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# Psychological Capital: A Bridge between Openness to Experience and Teacher Effectiveness in Distance Learning

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## Abstract

As an impact of the COVID-19 pandemic, distance learning has become a challenge for teacher effectiveness. The current study examined the role of psychological capital as a possible mediator of the relationship between openness to experience and teacher effectiveness. Respondents for this study included 172 senior high school teachers in Jabodetabek who are currently pursuing distance learning. The respondents are 117 female teachers (68%) and 55 male teachers (32%) who have teaching experience in the range of 5 months to 35 years ( $M = 161.34$ ,  $SD = 121.8$ ). The mediation analysis results revealed a significant indirect effect between openness to experience and teacher effectiveness through psychological capital,  $\beta = 0.999$ ,  $p < .01$ , 95% CI [0.668, 1.369]. These findings show that psychological capital mediates the relationship between openness to experience and teacher effectiveness. Therefore, teachers should have high openness to experience to increase psychological capital, thereby increasing teacher effectiveness.

## Keywords

Distance learning, Openness to experience, Psychological capital, Senior high school teacher, Teacher effectiveness

In August 2020, 81% of teachers in Indonesia were conducting distance learning due to the rapidly deteriorating pandemic situation (Ministry of Education and Culture [Kementerian Pendidikan dan Kebudayaan], 2020). Teachers face a significant challenge in providing students with access to online learning (Atsani, 2020). Before the pandemic, the vast majority of teachers had never experienced teaching in distance learning (Trust & Whalen, 2020); therefore, implying that teachers' expertise in online learning was rather limited. A similar scenario was observed in the research conducted at the senior high school (SMA) level, where it was shown that teachers were astounded by the change in learning methods that occurred during the pandemic (Indra *et al.*,

2021). Teachers were suddenly expected to spare more time outside school hours to answer students' questions. It is also challenging for many teachers to develop learning materials because they struggle to operate various devices (Efriana, 2021; Octaviani, 2021). Based on interviews with high school teachers, they admitted that teaching during the pandemic was particularly stressful compared to teaching students in person. These teachers also stated that they had to explain the learning material several times because they were concerned that the students would not understand it. When students are engaged in online learning, teachers must evaluate students' academic progress through the increased number of assignments in online learning situations. This makes teachers feel burdened, making it extremely difficult for teachers to teach effectively (Chen *et al.*, 2020).

The concerns teachers experienced during the pandemic can be resolved by improving

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teacher effectiveness, which involves establishing a variety of teacher internal criteria designed to assist them in effectively implementing the various roles of their jobs (Kyriakides *et al.*, 2002). Highly effective teachers are constantly working to advance their professional development and cultivate positive relationships with the parents of their students (Kyriakides *et al.*, 2002). Meanwhile, teachers whose effectiveness is low tend to create stressful learning environments, interact dispassionately, and lack emotional attachment to their students (Fisher, 2021; Walls *et al.*, 2002). As a result, teachers with low effectiveness are likelier to let their students fail because they do not care to assist their students (Schnell, 2020). This situation demonstrates the critical importance of teachers having a high level of teacher effectiveness.

Teacher effectiveness is affected by a variety of factors, such as motivation, emotions, self-regulation, and the teacher's personality (Octaviani, 2021). According to findings from earlier studies, the teacher effectiveness is highly impacted by motivation, emotion, and self-regulation (Efriana, 2021; Chang & Taxer, 2020; Ige, 2018; Li & Rawal, 2018; Uzuntiryaki-Kondakci *et al.*, 2017). However, previous research has found that a teacher's personality may not impact how effective they are in the classroom (Kim *et al.*, 2019; Klassen & Tze, 2014). Meanwhile, teachers' personality should be able to define how teachers conduct themselves in front of the students (Bardach *et al.*, 2021). Teachers who have a warm personality and are always willing to lend a helping hand can better empathize with their students and offer solid emotional support (Kim *et al.*, 2018). This attitude is part of the teacher's personality and is one of the characteristics of highly effective teachers. These characteristics include offering support to students, nurturing the students, having enthusiasm for teaching, and being patient with students (Kyriakides *et al.*, 2002). Through these considerations, examining how factors related to a teacher's personality can lead to their increased teacher effectiveness.

Regarding personality, it is known that openness to experience is a personality trait that describes a person as tending to be open and interested in exploring a multitude of subjects,

easily adapting to new situations, and finding relevant ways to overcome challenges in dealing with new circumstances (Asselmann *et al.*, 2020; McCrae & Costa, 2008). These personality traits are in accordance with the requirements that teachers will face as a result of the pandemic. Specifically, teachers will need to be able to adapt to new teaching scenarios and devise strategies to overcome obstacles that will arise during distance learning. Teachers who have difficulty adapting to new teaching conditions are more likely to develop burnout, which can hurt their overall effectiveness in teaching (Collie *et al.*, 2018). However, teachers will have a greater commitment to teaching and will be better able to deal with the changes that inevitably occur during teaching activities if the teacher is adaptable to new circumstances.

