, 2014](#)). Especially in understanding what stimulates the emergence of innovative behavior among colleagues, that affects the adoption to the current working environment ([Messmann & Mulder, 2011](#)). In fact, university is judged to only give education about hard skills and less soft skills. Organizations are accepting candidates who have the ability to commit, abstinence from quitting in the middle of tough and complex circumstances that cause stress and managing work assignments innovatively. This can be increased through academical or organizational activities such as extracurricular internally or externally of the

college ([JPNN, 2013](#)). Viewing the situation that is faced by individuals, it is not only organizations, such as universities, that need to support decreasing the risk and tension faced when implementing innovative ideas, the individual psychological capacity is also a crucial thing. An individual needs the psychological ability to handle hardships while still maintaining progress of the innovation ([Luthans, 2002](#)), like resilience.

Resilience is considered as an ability that provides an overview of strategies that can be carried out by individuals to overcome challenges, adapt to change and resolve obstacles related to the process ([Youssef & Luthans, 2007](#); [Dewi & Syarifah, 2018](#)). Every organization needs resilience to help work processes run well, not only in a state of crisis but also in carrying out daily work activities that affect the functioning of the organization itself ([Day, 2014](#)). Practicing resilience is essential for students to produce constructive reactions in situations that trigger stress and long-term efforts that have an impact on handling challenges, also accompanied by good performance. From the point of view of solving and handling problems that may arise in the process of being innovative, resilience is important. Resilience combines other abilities or personalities such as endurance and flexibility ([Wojtczuk-Turek, 2012](#)) such as adaptation to changes and difficulties in the lecture environment and the technology used when lecturing.

Considering that individuals need to face undesirable difficult situations with risks that may arise during the innovation process in lectures or study groups, individual resilience is considered to have an important role in this condition. Some theoretical conceptualizations of resilience have been described as adaptive behavior, in order to integrate and use available resources in the lecture environment ([Naswall et al., 2019](#); [Lengnick-Hall et al., 2011](#)). Thus, identification of observable behavior is needed and can explain how individual resilience and the ability to innovate in students can produce positive work behavior or in other words produce positive organizational behavior ([Caniëls & Baaten, 2019](#); [Naswall et al., 2019](#)). Positive Organizational Behavior (POB) identifies individual strengths, generates resilience and explores individual strengths by focusing on circumstances, personalities and processes ([Cameron et al., 2003](#); [Youssef & Luthans, 2007](#); [Belal, 2019](#)). This theory also explains that the positive traits that exist in each individual can be measured, researched, regulated and developed through the individual, group and organizational levels ([Gayathri & Karthikeyan, 2014](#)).

In adapting to the changing lifestyle that increasingly prioritizes technology, an organization needs to adapt the technology within its company, including its business model, to meet the different needs of each workforce and client. Technological developments in this organization can also help in dealing with government regulations and government regulations that are increasingly developing. This results in various challenges and difficulties for each individual, group or work team, as well as for the company organization itself. The response given to these unavoidable challenges and difficulties is the ability of resilience which is considered the key organizational behavior to produce success, development and even personal and company safety ([World Economic Forum, 2020](#)).

There are problems faced by companies or organizations that currently accept college graduates. This problem is the difficulty of the organization in selecting graduates who are "ready to use" or in other words have the ability to match the job criteria. In fact, college graduates experience Fresh Graduate Syndrome which indicates anxiety and obstacles in facing the new world which indicates a lack of resilience. College graduates also experience a lack of innovative behavior at work so that they are dependent on their mentors and even judge that their mentors have "toxic" traits even though they are also considered as directives with the best aim to build students' abilities as workers who have just entered the working environment ([Rhamdhani, 2021](#)). This supports researchers to analyze the student population which is still very likely to be developed and prepared for the ability to innovate and adapt in the face of the world of working.

