



## THE EFFECT OF SUPPORTIVE STUDY CLIMATE AND PSYCHOLOGICAL CAPITAL ON ACADEMIC PERFORMANCE WITH ACADEMIC ENGAGEMENT AS A MEDIATING VARIABLE

By

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### Article History

Received: 15/01/2025

Accepted: 22/01/2025

Published: 24/01/2025

Vol –4 Issue – 1

PP: -59-68

### Abstract

*This study aims to determine and analyze the effect of supportive study climate and psychology capital on academic performance with academic engagement as a mediating variable in Faculty of Economics and Business Universitas Muhammadiyah Yogyakarta students of class 2021. In this study, the number of samples used was 170 samples, and the sampling technique used was purposive sampling. The data collection technique used was a questionnaire in the form of Google Forms. The analysis method used in this study was SEM (Structural Equation Modeling), assisted by Smart-PLS software version 3.0. The results of this study indicate that a supportive study climate has a significant positive effect on academic engagement. Psychological capital has a significant positive effect on academic engagement. A supportive study climate has a significant positive effect on academic performance. Psychological capital has a significant positive effect on academic performance. Academic engagement has a significant positive effect on academic performance. Academic engagement can mediate the relationship between a supportive study climate and academic performance. Academic engagement can mediate the relationship between psychological capital and academic performance.*

**Keywords:** Supportive Study Climate, Psychology Capital, Academic Engagement, Academic Performance

### INTRODUCTION

Higher education is something important that is used to develop human resources and sustainable development (Chima ILO & Unachukwu, 2020). Students are one of the crucial figures in the world of higher education, they are required to achieve maximum academic performance. Higher education students must be able to improve their academic performance and factors that can affect their success and academic growth (Almeida et al., 2021; Wanmei, 2023).

*Academic performance* is one of the keys to success in facing challenges in the world of work (Mitchell et al., 2019). Academic performance is a parameter that has quite an influence on a university (Slåtten et al., 2021). Academic performance can also be a reference for predicting students' career development in the future (Negru-Subtirica and Pop, 2016; Van der Aar et al., 2019; Ma & Wei, 2022). Therefore, students need to try to get maximum academic performance so that in the future students will get benefits that will benefit them. In addition, to get maximum academic performance

many factors can support or influence the academic performance of the student.

*Supportive study climate* influences a student's academic performance, and this occurs because a student who has access to supportive learning support will have a positive impact on increasing academic performance compared to students who do not have learning support (Slåtten et al., 2021). In addition, there is research that states that psychological capital is something essential to change a student's character into a behaviour that can create better academic success (Chaffin et al., 2023). Academic engagement can also be a determinant of the success of a student's academic performance, and this can happen if students are able to actively participate and interact with various components of the learning environment (Tatiana et al., 2022). Thus, the purpose and objective of this study are to determine the significance of the influence of supportive study climate and Psychology Capital on academic performance through academic engagement as a mediating variable.

This research was conducted after seeing several gaps in previous research, such as research conducted by Slåtten et al. (2021) stated that a supportive study climate has insignificant results on academic performance. Several other studies that have the same assumptions, namely, related to supportive study climate, have similar results. As in the study Maksun & Khory (2020) stated that learning climate is not significant for academic performance. Then, in the research, Ma & Wei (2022b) stated that the perceived classroom climate was not significant to academic performance. However, in the study Castro-Sánchez et al. (2019) stated that motivational climate has significant results on academic performance.

Thus, there are still many research inconsistencies related to a supportive study climate on student academic performance. So, the author sees the gap to conduct further research related to these variables by also considering the limitations of previous research. In addition, this study will use one of the universities in Yogyakarta as an object with students who are studying there as subjects.

This research is essential because knowing the significance of the influence of supportive study climate factors and the psychological capital of a student on academic performance makes the university more concerned about the physical and mental well-being of its students and not only focuses on their academic performance. At this time, many students need more enthusiasm when studying because of the lack of a supportive study climate, such as unpleasant classmates, inadequate classroom facilities, lecturers who are less protective, or decreasing motivation, which can affect less than optimal academic performance.