Despite the fact that openness to experience is essential for teachers to adapt to teaching situations during the pandemic, previous studies have shown that the relationship between openness to experience and teacher effectiveness remains inconsistent. Prior studies have conclusively demonstrated that there is no correlation between openness to experience and teacher effectiveness (Buela & Joseph, 2015; Goel & Barooah, 2018; Harris, 2019; Kim *et al.*, 2018). This occurs because the qualities of teachers who have a high openness to experience, such as imaginative, creative, and a desire to seek out new experiences, are not related to teacher effectiveness (Tamban & Banasihan, 2017). In contrast to the findings of this study, another study found that the personality trait of openness to experience was related to higher levels of teacher effectiveness (Kim *et al.*, 2019). Moreover, teachers with openness to experience have high confidence in their teaching abilities, which contributes to a rise in their teacher effectiveness (Ramdani *et al.*, 2020). Furthermore, teachers with a high openness to experience are also likelier to be enthusiastic in learning new things, such as how to acquire benefits from using technology in order to enhance the quality of distance learning (Adov & Mäeots, 2021). This attitude will undoubtedly increase the effectiveness of teachers during the pandemic. Due to the fact that the results of this study were inconsistent, the connection between openness to experience and teacher effec-

tiveness needs to be further studied.

Based on the preceding phenomenon, it is known that teachers encounter obstacles when attempting to adapt their teaching methods to accommodate the constantly changing educational paradigms in the middle of the pandemic. According to Santamaría et al. (2021), teachers who struggled to adapt to the teaching system during online learning reported higher levels of stress and anxiety. This difficulty decreases self-resources, which in turn decreases the teacher's ability to deal with stress (Cokluk, 2014). In this context, it refers to one's own self-resources, also known as one's psychological capital (Grover et al., 2018). Psychological capital is an individual's state that improves over time and is linked to confidence (self-efficacy), perseverance (hope), resilience, and belief in one's own ability to achieve one's goals (optimism; Luthans et al., 2007). Teachers with high psychological capital can better handle stressful situations and look out for their own well-being by drawing on their own internal resources (Zewude & Hercz, 2021). On the other hand, if a teacher has a low level of psychological capital, they will be more likely to experience weariness when confronted with high work demands. This is of course in line with the circumstance in which teachers are faced during the pandemic, where they are confronted with new demands for operating a distance learning system. When teachers have a high level of psychological capital, they can better combat the harmful effects of stress by drawing from their inner fortitude to support teaching activities in the online learning period. The personality trait of openness to experience has been demonstrated to impact the teachers' psychological capital (Bozgeyikli, 2017). When there is a high level of psychological capital, teachers will also have a high level of openness to experience (Bozgeyikli, 2017). Teachers who enjoy taking on new challenges and expanding their knowledge have the self-assurance that comes from knowing they have personal resources to help them become more effective teachers (Ramdani et al., 2020). Teachers who have a high level of psychological capital are distinguished by the fact that they have great confidence in their own abilities. These teachers have a strong sense of self-esteem and are confident that they will achieve

their goals in their professional endeavors (Luthans et al., 2007). Ferradás et al. (2019) also revealed how the same point, such as teachers who can adapt to diverse teaching conditions have a high level of psychological capital, which allows teachers to lessen the impact of stress caused by the obligations imposed on them to teach. This is consistent with the characteristics of people with a high openness to experience, reflecting individuals who find it convenient to adjust to new circumstances (Asselmann et al., 2020; McCrae & Costa, 2008).

In addition to the statement, psychological capital is a factor that determines the effectiveness of teachers in teaching (Emmanuel, 2020). Teachers' levels of psychological capital affect the characteristics that distinguish highly effective teachers, such as being well-prepared when they start the classroom, displaying a positive attitude toward their students, and being innovative while teaching (Varadwaj & Varadwaj, 2021). Furthermore, Viseu et al. (2016) believe that teachers can improve the quality of their overall teaching and the assistance they provide to students by cultivating psychological capital in themselves. This is following the quality of highly effective teachers, notably those who have room for professional development and provide students with support on both personal and academic levels (Kyriakides et al., 2002). This shows that teachers must have a significant amount of psychological capital to improve teacher effectiveness.

Due to the sheer inconsistency that has been encountered in previous studies of the relationship between openness to experience and teacher effectiveness, we must obtain a mediator to understand the dynamics of the relationship between the two variables. According to Bozgeyikli (2017), there is a strong correlation between openness to experience and the psychological capital that teachers acquire. Therefore, psychological capital of teachers has a high correlation with teacher effectiveness (Varadwaj & Varadwaj, 2021; Viseu et al., 2016). Accordingly, the hypothesis that the relationship between openness to experience and teacher effectiveness is mediated by psychological capital.

## **Methods**

### ***Research Design***

This quantitative research uses a correlational approach to its design (Gravetter & Forzano, 2019). The participants in this study are Indonesian high school teachers who participated in distance learning located in Jakarta, Bogor, Depok, Tangerang, and Bekasi (Jabodetabek). This study has used nonprobability sampling, specifically convenience sampling (Gravetter & Forzano, 2019).