Research on what motivates or supports individual student innovative work behavior is critical and needs to be done ([Scott & Bruce, 1994](#)). Research that analyzes the dynamic processes that occur as

well as the situation generated by the influence exerted by resilience on work behavior shown by students is still under researched compared to others ([Youssef & Luthans, 2007](#)). Previous studies have focused more on resilience as part of psychological capital and not on the construct of resilience itself. In fact, the ability to behave in an innovative way can be developed and learned since an individual becomes a student ([Chen & Yin, 2017](#)) and prepares students who are future employees to face the demands of the working environment ([Martin et al., 2017](#); [Reddy, 2019](#)). In addition, only a few studies have investigated the dynamic processes that take place in certain situations, such as research on resilience influencing work behavior of the work environments ([Youssef & Luthans, 2007](#)); ([King et al., 2016](#)). Given the background, problems, support from previous research and differences in results with previous studies, this study aimed to see the relationship between resilience and innovative work behavior among college students.

2. Literature review and hypothesis development

Innovative Work Behavior

Following the definition and stages from [West & Farr \(1989\)](#), [Scott and Bruce \(1994\)](#) explained that Innovative Work Behavior is a process of one individual in creating the ideas used as solution for the problem or challenges they faced, the formation of coalition to support those ideas and also the implementation of the ideas to become a model presented based on needs of innovation on the environment ones in. [Janssen \(2000\)](#) also defined innovative work behavior as creating, introducing and implementing new ideas purposefully in a work, group or organization to achieve benefits for their performance in the mentioned environment. These definitions limit the innovative behavior as efforts purposefully done to accomplish desired outcomes that benefit individuals. According to the research done, [Winarsih & Etikariena \(2020\)](#), as a reference, this research paper also defined innovative work behavior accordingly to [Janssen \(2000\)](#) explanation that innovative work behavior among college students is the creation, introduction and application of new ideas in learning process of one individual, in a learning group to produce desired outcomes based on innovation needs in college environments.

[Janssen \(2000\)](#) explained further about the stages of innovative work behavior from [Scott and Bruce \(1994\)](#) which was divided into three stages. First, idea generation, is a process of generating an idea that is unique and useful on every aspects ([Amabile et al., 1988](#); [Kanter, 1988](#); [Woodman et al., 1993](#); [Janssen, 2000](#)) supported by work-related challenges as in discrepancy, the emergence or disconnection of a trend ([Drucker, 1985](#); [Janssen, 2000](#)). Second, idea promotion, which was given to potential parties through activities conducted by individuals such as participating in social activities to find support or building a coalition to support the explained ideas ([Galbraith, 1982](#); [Kanter, 1988](#); [Janssen, 2000](#)). Lastly, idea realization, producing prototypes or models of innovation that is real enough to be used and implemented in a group of employees or the whole working organization that support roles in organization.

Resilience

[Connor and Davidson \(2003\)](#) defined resilience as the ability to tolerate diversity or discrepancy. Other than that, resilience can also be defined as levels of an individual's quality to face stress which is considered as a stressor. This ability can be the main goal in the process of handling anxiety, depression and also the reaction that is caused by stress ([Connor & Davidson, 2003](#); [Andriani & Listiyandini, 2017](#)). Following the definition of resilience explained by [Connor and Davidson \(2003\)](#) this research defined resilience as the ability of college students to and is judged by the success of tolerating diversity, changes, and facing stress, so that it helps them to evolve in circumstances or challenges that they face.

As a positive psychological trait, resilience is defined as a positive psychological ability to bounce back to prior or better condition after the experience of challenges, conflicts, failures and changes as in role step-ups or responsibility ([Luthans, 2002](#)). According to [Connor and Davidson \(2003\)](#), there are five factors regarding individual resilience. First, resilient individuals will make the best efforts to acquire their goals, refrain from giving up and consider challenges in a positive manner. Second, trust on instincts, accept negative impacts of stress, and tend to have a goal oriented attitude to counter the negative effects of stress. Third, adaptation to challenges or problems and intimacy with loved ones.

Their way to adapt is to face every challenge without having trouble in their performance. They are also good at selecting close relatives as their source of support. Next, self-control of their own behavior in the process of achieving their goals with the support of selected people. Lastly, spiritual beliefs in which they have a mindset that everything happens for a reason and is a product of nature.