In addition, many students do not yet have solid psychological capital, such as still having a sense of pessimism, lack of self-confidence, and inability to face a problem that will ultimately affect their academic performance. Thus, this study is expected to be a consideration for the campus to pay more attention to student welfare. If students have good welfare, this will impact on a healthy and harmonious campus life, which, in the end, the campus can create a better generation of graduates who are more prepared to face the world of work.

## LITERATUR REVIEW

### Supportive Study Climate

The work climate itself is characterized by each person's views and the surface interactions of an organization (Zhou and Shalley, 2008; Slåtten et al., 2021). Meanwhile, Robbins & Coulter (2016) state that work climate is an employee's perspective on their work environment. An organization needs to have a supportive work climate, the reason is that when an organization has a supportive work climate, it will improve the abilities of individuals, teams, and all parties involved in the organization.

In the context of this research, the concept of work climate is relatively broad and needs to be narrowed down in order to focus on relevant aspects of the climate (Slåtten et al., 2021). Therefore, in this study, the concept of work climate is limited to the work that is usually done by a student and is marked as a

supportive study climate. Supportive study climate is an experience or view of students toward aspects that support their learning process, such as lecturers, friends, and support facilities provided by the campus (Slåtten et al., 2021). Just as the concept of a supportive work climate can improve employee capabilities, a supportive learning climate can also improve the capabilities of students which will then indirectly be able to boost their academic performance.

### Psychological Capital

In organizational psychology, the term "Psychological Capital" refers to a person's personality, which is the capacity to generate an emotion that results in an action. It is used to reflect emotional growth that can influence a person's behavior in a positive, recoverable condition and is associated with subjective well-being and life satisfaction (Preston et al., 2023). According to Wanmei (2023), Psychology Capital is a condition of positive psychological change in a person which is marked by (1) the ability of a person who believes that he can do complicated tasks (Self-Efficacy), (2) Linking success to one's efforts (Optimism); (3) trying hard to achieve a goal even though the goal has to change direction later (hope); and (4) persisting in the face of failure that occurs when wanting to succeed in achieving the goal (resilience) (Wanmei 2023), meanwhile, according to F. Luthans et al. (2007) and Chaffin et al. (2023) states that psyche is a solid construct that can create positive psychological variables such as hope, optimism, self-efficacy, and resilience.

### Academic Engagement

According to Geoffrey & January-Enkali (2019) states, "A positive and rewarding state of mind associated with work involving dedication, characterized by a sense of passion, meaning, challenge, pride, and inspirational power that produces abundant energy and positive mental resilience while working and absorption in one's tasks" is what is meant to be understood by engagement. In the context of this study, the theory of engagement is applied to a student's academic activities. In this study, it will be marked as academic engagement.

Academic engagement also influences a student's academic success (Martin et al., 2017; Pham et al., 2024). Meanwhile, according to Vinson et al. (2010) in Junça Silva et al. (2022) state that academic engagement is a position where students can contribute to an activity or the extent to which a student is able to actively participate in educational activities that can lead to high-quality learning (Coates, 2005, p. 26; Junça Silva et al., 2022). To Schaufelli et al. (2002) in Carmona-Halty et al. (2021) state that there are three dimensions related to academic involvement, namely Vigor, Absorption, and Dedication

### Academic Performance

Performance theory, according to Elger (2007) and Banda et al. (2023), defines that performance can create something that can be appreciated, and workers are individuals or groups who work together, while the level of performance represents the place in the student's academic journey. Meanwhile, according to Haryono (2018), *performance can be defined as*

the result of a person's work influenced by individual competence and organizational support. In the context of this study, performance theory is applied to a student's academic activities; in this study, it will be marked as academic performance.

Academic performance itself is considered a result obtained during the academic learning process carried out (Iqbal et al., 2021). In addition, academic performance is a performance that can be used as a benchmark, such as the level of theoretical knowledge and practical skills (Slåtten et al., 2021). However, according to Samson Balogun et al. (2020), stated that academic performance is the capacity to create something valuable for individuals and groups. Meanwhile, Kumar (2021) said that academic performance is knowledge obtained by students within a certain period that is in line with the values or goals that students and teachers have set and according to Aarti & Kadian (2023) stated that three indicators of academic performance need to be considered, namely Behavioural, Cognitive, and Emotional.