### Research Instruments

The Teacher Effectiveness Scale, which was originally developed by Kyriakides et al. (2002) and then adapted to Indonesian by Primandhita (2020), was used to measure the teacher effectiveness variable in this study. The openness to experience variable is measured by openness to experience items in The Big Five Personality Inventory, which was developed by John (1999) and adapted by Ramdhani (2012). The Psychological Capital Questionnaire, which was initially developed by Luthans et al. (2008) and later modified by Mangundjaya (2015), was used to collect the data on the psychological capital variable.

### Statistical Analysis

Statistical analysis includes descriptive analysis to see an overview of participant demographic data and variable descriptions, Pearson's correlation analysis to see correlations between variables, and mediation analysis using PROCESS version 4.0 developed by Hayes (2021) to see the mediating role of psychological capital in the relationship between openness to experience and teacher effectiveness.

## Results

### Descriptive Analysis

The total number of respondents in this study were of 172 high school teachers, dominated by women teachers as many as 117 (68%) and men teachers as many as 55 (32%) people. The respondents have a variety of teaching experience ranging from 5 months to 35 years ( $M = 161.34$ ,  $SD = 121.8$ ). A total of 99 respondents teach in Jakarta (57.6%), 49 respondents teach in Bogor (28.5%), 10 respondents teach in Depok (5.8%), 3 respondents teach in Tangerang (1.7%), and 11 respondents teach in Bekasi (6.4%). Research was carried out from August 2021 to January 2022.

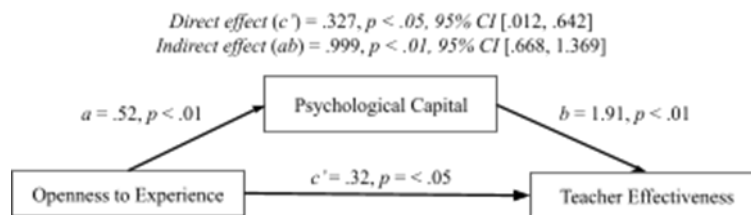
Teacher effectiveness scores are not normally distributed, with a skewness value of  $-1.227$  ( $SE = 0.185$ ), meaning that most scores are distributed on the right side of the curve. This result indicates that the average respondent has a high teacher effectiveness. The openness-to-experience score is normally distributed, with a skewness value of  $-0.103$  ( $SE = 0.185$ ). This means that the average score of respondents' openness to experience in this study is heterogeneous. Furthermore, the psychological capital score is not normally distributed, with a skewness value of  $-1.036$  ( $SE = 0.185$ ), indicating that most scores are distributed to the right of the curve. This result shows that the average respondents have high psychological capital.

### Correlation Analysis

The Pearson correlation calculation results reveal a significant positive relationship be-

**Table 1.** Overview of research variables

Variable	Min	Max	M	Median	SD	Skewness
Teacher Effectiveness	147	245	226.45	232	19.62	-1.227
Openness to Experience	32	70	55.75	55	7.54	-0.103
Psychological Capital	36	72	64.96	66	6.91	-1.036

**Table 3.** Examples of the Item in Each Aspect

tween openness to experience and teacher effectiveness,  $r(170) = 0.510, p < 0.01$ . A significant positive relationship between psychological capital and teacher effectiveness was also found,  $r(170) = 0.748, p < 0.01$ . Furthermore, openness to experience and psychological capital were found to have a significant positive relationship,  $r(170) = 0.569, p < 0.01$ .

### Mediation Analysis

The mediation analysis was performed in IBM SPSS Statistics 24 using PROCESS version 4.0 developed by Hayes. This analysis used model 4 (simple mediation model) with a 95% confidence interval and a bootstrap sample of 5000. Skewed data were normalized using bootstrap.

Indirect effect analysis shows that psychological capital significantly mediated the relationship between openness to experience and teacher effectiveness,  $\beta = 0.999, p < 0.01, 95\% \text{ CI } [0.668, 1.369]$ . A direct effect analysis shows that openness to experience has a significant effect on teacher effectiveness,  $\beta = 0.327, p < 0.05, 95\% \text{ CI } [0.012, 0.642]$ . According to the findings of this study, the research hypothesis, which states that psychological capital serves as a mediator in the relationship between openness to experience and teacher effectiveness, is validated.

### Discussion

In the course of this study, a teacher's psychological capital mediates the relationship between openness to experience and teacher effectiveness. This finding is consistent with a previous study (Bozgeyikli, 2017), which concluded that openness to experience personality predicts psychological capital and psychological capital also predicts teacher effectiveness (Emmanuel, 2020). Teachers with a high openness to experience will find the new challenges that arise during the period of distance learning are enjoyable

(Dewal & Kumar, 2017). According to the findings of the same study, this leads teachers to believe that they obtain a high level of psychological capital, enabling them to use their internal resources during the distance learning period. When a teacher has high psychological capital, they tend to continue improving the overall quality of their teaching and offer support to their students (Viseu et al., 2016). This attitude is in line with the characteristics of highly effective teachers (Kyriakides et al., 2002). These teachers can demonstrate professionalism by continually improving themselves and having the goals and intentions to support the growth of their students.