Positive Organizational Behavior (POB)

[Luthans \(2002\)](#) explained that earlier organizational behavior theory development and its implementation to the real world is a dynamic and broad process. From that belief, Luthans realized that there is a movement of positive psychology that can be correlated to organizational behavior. This concept of organizational behavior and a few of other core concepts that can be correlated such as confidence, hope, optimism, happiness and resilience. This movement of positive psychology has a relevance that can be considered in the working environment and is potential to give ideas and solutions that may help individuals in working environments to face real challenges ([Luthans, 2002](#)).

The movement of positive psychology is started by Seligman and other researchers oriented in positive psychology such as Ed Diener (2000), Christopher Peterson (2000), and Rick Snyder (2000), that explained the purpose of positive psychology is to counter the beliefs of most people in outlooking the wrongs or weaknesses of other people to reviewing what is right and positive about people. In other words, it is more focused on the strengths, and not the vulnerability of people, which leads to resilience and becoming aware to promote prosperity, well-being and better life than pathological remediation. In years before that, there was an implicit denial about the correlation between positive feeling and employees performance in the context of organizational behavior ([Staw, 1986](#)).

In this theory, resilience is defined as the ability of an individual to face changes, diversity and significant challenges. This ability might change along the way, and can be developed with protective factors from the individual and the environment ([Stewart et al., 1997](#)). As a positive trait to react to challenging and stress-related circumstances, in line with the other positive organizational behavior, Hans Selye explained that what matters is not what they face, instead it is how an individual faces and reacts to it. In a current dynamic working environment, psychological ability such as resilience can be applied to support its activities. Resilient individuals tend to be more effective working in more complex environments, supported by a research result that shows a correlation between resilience with the ability to work effectively in a variety of life experiences ([Coutu, 2002](#)). The implication of resilience to the working environment is supported and assured. Therefore, the hypothesis of this research would be:

H1 : There is a significant correlation between resilience and innovative work behavior among college students

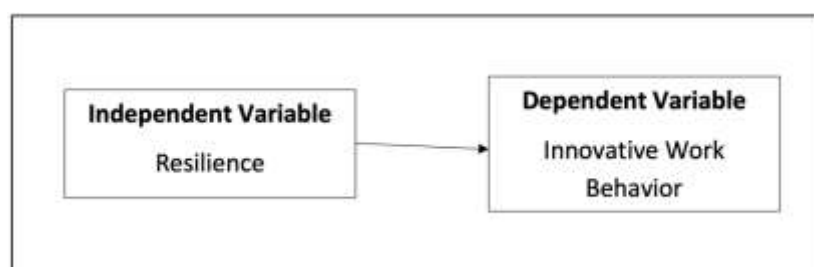


Figure 1. Research Model

3. Research methodology

This research is a non-experimental research with quantitative approach without any manipulation on each variable with no strict controls. Other than that, this research is a cross-sectional study for it is done in a short period of time and customized to a certain area of demographic. Two variables measured with correlational design that seek the relationship between resilience and innovative work behavior. The characteristics of respondents taken are from the population of college students, with the samples of Universitas Indonesia bachelor's degree college students. This is based on the convenience sampling in which the respondents chose with non-probability sampling, in a proximity related reason that gives convenience to the researcher. Based on G-Power, the estimated minimum sample is 105 college

students. For generalization purposes, respondents are augmented to represent the sample of Universitas Indonesia college students in the college students population.

Innovative work behavior is measured with The Innovative Work Behavior Scale by [Janssen \(2000\)](#) that has been adapted according to [Winarsih & Etikariena \(2020\)](#) to Bahasa. This measurement has 9 items that explain the three stages of innovative work behavior which are idea generation, idea promotion and idea realization. Based on prior research papers, this questionnaire is used to measure the innovative work behavior of employees. For that reason, this research follows the adapted version according to [Winarsih & Etikariena \(2020\)](#) with the reliability coefficient, Cronbach's Alpha 0.89, which several items had been modified to fit the context of college students in college environments. This measurement tool is also modified to be a 6 likert-type scale with options ranging from "Have Never Done" to "Always Have Done". A few examples of the items are "Finding new ways to do my own tasks" and "Looking back the use of new ideas that I have tried when finishing my tasks". This questionnaire was not included in trials because this research referred to [Winarsih & Etikariena \(2020\)](#) with the same group of sample which is Universitas Indonesia college students.