## HYPOTHESIS DEVELOPMENT

### The Effect of Supportive Study Climate & Academic Engagement

The learning climate is expected to reflect intrinsic and extrinsic motivation, which will ultimately increase work involvement (Peng & Chen, 2023). In an academic context, if a student has a supportive *study climate*, then they will be able to improve academic *engagement* student in an academic environment. This needs to be considered because lately, *academic engagement has become* one of the essential factors to achieve success in academic fields such as getting *academic performance* the maximum.

Based on the discussion above, the researcher sees a significant positive relationship between supportive *study and academic engagement*. This is also supported by several previous studies conducted by Namaziandost et al. (2024), Li (2024), And Ramírez Hernández et al. (2024) which found that classroom climate has a significant positive influence on students' academic engagement in the classroom. In the context of this study, the classroom climate is assumed to be a supportive study climate. Thus, based on the discussion above and several previous studies, the researcher sets the following hypothesis:

**H1: Supportive study climate has a significant positive influence on academic engagement.**

### The Effect of Psychological Capital & Academic Engagement

A student who has high academic engagement tends to have a better understanding of the learning process in class compared to students who have a lower level of engagement (Van Steenbergen et al., 2017.; Junça Silva et al., 2022). To increase student engagement in class, supporting resources are needed so that students are more motivated to be involved in academics (Junça Silva et al., 2022). This is in line with someone who has high psychological capital and tends to be more motivated to use their resources to increase their engagement in academics (Virgã et al., 2022).

In addition, a student at a university who has substantial psychological capital has been shown to improve learning, which can then help them deal with problems and make it easier for them to achieve their goals in the future. (Wanmei, 2023). Therefore, if a student has good psychological capital, it will increase their academic engagement so that these two relationships have a positive relationship.

Based on the discussion above, the researcher sees a significant positive relationship between psychological capital and academic engagement. This is supported by several previous studies conducted by Wanmei (2023), Junça Silva et al. (2022), Carmona-Halty et al. (2021), Paloş et al. (2023), Virgã et al. (2022) And Gomez Borges et al. (2023) which states that the relationship between psychological capital and academic engagement has a significant positive relationship. Thus, based on the discussion above and several previous studies, the researcher sets the following hypothesis:

**H2: Psychological capital has a significant positive influence on academic engagement.**

### The Effect of Supportive Study Climate & Academic Performance

*Supportive study climate* is one of the factors that can influence a student's academic performance (Wentzel et al., 2010; Slåtten et al., 2021). In this context, a supportive study climate includes several factors, such as the perceived classroom atmosphere, relationships with classmates, relationships with lecturers, and facilities obtained from the university. Therefore, the campus environment is an important component in creating a supportive study climate. Creating a supportive study climate will indirectly make them more motivated to carry out academic activities, which will ultimately improve their academic performance (Apostol & Delos Santos, 2023).

Based on the discussion above it shows that a supportive study climate has a positive influence on academic performance. This is supported by several previous studies, such as the study conducted by Rudolf & Lee (2023), Izaguirre et al. (2023), Garza & Zermeno (2021) And Mateos et al. (2021), who found that school climate has a positive relationship with a student's academic performance. In the context of this study, school climate is assumed to be a supportive study climate. Thus, based on the discussion above and several previous studies, the researcher establishes the following hypothesis:

**H3: Supportive study climate has a significant positive influence on academic performance.**

### The Effect of Psychological Capital & Academic Performance

There is research that states that psychological capital is something essential to change a student's character into a behavior that can create better academic success (Chaffin et al., 2023). In addition, psychological capital can be an instrument to improve a student's mental health condition and is able to increase a student's learning motivation (Van Rooij-Peiman, 2020). And psychological capital is also used as an indicator of academic success which includes students'

academic performance (Luthans et al., 2007; Chaffin et al., 2023). So, a student who has high psychological capital will make the student have the motivation to learn, it can improve the educational performance of the student. Therefore, between psychological capital and academic performance, there is a positive relationship that is interrelated.