The relationship between openness to experience and teacher effectiveness occurs because self-efficacy, one of the dimensions of psychological capital, acts as a bridge between the two variables. Due to the nature of the teaching environment during the pandemic, teachers must adapt to the increased level of responsibility they have in fostering online learning (Karabay et al., 2021). Although students are expected to complete some of their schoolwork on their own time, teachers are still responsible to remain flexible and receptive to novel approaches to lesson planning (Indra et al., 2021). When teachers show an openness to learning situations during a pandemic, it increases the teacher's confidence that he will be able to support students' successful learning during the pandemic (Karabay et al., 2021). One of the characteristics of a highly effective teacher (Kyriakides et al., 2002) is the teacher's belief that he is able to support student learning success, especially in distance learning. The said belief reflects one of the characteristics of a highly effective teacher, which is having goals and intentions to support student development (Kyriakides et al., 2002). Teachers who have a high level of openness to experience are more likely to be interested in learning about techno-

logical advancements that can support distance learning (Adov & Mäeots, 2021). Increased interest among teachers in acquiring the skills necessary to use technology effectively in the classroom is associated with an increased teachers' self-efficacy level (Luthans *et al.*, 2007). According to the study's findings, this occurs because the teacher will believe that he can provide a positive educational experience to the students by using various technological tools. Thus, it can assist teachers in increasing their effectiveness during the online learning, during which teachers must make use of technological tools to compile learning materials (Efriana, 2021). Teachers who demonstrate this behavior are responsive to changes in the educational system, which is one of the characteristics of highly effective teachers (Kyriakides *et al.*, 2002). This explains why psychological capital can serve as a link between openness to experience and teacher effectiveness.

The presence of hope, which is another dimension of psychological capital, can also cause a relationship between openness to experience and teacher effectiveness. Teachers who maintain a positive attitude while remaining eager to learn new approaches to dealing with the challenges of their profession exhibit a strong sense of hope or perseverance (Bullough, 2019). According to the study findings, it is known that when a teacher is able to overcome the obstacles that each student presents while teaching, the teacher will experience a sense of success in their efforts to support student learning growth. This occurs because teachers with high hopes for their careers enjoy working with children and are willing to sacrifice for their students. In conclusion, teachers are open to exploring a variety of pedagogical approaches to better direct their students and meet their professional objectives. Teachers with high hopes demonstrate that they have acquired the qualities that distinguish highly effective teachers: a positive attitude toward their students and a love for children (Kyriakides *et al.*, 2002). Teachers with these characteristics can develop an educational environment that is exciting for students, loves and appreciates each student.

The relationship between openness to experience and teacher effectiveness can also occur due to another psychological capital dimension

bridging the gap between the two concepts, resilience. According to the findings of a study (Tamah & Wirjawan, 2021), teachers who feel challenged to change and who are interested in trying new things have a high level of resilience. Teachers will have access to various professional development opportunities to help them further their careers. In the event that their efforts to improve themselves result in failure, good teachers can pick themselves up and learn from the experience. This behavior is also considered to be an attribute of highly effective teachers, who are referred to as teachers who have professionalism (Kyriakides *et al.*, 2002). Teachers who exhibit these traits are committed to engaging in ongoing self-reflection to further their professional development as teachers. The first step toward achieving progress in the field of education is for teachers to demonstrate a willingness to improve themselves (Tamah & Wirjawan, 2021).

The relationship between openness to experience and teacher effectiveness can also occur due to the mediating role played by optimism, one of the dimensions that makes up psychological capital. The level of optimism among teachers rises when they are interested in investigating novel approaches to transforming their schools into settings that are conducive to the education of their students (Kulophas & Hallinger, 2020). Teachers who have a high optimism believe that positive experiences for the development of the school environment include taking steps to increase self-capacity with colleagues, as well as developing good relationships with parents (Horner *et al.*, 2019). Teachers who exhibit this behavior can be classified as having one of the characteristics of highly effective teachers, namely having a sense of collective responsibility (Kyriakides *et al.*, 2002). Teachers who develop these characteristics can collaborate with other education community members and assist one another in professional development. In addition, this quality makes it possible for teachers to work with the students' families to foster their potential. All of these different explanations show that psychological capital fully mediates the relationship between openness to experience and teacher effectiveness because each aspect of psychological capital improves teacher effectiveness.

This study aims to provide an overview of the openness to experience, psychological capital, and the effectiveness of high school teachers in Jabodetabek during the distance learning period. The score for the openness of the respondents to experience was revealed to have a normally distributed proportion, which indicates that the score is heterogeneous. On the other hand, the scores for psychological capital and teacher effectiveness do not follow a normal distribution. They are distributed on the right side of the curve, indicating that the typical respondent acquires a high level of psychological capital and teacher effectiveness. This suggests that personality is not the only factor affecting the psychological capital of teachers in this study; there may be other factors at play as well.