Resilience is measured with The CD-RISC 25 (The Connor Davidson – Resilience Scale) that had been adapted according to [Andriani & Listiyandini \(2017\)](#) and also had been tested for reliability and validity to Jakarta college students with the coefficient of Cronbach's Alpha 0.91. This questionnaire consists of 25 items, with 5 likert-type scales ranging from "Very Not True" until "Almost Always Right". A few examples of the items are "I want to connect and build a comfortable relationship with others" and "I will not give up even when everything seems hopeless". The scores are observed from a total score of each respondent. When an individual get a high total score, that means the resilience is also in a high range, vice versa. To see the internal validity of this resilience scale, the researcher conducted a trial to 31 random college students respondents resulted in coefficient corrected item-total correlation (CrIT) ranging from 0.13 - 0.78 and Cronbach's Alpha 0.89 to know the reliability of the scale. Item number 20 had a score of CrIT < 0.2, which concludes that the item is not that valid to discriminate with other items, according to [Nunnally & Bernstein \(1994\)](#), they stated that the cut-off score for CrIT is > 0.2. For prior research validity reasons, the item is not terminated because it had been tested on 177 Jakarta college students according to [Andriani & Listiyandini \(2017\)](#) that shows coefficient of validity ranging from CrIT 0.31 - 0.69. This indicates that The CD-RISC is still valid to measure college students' resilience. Furthermore, the validity coefficient result on item number 20, that is out of validity criteria, was predicted by the cause of small sample size in the trial step of this research, and is not valid to be generalized.

Before distributing the compiled questionnaire to do the measurement trial, an ethical review to conform with the psychological principle of ethics, which are Kode Etik Riset Universitas Indonesia and Himpunan Psikologi Indonesia (Research Ethical Code of Universitas Indonesia Committee and Indonesian Psychologist Community), is done. The questionnaire is approved and stated able to be used for research with the ethical code of 007/FPsi.KomiteEtik/PDP.04.00/2021. The measurement trial questionnaire is distributed to Universitas Indonesia college students to measure the reliability, validity and purposefully to acquire feedback regarding the items used. Both variables are measured with questionnaires that are shared online through social media such as Line, Whatsapp, Instagram and Twitter in a Google form. The form also consists of informed consent given to respondents to explain that the questionnaire is not coercive and voluntary. Rewards is given as an appreciation to the respondents with randomization on the separate link to secure anonymity that consists of phone numbers and rewards preference in fund form through virtual account of OVO/GoPay Rp500.000,- for 25 people. The data analysis conducted in this research is supported with Statistical Package for Social Science (SPSS) 25th version which is a statistical analysis for descriptive frequencies to explain demographic data of respondents and correlation analysis of Pearson Correlation to seek the relationship between both variables.

4. Results and discussions

The majority of respondents is women with a total of 224 respondents (73.2%). The respondents of this research range from 19 to 21 years old with a total of 232 respondents (75.7%) and mostly are in their last (8th) semester (113, 36.9%). Based on the education cluster, the majority come from the Ilmu Sosial dan Humaniora cluster (173, 56.5%). In terms of college activities, respondents of this research are mostly doing non-academic activities such as extracurricular, organizations, Unit Kegiatan Mahasiswa (UKM), entrepreneuring, and internship. Other than that, most of the respondents are also working on their thesis or assignments related activities. The total of the respondents that are bound to extracurricular activities is 228 orang (74.5%).

The mean of the whole respondents for resilience is 95.15 and for innovative behavior is 31.38. On the innovative work behavior variable, the mean position that is obtained by the whole respondents is 3.48, with the median of 3. This shows that the average of respondents obtained a high score above the median. On the other hand, for resilience, the mean position that is obtained is 3.8 with minimum scale of 25 with the median of 2.5, which means that the respondents also obtain a high score in resilience with the average being above median. From the data obtained, The CD-RISC shows coefficient of Cronbach's Alpha 0.92 and The Innovative Work Behavior Scale shows coefficient of Cronbach's Alpha 0.94. The CD-RISC shows a range of CrIT 0.35 - 0.70 and The IWB Scale shows a range of CrIT 0.61 - 0.82. This range of CrIT results from data collection of both scales shows the score above 0.2. Therefore, both scales are considered as valid to measure both variables.