This is supported by several previous studies, such as research conducted by Carmona-Halty et al. (2021) And Slåtten et al. (2021), who found that psychological capital has a significant positive relationship with academic performance. Then the research conducted by Virgã et al. (2022) and KW Luthans et al. (2019) also found that there is a significant positive relationship between psychological capital and academic performance. So, based on the discussion above and several previous studies, the researcher decided to provide the following hypothesis:

**H4: Psychology capital has a significant positive influence on academic performance.**

#### **The Effect of Academic Engagement and Academic Performance**

Academic engagement can be a determinant of the success of student's academic performance, and this can happen if students are able to actively participate and interact with various components of the learning environment (Tatiana et al., 2022). Achieving academic performance success is one of the most valuable achievements that a student can have (Khosravi & Mohanan, n.d.)

Therefore, students will try harder to face various kinds of academic tasks, so that in this condition, students will be quicker in completing their tasks which will be able to improve the academic performance of these students (Tatiana et al., 2022). Thus, academic engagement has a positive influence on academic performance, this happens because when a student has high academic engagement, it will increase the academic performance of the student.

This is supported by several previous studies, such as research conducted by Slåtten et al. (2021), Virgã et al. (2022) Meng & Zhang (2023), Wanmei (2023), Tatiana et al. (2022) and Carmona-Halty et al. (2021) which found that there is a significant positive relationship between academic engagement and academic performance. So, based on the discussion above and several previous studies, the researcher decided to provide the following hypothesis:

**H5: Academic engagement has a significant positive influence on academic performance.**

#### **The Mediation Role of Academic Engagement on Supportive Study Climate & Academic Performance**

*Work engagement* is a positive and proactive state of mind that drives individuals to pursue and achieve their goals by demonstrating enthusiasm, dedication, and absorption related to work (Schaufeli et al, 2002; JC Peng & Chen, 2023) In the context of academic engagement, a student in order to achieve maximum academic performance, the student needs to show enthusiasm, dedication, and absorption when doing academic

activities. For a student to be more motivated, there needs to be learning support from the student's academic environment. The form of learning support that can be obtained such as support from teachers, then classmates, and adequate campus facilities. Therefore, when a student gets a supportive learning climate, then the student will be able to increase their academic engagement. So, when their academic engagement is high, it will indirectly affect their academic performance to be better. Therefore, academic engagement can be a bridge or mediation between a supportive study climate and academic performance. This is also supported by previous research conducted by Slåtten et al. (2021), who found that academic engagement mediates the relationship between supportive study climate and academic performance. In addition, in a study conducted by Pham et al. (2024), academic engagement can act as a mediating variable.

In addition, there are several previous studies conducted by Ramírez Hernández et al. (2024) and Namaziandost et al. (2024) which found a significant positive relationship between classroom climate and academic engagement, where in this study, classroom climate is assumed to be a supportive learning climate. Then, several previous studies found a significant positive relationship between academic engagement and academic performance as conducted by Carmona- Halty et al. (2021) and Wanmei (2023). Therefore, by looking at the discussion above and the existence of previous research, the researcher determines the following hypothesis:

**H6: Academic Engagement mediates the relationship between Supportive Study Climate and Academic Performance.**

#### **The Mediating Role of Academic Engagement on Psychological Capital & Academic Performance**

According to Lawson and Lawson (2013) in Pham et al. (2024) revealed that academic engagement is a physical and psychological investment of a student toward success in achieving maximum academic performance. In addition, psychological capital helps individuals to notice, interpret, and maintain positive and constructive emotions in their interactions and engagement with the educational environment. This can lead to greater engagement, which ultimately results in better performance and quality of work (Wang et al., 2021). Therefore, academic engagement has a role as a link between psychological capital and academic performance.

This happens because when a student has high psychological capital, it will increase academic engagement which will ultimately increase academic performance. Thus, to improve academic performance, students need to develop the psychological capital that exists within themselves and encourage their involvement in academic activities. Then, several previous studies can support the development of this hypothesis, such as the last research conducted by Junça Silva et al. (2022) and Carmona-Halty et al. (2021), who found that academic engagement has a role as a mediating variable.