In addition to personality, one of the factors that can affect psychological capital is job characteristics (Avey, 2014). When an individual has good experience in his work, the individual's psychological capital tends to increase because he feels he has resources that can support him in completing the job. Quoting from The Law Number 14 of 2005 (*Undang-Undang Republik Indonesia Nomor 14 Tahun 2005*) concerning Teachers and Lecturers, some of the characteristics of a teacher's job are educating and evaluating students, conducting learning activities for students, and being a role model for students. According to records of teachers' journeys in Indonesia published by SMERU's Research on Improving Systems of Education, teachers see their work as not monotonous because teachers must deal with various student characters and characters every day. Teachers also consider their jobs to be fun and noble because the teacher can educate students to become decent human beings. Therefore, it can be assumed that the majority of respondents in this study have relevant teaching experience, thus indicating that the level of psychological capital and teacher effectiveness of the respondents is also high.

The heterogeneity of respondents' openness to experience scores is assumed to occur because teachers have various cognitive abilities. Cognitive training programs can improve Teachers' cognitive abilities (Jackson et al., 2012). This training program can be implemented by assigning tasks to teachers in the areas of analytical skills, comparisons, classification,

space and time orientation, understanding and compiling instructions, and syllogistic reasoning (Kozulin, 2015). Teachers will be challenged with tasks that are gradually getting more difficult; thus, teachers are trained to explore new ideas and look for various ways to complete assignments, increasing the teacher's openness to experience (Jackson et al., 2012).

The high psychological capital score of the respondents in this study is assumed to occur because teachers have developed their psychological capital. One way to help teachers develop psychological capital is through the Psychological Capital Development Training Program (Kalman & Summak, 2017). This training program can be carried out by discussing case studies and scenarios related to teaching activities with teachers. Furthermore, the teacher will be asked to share his or her teaching experience. Psychologists will be invited to participate in this intervention to train teachers on how to deal with stress while teaching so that teachers can have a high level of psychological capital.

This study also illustrates that the majority of respondents have high teacher effectiveness. This means that most teachers are already effective during the distance learning period. Based on the statement from the Regulation of the Minister of National Education Number 16 of 2007 (*Peraturan Menteri Pendidikan Nasional Republik Indonesia Nomor 16 Tahun 2007*), research respondents can carry out various roles such as supporting student development, improving self-quality, showing professional attitudes, and collaborating with colleagues and parents of students. This finding contradicts the observed phenomena, the results of teacher interviews, and several previous studies that show low teacher effectiveness during the distance learning period (Efriana, 2021; Indra et al., 2021; Octaviani, 2021).

The discrepancy between the description of teacher effectiveness in this study and the results of interviews with teachers, phenomena, and previous research can be explained as follows. Teacher effectiveness scores are generally not distributed; most of the teacher scores are distributed on the right side of the curve or have high average scores. The results of this score could be due to respondent fatigue, a con-



dition in which respondents are tired when filling out questionnaires and thus give answers that are not following their current circumstances (Lavrakas, 2008). Citing the same research, this phenomenon usually occurs when too many items are in the research questionnaire. This study anticipates that the items measuring teacher effectiveness will be divided into several parts to avoid respondent fatigue. However, this phenomenon still occurs when the research is carried out.

The Dunning-Kruger effect may also affect the filling of the Teacher Effectiveness Scale. This phenomenon occurs when individuals with low abilities in certain tasks judge that they have high capabilities in that task (Dunning, 2011). This phenomenon allows respondents to tend to judge themselves as having high effectiveness so that the total score for measuring teacher effectiveness is ultimately high. However, this phenomenon was previously anticipated. All measuring instruments in this study have undergone expert judgment and readability tests to ensure that all items are suitable for use in research. Because no possibility of the Dunning-Kruger Effect had previously been discovered, this phenomenon has only been discovered in field studies. It is assumed that the measurement of teacher effectiveness can be better if the completion of the questionnaire is combined with other self-report methods such as interviews or teacher teaching notes (Little *et al.*, 2009). This can enrich the data on how teachers carry out their profession so that teacher effectiveness can be assessed more objectively.

This study uses a sample of high school teachers from Jabodetabek, which consists of urban areas in Indonesia. According to previous research (Zhang *et al.*, 2018), teachers in urban and rural areas exhibited a variety of distinct characteristics. Teachers in urban areas tend to have higher education than teachers in rural areas. This causes teachers in urban areas to better support students than teachers in rural areas. The occurrence of this phenomenon lends credence to the idea that there may be, in fact, differences between the effectiveness of teachers in urban and rural settings. It is possible that the results of this study do not represent the entire teacher population in Indonesia which

includes a wide range of rural areas.