Table 1. Pearson Correlation Analysis

		RES	IWB
Pearson Correlation	RES	Correlation Coefficient	1
		Sig. (2-tailed)	.59**
		N	.000
	IWB	Correlation Coefficient	306
		Sig. (2-tailed)	306
		N	.59**
		Correlation Coefficient	1
		Sig. (2-tailed)	.000
		N	306

** Correlation is significant at the 0.01 level (2-tailed)

Based on the correlation test using Pearson Correlation, this research shows the signification is .00, $p < .01$ which accepts the alternative hypothesis and denies the null hypothesis. There is a positive correlation between resilience and innovative work behavior among college students with the coefficient correlation of $r = .59$, $p < .01$. That coefficient correlation shows a strong correlation, which means that a resilient college student will most likely show innovative work behavior.

Table 2. Determination Coefficient (R-Squared)

Variable	R-Squared (r^2)	P
Resilience	0.35	0.00

The result of simple linear regression (r-squared) that determines the effect size of the correlation from the respondent of this research shows a coefficient of $r^2 = .35$, which means that resilience generally have a significant role in innovative work behavior among college students with the contribution of 35%, and the other 65% is affected by factors other than resilience.

Based on prior research, both variables, resilience and innovative work behavior, is proven to have a significant correlation on tourism industry organization employees ([Dewi & Syarifah, 2018](#)). The result of this study is a new finding contribution in the research world, because on earlier research, the variables are connected through employee respondents. College students in this research are considered as samples due to a few factors such as convenience and future reference to develop college students ability as future employees that can be generalized. Both variables have a significant correlation and can be applied in the education environment, where innovative work behavior caused them to implement methods, strategies or new ideas in performing and practicing assignments so that it supports them to fasten the working process that they are doing ([Firdausiah & Etikariena, 2021](#)). Resilience with the ability of endurance helps individuals in dealing with difficult problems, full of demands and the situation that must be resolved immediately as well as dangerous conditions and flexibility is important for situations that require adaptive behavior ([Wojtczuk-Turek, 2012](#)).

Innovative work behavior among college students that is shown can be considered as a coping strategy that can detain the effects of demands and challenges which leads to well-being ([Maunder et al., 2013](#)). This study's result also indicates that college as an institution can help college students to expand their knowledge and develop innovative work behavior. College students are expected to have mentioned ability ever since they are in college so that it facilitates them when entering the working environment, adapting to various complexity and innovation in an organization ([Winarsih & Etikariena, 2020](#)). Innovative work behavior among college students that is shown can be considered as a coping strategy that can detain the effects of demands and challenges, like cognitively, of psychological distress, which leads to psychological well-being. The demands that can be felt by colleagues are for example academic demands, either socially or personally, also the need to adapt to certain activities or academic expectancy ([Maunder et al., 2013](#)).

According to the result of this research, there is a significant correlation between positive psychological ability such as resilience with working performance that is shown through innovative work behavior among college students. Based on Positive Organizational Behavior (POB) theory, there are a few intrinsic polemic in the research world about the correlation between feelings or traits and positive abilities with the performance that is shown by employees ([Staw, 1986](#); [Luthans, 2002](#)). The abilities according to the definitions of POB is said to be a state or ability that can be developed through learning, development, changes and management in the working environment, likewise in educational context like college students in the college environment. The POB can also be developed through training programs or self-learning from life experiences ([Luthans, 2002](#)) that is done by college students.