In addition, several previous studies found a significant positive relationship between psychological capital and academic engagement, such as that conducted by Wanmei (2023) , and Gomez Borges et al. (2023). Then, several previous studies found a significant positive relationship between academic engagement and academic performance, such as that conducted by Meng & Zhang (2023) And Carmona-Halty et al. (2021). Therefore, based on the discussion above and several previous studies, the researcher decided to establish the following hypothesis:

**H7: Academic engagement mediates the relationship between Psychology Capital and Academic Performance.**

**RESEARCH METHODE**

In this study, the research approach method used is quantitative. The population in this study were FEB UMY students of the 2021 intake, totaling 1,006 students consisting of Management, Accounting, and Economics Study Programs. The sampling technique used was purposive sampling. The data collection technique used was by distributing questionnaires to 170 FEB UMY students of the 2021 intake, with 90 (53%) students from the Management Study Program, 41 (24%) students from the Economics Study Program, and 39 (23%) students from the Accounting Study Program

**Measurement**

Learning climate was measured using dimensions developed by Slåtten et al. (2021 ) includes lecturer- student relationships, peer-student relationships, and the use of supporting resources by students. then Psychological Capital is measured with dimensions developed by F. Luthans et al. (2007) which were adopted by Slåtten et al. (2021) including hope, optimism, self-efficacy, and resilience. Meanwhile, academic engagement is measured with dimensions developed by Schaufelli et al. (2002) adopted by Slåtten et al. (2021) includes enthusiasm, absorption, and dedication. Finally, academic performance is measured by the dimensions developed by Skinner et al. (2008), adopted by Aarti & Kadian (2023) including behavioral, cognitive , and emotional.

**RESEARCH RESULTS AND DISCUSSION**

The results of the validity test analysis (Convergent Validity) are displayed in Table 1. From the instrument testing results, all question items are valid with a correlation value above 0.7

**Table 1 Results Loading Factor**

Indicator Variable	Loading Factor	Result
SSC 1	0.731	Valid
SSC 2	0.808	Valid
SSC 3	0.802	Valid
PC 4	0.708	Valid
PC 5	0.709	Valid
PC 6	0.787	Valid
PC 7	0.765	Valid

PC 8	0.765	Valid
PC 9	0.726	Valid
AE 1	0.805	Valid
AE 2	0.781	Valid
AE 3	0.838	Valid
AE 5	0.741	Valid
AE 7	0.814	Valid
AE 8	0.742	Valid
AE 9	0.759	Valid
AE 10	0.712	Valid
AE 11	0.717	Valid
AE 12	0.719	Valid
AE 13	0.808	Valid
AP 1	0.753	Valid
AP 2	0.729	Valid
AP 3	0.757	Valid
AP 4	0.785	Valid
AP 7	0.719	Valid
AP 8	0.787	Valid
AP 9	0.819	Valid

According to Hair et al. (2019), An indicator construct can be said to be valid if it has an outer loading value >0.7. Based on the output table above, several indicator constructs cannot be met because they have values <0.7, namely PC 1, PC 2, PC3, PC 10, AE 4, AE 6, AE 14, AE 15, AE 16, AE 17, AP 5, AP 6, and AP 10. Therefore, these indicators need to be eliminated in order to meet the role of thumb requirements that have been required.

**Reliability Test**

**Table 2 Cronbach Alpha, Composite Reliability dan AVE**

	Cronbach's alpha	Composite reliability (rho_a)	AVE	Result
AE	0.930	0.940	0,590	Reliable
AP	0.882	0.908	0,585	Reliable
PC	0.839	0.881	0,553	Reliable
SSC	0.687	0.824	0,610	Reliable

According to Hair et al. (2019), states that if the value of Cronbach's alpha and composite reliability > 0.6 then the construct can be said to be reliable. Based on the table above shows that the value of Cronbach's alpha and composite reliability in this study is more significant than 0.6 (>0.6). It can be concluded that the reliability requirements in this study

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are met, or all constructs are reliable Structural Model Analysis (Inner Model)

Testing the internal model, also known as the structural model, comes next after the exterior model, or outer model, has been successfully tested and validated. To determine how variables in a study relate to one another, inner model testing is done. The R-squared value (R2) was used to assess the model test in PLS. The degree of variation in changes from the independent variable to the dependent variable is measured by the R2 value.