## Conclusion

The findings of this study show that psychological capital acts as a mediator in the relationship between openness to experience and teacher effectiveness; hence, it is reasonable to conclude that the hypothesis is accepted. The high level of teachers' openness to experience will eventually lead to an increase in teachers' psychological capital, which will also increase the effectiveness of senior high school teachers during the distance learning period. To conduct similar research in the future, researchers must consider using other self-report methods in addition to completing questionnaires to evaluate teacher effectiveness. This is done to prevent the phenomenon of respondent fatigue, which can arise when an excessive number of questionnaire items exist. This is also done to prevent the Dunning-Kruger effect and make teacher effectiveness evaluations more objective. Furthermore, if future research intends to generalize the study findings to all senior high school teachers in Indonesia, the research sample should ideally be increased as it would be more representative of the population. According to this research, teachers with a high level of openness to experience must also have a high level of psychological capital to be more effective in their teaching. Cognitive training programs can be used to organize teacher openness to experience development programs. Moreover, the government and educational institutions can work together to coordinate these programs. Furthermore, training programs can be implemented to increase psychological capital, resulting in increased teacher effectiveness.

**Declaration of Conflicting Interest.** There is no conflict of interest in the authorship and / or publication of the manuscript.

## References

- Adov, L., & Mäeots, M. (2021). What Can We Learn about Science Teachers' Technology Use during the COVID-19 Pandemic?. *Education Sciences*, 11(6), 255. <https://doi.org/10.3390/educsci11060255>
- Asselmann, E., Borghans, L., Montizaan, R., & Seegers, P. (2020). The role of personality in the thoughts, feelings, and behaviors of stu-

- dents in Germany during the first weeks of the COVID-19 pandemic. *PloS one*, 15(11), e0242904. <https://doi.org/10.1371/journal.pone.0242904>
- Atsani, K. H. L. G. M. Z. (2020). Transformasi media pembelajaran pada masa pandemi COVID-19. *Al-Hikmah: Jurnal Studi Islam*, 1(1), 82-93.
- Avey, J. B. (2014). The left side of psychological capital: New evidence on the antecedents of PsyCap. *Journal of Leadership & Organizational Studies*, 21(2), 141-149. doi:10.1177/1548051813515516
- Bardach, L., Klassen, R. M., & Perry, N. E. (2021). Teachers' psychological characteristics: Do they matter for teacher effectiveness, teachers' well-being, retention, and interpersonal relations? An integrative review. *Educational Psychology Review*, 1-42. <https://doi.org/10.1007/s10648-021-09614-9>
- Bozgeyikli, H. (2017). Big Five Personality Traits as the Predictor of Teachers' Organizational Psychological Capital. *Online Submission*, 8(18), 125-135.
- Buela, S., & Joseph, M. C. (2015). Relationship between personality and teacher effectiveness of high school teachers. *The International Journal of Indian Psychology*, 3(1), 57-70.
- Bullough, R. V. (2019). Getting Motivation Right: The Call to Teach and Teacher Hopefulness. In *Essays on Teaching Education and the Inner Drama of Teaching*. Emerald Publishing Limited.
- Chang, M. L., & Taxer, J. (2020). Teacher emotion regulation strategies in response to classroom misbehavior. *Teachers and Teaching*, 1-17. <https://doi.org/10.1080/13540602.2020.1740198>
- Chen, H., Liu, F., Pang, L., Liu, F., Fang, T., Wen, Y., ... & Gu, X. (2020). Are you tired of working amid the pandemic? The role of professional identity and job satisfaction against job burnout. *International journal of environmental research and public health*, 17(24), 9188.
- Cokluk, O. (2014). Orgutlerde tukenmislik. Icinde C. Elma ve K. Demir (Ed.) [Burnout in organizations]. In C. Elma & K. Demir (Ed.), *Yonetimde cagdas yaklasimlar uygulamalar ve sorunlar [Modern approachments practises and problems in administration]* (pp. 117-143). Ankara: Ani Yayıncılık.
- Collie, R. J., Martin, A. J., & Granziera, H. (2018). Being able to adapt in the classroom improves teachers' well-being. <https://theconversation.com/being-able-to-adapt-in-the-classroom-improves-teachers-well-being-95788>
- Costa, P. T., & McCrae, R. R. (2008). The five-factor theory of personality. In *Handbook of personality: Theory and research*. Guilford Press.
- Dewal, K., & Kumar, S. (2017). The mediating role of psychological capital in the relationship between big five personality traits and psychological well-being: A study of Indian entrepreneurs. *Indian Journal of Positive Psychology*, 8(4), 500-506.
- Dunning, D. (2011). The Dunning-Kruger effect: On being ignorant of one's own ignorance. In *Advances in experimental social psychology* (Vol. 44, pp. 247-296). Academic Press.
- Efriana, L. (2021). Problems of Online Learning during Covid-19 Pandemic in EFL Classroom and the Solution. *JELITA*, 38-47.
- Emmanuel, N. (2020). The impact of psychological capital on teaching effectiveness in the Bafut Sub-Division. *International Journal of Trend in Scientific Research and Development (IJTSRD)*, 4(6), 1781-1801.
- Ferradás, M. D. M., Freire, C., García-Bértoa, A., Núñez, J. C., & Rodríguez, S. (2019). Teacher profiles of psychological capital and their relationship with burnout. *Sustainability*, 11(18), 5096.
- Fisher, C. (2021). *Student and Teacher Relationships at Secondary Level* (Doctoral dissertation, University of Northern Colorado).
- Goel, D., & Barooah, B. (2018). Drivers of student performance: Evidence from higher secondary public schools in Delhi. *GLO Discussion Paper*, 231.
- Gravetter, F. J., & Forzano, L. B. (2019). *Research Methods for The Behavioral Sciences* (6th ed.). Cengage Learning.
- Grover, S. L., Teo, S. T., Pick, D., Roche, M., & Newton, C. J. (2018). Psychological capital as a personal resource in the JD-R model. *Personnel Review*, 47(4), 968-984. <https://doi.org/10.37542/iq.v3i01.57>
- Harris, H. (2019). *The relationship between the Five-Factor Model of personality and educator effectiveness* (Publication No. 27548323) [Doctoral