[Ratnaningsih et al. \(2016\)](#) found that resilience had a significant correlation with innovative work behavior with coefficient correlation $r = .39$, $p = .000$ ($p < .001$), interpreted that the correlation had a moderate effect size. Other than that, this research results in coefficient correlation of $r = .59$, $p = .000$ ($p < .001$), which means that the correlation between resilience and innovative work behavior among college students is considered as strong. This result indicates that resilient college students tend to show innovative work behavior. [Maddi & Khoshaba \(2005\)](#) in [Shani \(2020\)](#) found that resilient people tend to have the ability to improvise in a variety of circumstances. Someone who is resilient tends to view situations that cause stress as non-threatening and will try to solve their problems in new and creative ways.

The result of this study is aligned with two prior dissertations that had been published that proved resilience had a significant correlation with innovative work behavior with the large effect size ([Amir, 2019](#); [Roberts, 2016](#)). This research shows an effect size of $r^2 = .35$, where resilience contributes 35% in affecting innovative work behavior among college students. The mentioned coefficient of determinations is classified to a large effect size because it is $r^2 > .25$ ([Cohen, 1988](#); [Gravetter & Wallnau, 2016](#)). Therefore, the result of this study supports that the correlation between two variables is not a coincidence, but it is in fact correlated ([Roberts, 2016](#)).

The majority of respondents in this research are college students who are currently pursuing the 8th semester, which can affect the relationship between variables. [Prihartono et al. \(2018\)](#) explained that the older and longer a college student had been in the environment, the richer experiences that they had so that it makes them better at handling various circumstances than the younger college students ([Prihartono et al., 2018](#)). The mentioned experience can be interpreted as extracurricular activities in the college environment. The majority of college students from the data obtained are active in extracurricular activities that can also trigger the development of innovative work behavior and the ability to adapt in the middle of predicament ([JPNN, 2013](#)). [Ketai et al. \(2011\)](#) support this argument with the explanation that extracurricular activities can be the first solution to increase the innovative work behavior of college students. The activities done in the organizations can trigger their minds to actively produce innovative ideas and strategies in facing the problems that may emerge in the organization itself ([Firdausiah & Etikariena, 2021](#)).

5. Conclusion

This research aims to seek the correlation between resilience and innovative work behavior among college students. Based on the data analysis of 306 samples, it is proved that there is a positive correlation between resilience and innovative work behavior that is shown by college students. For that reason, it can be concluded that the more resilient a college student is, the more innovative their work behavior will be.

Limitation and study forward

This research has its own limits that can be a lesson or future reference of the research construction. First, the administration of the questionnaire is not supervised strictly by the researcher and the collected questionnaire consists of six different questionnaires from the research team, and it is certainly loaded. There are possibilities or tendencies that the respondents filled the questionnaire fastly without thinking of the right answer that aligns with their own condition. Other than that, this research paper had Universitas Indonesia college students sample that is not possible to be generalized as the whole college students population in other universities. Therefore, for future research, the suggestions are made in the next section.

The suggestions that can be given to future research are that: measurements trials are suggested to be conducted to assure the validity and reliability of the scale used and to minimize the possible mistake in inputting items or scale range. In administering the questionnaire, it is better to be accompanied by an expert to make sure of controlled input of item and scale. This is also intended to avoid possible fraud or mistakes in distributing the questionnaire so that the data that is obtained are valid and reliable. Other than that, for generalization purposes, consider taking a variety of population and sample. This research constricts the population to samples of Universitas Indonesia college students for convenience reasons. For future research, it is suggested to perhaps constrict more and focus on freshman year college students that are experiencing transition from high school to college environments that the difference of the circumstances between both environments most likely will support the emergence of resilience. Other than that, future research can also broaden the sample even more for generalization purposes. This research tests the correlation of one of Positive Organizational Behavior (POB) with the performance of an individual. Future research can dig up other internal or external factors, individual or organizational, and perhaps contextual factors.

Resilience and innovative work behavior can be developed through training activities, seminars, mentoring and also education in the classroom. One of the techniques in teaching the ability to do innovative work behavior and resilience is to give assignments that generate both variables. The lecturer can give assignments that generate stimulus for innovation and a condition where college students have to deal with adversity or challenges in facing problems. For example, applying case study that needs cooperation, innovation in problem solving, and also final projects that need innovation such as creating organization in psychological context, conducting research or students creation.

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