**Table 3 R-Square test**

	R-square	R-square adjusted
Academic Engagement (AE)	0,294	0,286
Academic Performance (AP)	0,522	0,514

Based on the results of the table above it shows that the R-Square Adjusted value for the academic engagement variable is 0.286 or 28.6%. This indicates that the variability of the academic engagement construct can be explained by the supportive study climate, psychology capital and academic performance variables only by 28.6%. In contrast, the rest is explained by other variables outside the model that has been studied.

In this study, the R-Square Adjusted value for the academic performance variable is 0.514 or 51.4%. This indicates that the variability of the academic performance construct can be explained by the supportive study climate, psychology capital, and academic engagement variables by 51.4%, while other variables outside the studied model explain the rest.

**Hypothesis test**

Hypothesis testing in this study uses the Bootstrapping method. This hypothesis testing is carried out to determine whether the hypothesis is rejected or accepted. This can be seen when the P-value <0.05 and the T-statistic value > 1.96, then the hypothesis is accepted. And vice versa, when the P value > 0.05 and the T statistic value <1.96, then the hypothesis is rejected (Hair et al., 2019). The following are the results of the hypothesis testing that has been carried out:

**Table 4 Path Coefficient**

	Original sample (O)	T statistics	P values	Result
SSC-> AE	0.165	2,420	<b>0.016</b>	Accepted
PC-> AE	0.470	7,291	<b>0,000</b>	Accepted
SSC-> AP	0.242	4,587	<b>0,000</b>	Accepted
PC> AP	0.331	4,023	<b>0,000</b>	Accepted
AE-> AP	0.360	4,822	<b>0,000</b>	Accepted

**Table 5 Indirect Effects**

	Original sample (O)	T		Result

		statistics	P values	
SSC -> AE -> AP	0.060	2,205	<b>0.028</b>	Accepted
PC -> AE - > AP	0.169	3,760	<b>0,000</b>	Accepted

Based on the results of the hypothesis test, supportive study climate has a significant positive influence on academic engagement in Faculty of Economics and Business Universitas Muhammadiyah Yogyakarta students of the 2021 intake. This proves that Faculty of Economics and Business Universitas Muhammadiyah Yogyakarta students of the 2021 intake, when they have a supportive learning environment, will increase their engagement when carrying out academic activities. As stated by Peng & Chen (2023), the learning environment can encourage intrinsic and extrinsic motivation in a person so that it can increase their commitment to every academic activity they do.

Therefore, to maintain the engagement of Faculty of Economics and Business Universitas Muhammadiyah Yogyakarta students of class 2021, the faculty needs to maintain a learning climate for its students by providing good academic services and facilities that can support its students to continue to participate in every academic activity carried out actively. It was considered that the learning climate plays an essential role in the activeness of students to contribute to every educational activity.

Based on the results of the hypothesis test conducted, psychological capital has a significant positive influence on academic engagement in Faculty of Economics and Business Universitas Muhammadiyah Yogyakarta students of class 2021. This proves that Faculty of Economics and Business Universitas Muhammadiyah Yogyakarta students of class 2021 have good psychological capital, such as having a sense of optimism when doing everything, then having the resilience to face a problem, and having self-confidence when facing obstacles. This can encourage them to increase their engagement or activeness in participating in academic activities.

This is in line with what was conveyed by Virgã et al. (2022), which states that someone who has good psychological capital tends to be more motivated to use their resources to increase their engagement in academics. In addition, a student at a university who has substantial psychological capital has been shown to improve learning, then can help them to face a problem and make it easier for them to achieve their goals in the future (Wanmei, 2023).

Based on the results of the hypothesis test that has been conducted, a supportive study climate has a significant positive influence on academic performance in Faculty of Economics and Business Universitas Muhammadiyah Yogyakarta students of class 2021. This proves that on average, students can achieve a high level of academic performance when they have a

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learning environment or climate that can support them to achieve this.

This is in line with what was stated by Slåtten et al. (2021) which states that a student who has access to supportive learning support will have a positive impact on improving academic performance, compared to students who do not have learning support. Thus, a supportive study climate has an essential role in enhancing a student's academic performance.