- dissertation, Union University School of Education]. ProQuest Dissertations Publishing.
- Hayes, A. F. (2021). *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach* (3rd ed.). The Guilford Press.
- Horner, M. V., Jordan, D. D., & Brown, K. M. (2019). Academic optimism. In *Oxford Research Encyclopedia of Education*. <https://doi.org/10.1093/acrefore/9780190264093.013.645>
- Ige, A. M. (2018). Perceived potential of motivational strategies operating in school to impact teacher effectiveness, by teachers in public secondary schools in Ondo State, Nigeria. *Educational Studies*, 44(4), 488-503.
- Indra, R., Lian, G. C., Putri, J. A. I., Valencia, L., Santoso, Y. E. S. U., Yosua, I. (2021). Gambaran stres kerja dan koping guru SMA saat pembelajaran daring selama pandemi. *Mind Set Edisi Khusus TIN*, 1(1), 63-86.
- Jackson, J. J., Hill, P. L., Payne, B. R., Roberts, B. W., & Stine-Morrow, E. A. (2012). Can an old dog learn (and want to experience) new tricks? Cognitive training increases openness to experience in older adults. *Psychology and Aging*, 27(2), 286.
- John, O. P., & Srivastava, S. (1999). *The Big-Five trait taxonomy: History, measurement, and theoretical perspectives* (Vol. 2, pp. 102-138). Berkeley: University of California.
- Kalman, M., & Summak, M. S. (2017). Revitalizing the HERO within teachers: An analysis of the effects of the PsyCap development training. *The Qualitative Report*, 22(3), 655.
- Karabay, A., Korumaz, M., & Kocabaş, İ. (2021). The Relationship Between the Effectiveness of School Principals in the Communication Process and the Psychological Capital Levels of Teachers During the COVID-19. *Kastamonu Eğitim Dergisi*, 29(3), 756-768.
- Kementerian Pendidikan dan Kebudayaan. (2020). *Survei belajar dari rumah tahun ajaran 2020/2021*. [https://puslitjakdikbud.kemdikbud.go.id/assets\\_front/images/produk/1-gtk/buku/06\\_200910\\_Survei\\_Belajar\\_dari\\_Rumah\\_kepada\\_Guru\\_dan\\_Siswa\\_Semester\\_2020\\_2021.pdf](https://puslitjakdikbud.kemdikbud.go.id/assets_front/images/produk/1-gtk/buku/06_200910_Survei_Belajar_dari_Rumah_kepada_Guru_dan_Siswa_Semester_2020_2021.pdf)
- Kim, L. E., Dar-Nimrod, I., & MacCann, C. (2018). Teacher personality and teacher effectiveness in secondary school: Personality predicts teacher support and student self-efficacy but not academic achievement. *Journal of Educational Psychology*, 110(3), 309.
- Kim, L. E., Jörg, V., & Klassen, R. M. (2019). A meta-analysis of the effects of teacher personality on teacher effectiveness and burn-out. *Educational Psychology Review*, 31, 163-195.
- Klassen, R. M., & Tze, V. (2014). Teachers' self-efficacy, personality, and teaching effectiveness: A meta-analysis. *Educational Research Review*, 12, 59-76.
- Kozulin, A. (2015). The impact of cognitive education training on teachers' cognitive performance. *Journal of Cognitive Education and Psychology*, 14(2), 252-262.
- Kulophas, D., & Hallinger, P. (2020). Leadership that matters: creating cultures of academic optimism that support teacher learning in Thailand. *Journal of Educational Administration*, 58(6), 605-627. <https://doi.org/10.1108/JEA-12-2019-0222>
- Kyriakides, L., Campbell, R. J., & Christofidou, E. (2002). Generating criteria for measuring teacher effectiveness through a self-evaluation approach: A complementary way of measuring teacher effectiveness. *School effectiveness and school improvement*, 13(3), 291-325. <https://doi.org/10.1076/sesi.13.3.291.3426>
- Lavrakas, P. J. (2008). *Encyclopedia of Survey Research Methods*. Sage Publications. <https://dx.doi.org/10.4135/9781412963947.n537>
- Li, W., & Rawal, H. (2018). Waning and waxing of love: unpacking layers of teacher emotion. *Chinese Journal of Applied Linguistics*, 41(4), 552-570.
- Little, O., Goe, L., & Bell, C. (2009). *A practical guide to evaluating teacher effectiveness*. <https://files.eric.ed.gov/fulltext/ED543776.pdf>
- Luthans, F., Avolio, B. J., Avey, J. B., & Norman, S. M. (2007). Positive psychological capital: Measurement and relationship with performance and satisfaction. *Personnel Psychology*, 60, 541-572.
- Luthans, F., Youssef, C. M., & Avolio, B. J. (2007). *Psychological capital: Developing the human competitive edge*. Oxford University Press.
- Mangundjaya, W. L. (2015). *Program pelatihan karyawan*. Jakarta: Swascita.

- McCrae, R., & Costa, P. (2008) *The five-factor theory of personality*. In John, O. P., Robins, R. W., & Pervin, L. A. (Eds.). (2008). *Handbook of personality: Theory and research*. Guilford Press.
- Octaviani, A. Y. (2021). The use of Zoom Cloud Meeting for teaching English grammar in an online class. *RETAIN (Research on English Language Teaching in Indonesia)*, 9(2), 83-92.
- Peraturan Menteri Pendidikan Nasional Republik Indonesia Nomor 16 Tahun 2007. (Ind.). <https://sumsel.bpk.go.id/files/2009/10/PERMEN2.PDF>
- Primandhita, N. A. (2020). Peran intellectual humility dalam memprediksi efektivitas guru sekolah menengah di Indonesia [Bachelor's thesis, Universitas Indonesia].
- Ramdani, Z., Tae, L. F., Prakoso, B. H., & Luanganggoon, N. (2020). Personality trait, self-efficacy, and individual work performance on science teachers in Indonesia. *Advances in Social Science, Education and Humanities Research*, 545, 16-21.
- RISE SMERU Research Institute. (n.d.). *Catatan perjalanan guru*. <https://rise.smeru.or.id/id/label-blog/catatan-perjalanan-guru>
- Santamaria, M. D., Mondragon, N. I., Santxo, N. B., & Ozamiz-Etxebarria, N. (2021). Teacher stress, anxiety and depression at the beginning of the academic year during the COVID-19 pandemic. *Global Mental Health*, 8, 1-8. <https://doi.org/10.1017/gmh.2021.14>
- Schnell, A. M. (2020). *The Influence of Care: An Exploration of Student and Teacher Experiences*. University of Northern Colorado.
- Tamah, S. M., & Wirjawan, J. V. (2021). Teachers' response to a challenge to change: A portrait of teacher resilience to a professional development program. *Power and Education*, 175774382111052647.
- Tamban, V. E., & Banasihan, G. L. (2017). Big Five Personality Traits and Teaching Performance of Faculty of College of Teacher Education, Laguna State Polytechnic University. *International Journal of Research-Granthaalayah*, 5(9), 99-105. <https://doi.org/10.29121/granthaalayah.v5.i9.2017.2209>
- Trust, T., & Whalen, J. (2020). Should teachers be trained in emergency remote teaching? Lessons learned from the COVID-19 pandemic. *Jl. of Technology and Teacher Education*, 28(2), 189-199.
- Undang-Undang Republik Indonesia Nomor 14 Tahun 2005. (Ind.). <http://luk.staff.ugm.ac.id/atur/UU14-2005GuruDosen.pdf>
- Uzuntiryaki-Kondakci, E., Demirdöğen, B., Akin, F. N., Tarkin, A., & Aydın-Günbatar, S. (2017). Exploring the complexity of teaching: the interaction between teacher self-regulation and pedagogical content knowledge. *Chemistry Education Research and Practice*, 18(1), 250-270.
- Varadwaj, J., & Varadwaj, K. Psychological Capital and Teacher Effectiveness: Evidence from Secondary School Teachers. *Odisha Journal of Social Science*, 8(1), 65-73.
- Viseu, J., Neves de Jesus, S., Rus, C., & Canavaro, J. M. (2016). Teacher motivation, work satisfaction, and positive psychological capital: A literature review. *Electronic Journal of Research in Educational Psychology*, 14(2), 439-461.
- Walls, R. T., Nardi, A. H., von Minden, A. M., & Hoffman, N. (2002). The characteristics of effective and ineffective teachers. *Teacher Education Quarterly*, 29(1), 39-48.
- Zewude, G. T., & Hercz, M. (2021). Psychological Capital and Teacher Well-Being: The Mediation Role of Coping with Stress. *European Journal of Educational Research*, 10(3), 1227-1245.