Based on the results of the hypothesis test that has been carried out, psychological capital has a significant positive influence on academic performance in Faculty of Economics and Business Universitas Muhammadiyah Yogyakarta students of class 2021. This proves that when a student can have good psychological capital, it can help them achieve maximum academic performance. This is in line with what was stated by Chaffin et al. (2023), which states that psychological capital is one of the essential aspects of changing a student's character into a behavior that can create better academic success. Thus, students need to improve or maintain their psychological capital to achieve maximum academic performance.

Based on the discussion above, this research is in accordance with several previous studies conducted by Wanmei (2023), Slåtten et al. (2021), Virgã et al. (2022), KW Luthans et al. (2019), Chaffin et al. (2023) And Carmona-Halty et al. (2021) which found that psychological capital has a significant positive relationship to academic performance. So, the results of the research found in this study are still relevant to the results of previous studies that have been conducted. So, the results of the research found in this study are still relevant to the results of previous studies that have been performed.

Based on the results of the hypothesis test that has been conducted, academic engagement has a significant positive influence on academic performance in Faculty of Economics and Business Universitas Muhammadiyah Yogyakarta students of the 2021 intake. This proves that a student who has high engagement and actively contributes to each of their academic activities will be able to encourage them to achieve maximum academic performance. This is in line with what has been stated by Tatiana et al. (2022), which states that academic engagement can be a determinant of the success of a student's academic performance; this can happen if students are able to actively participate and interact with various components of the learning environment.

Therefore, students will try harder to face various kinds of academic tasks, so that in this condition, students will be quicker in completing their tasks which will be able to improve the academic performance of these students (Tatiana et al., 2022). Thus, a student does need to have high engagement and actively contribute to every academic activity if he wants to achieve maximum academic performance.

Based on the hypothesis test that has been conducted, academic engagement can mediate the relationship between supportive study climate and academic performance in Faculty of Economics and Business Universitas Muhammadiyah Yogyakarta students of the 2021 batch. This

can prove that when a student has a supportive learning climate, the student can have high motivation to make an active contribution and high engagement in each of their academic activities, which can indirectly help them achieve maximum academic performance.

This is in line with what was stated by Apostol & Delos Santos (2023), who said that creating a supportive study climate will indirectly make them more motivated to carry out academic activities, which will ultimately improve their academic performance. Thus, academic engagement plays a role in mediating the relationship between supportive study climate and academic performance.

Based on the results of the hypothesis test that has been conducted, academic engagement is able to mediate the relationship between psychological capital and academic performance. This proves that when a student has psychologically solid capital such as optimism, self-efficacy, and resilience in facing a problem, it can encourage them to contribute actively and have high engagement in carrying out academic activities. This will boost their academic performance to the maximum.

## CONCLUSION

The purpose of this study was to determine the effect of supportive study climate and psychological capital on academic performance with academic engagement as a mediating variable on Faculty of Economics and Business Universitas Muhammadiyah Yogyakarta students of the 2021 batch. This study used a sample with a population of all Faculty of Economics and Business Universitas Muhammadiyah Yogyakarta students of the 2021 batch who were still active until the even semester of the 2023/2024 academic year with a sample size of 170 respondents. Based on the results of the research that has been conducted, the researcher can provide the following conclusions: *Supportive study climate* has a significant positive influence on academic engagement in Faculty of Economics and Business Universitas Muhammadiyah Yogyakarta students of the 2021 intake. *Psychology capital* has a significant positive influence on academic engagement in Faculty of Economics and Business Universitas Muhammadiyah Yogyakarta students of the 2021 intake. *Supportive study climate* has a significant positive influence on the academic performance of Faculty of Economics and Business Universitas Muhammadiyah Yogyakarta students of the 2021 intake. *Psychology capital* has a significant positive influence on the academic performance of Faculty of Economics and Business Universitas Muhammadiyah Yogyakarta students of the 2021 intake. *Academic engagement* has a significant positive influence on the academic performance of Faculty of Economics and Business Universitas Muhammadiyah Yogyakarta students of the 2021 intake. *Academic engagement* to mediate the relationship between supportive study climate and academic performance of Faculty of Economics and Business Universitas Muhammadiyah Yogyakarta students of class 2021. *Academic engagement* to mediate the relationship between psychological capital and

academic performance in Faculty of Economics and Business Universitas Muhammadiyah Yogyakarta students of the 2021 intake.

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