CHAPTER IV
FINDING AND DISCUSSION

4.1 Research Findings

This chapter presents the findings and discussion of a research study focused on students' motivation in learning English at Aaron's English on WhatsApp and their learning outcomes as reflected in their scores. The population of the study consisted of the students of Aaron's English on WhatsApp, and a sample of 25 respondents was selected using snowball sampling method. The findings provide a detailed description of the data collected through questionnaires and interviews, while the discussion section offers further explanation and interpretation of the findings. The researcher analyzed the data to understand the relationship between students' motivation and their learning outcomes, examining factors that contribute to motivation and the impact on language proficiency. The discussion section explores the implications of the findings, identifies patterns or trends, and delves into the significance and implications of the research. It provides a comprehensive understanding of the study's outcomes and their implications for language learning in the context of Aaron's English on WhatsApp.

4.1.1 Students' Motivation at AEonWA

1. Motivation Scores Obtained In Questionnaire

In this study, the scores of students' motivation in learning at AEonWA serve as the independent variable (X). To collect the data on students' intrinsic motivation in online learning through WhatsApp as a Mobile-Assisted Language Learning (MALL) platform, the researcher adapted a questionnaire originally designed by Amabile (1994) and tailored it to address the specific context of language learning on WhatsApp. The questionnaire consisted of 10 closed-ended items, wherein each question was rated using a 4-point rating scale. Through this data collection process, participants were able to express their levels of intrinsic motivation in their language learning activities on WhatsApp. By utilizing this adapted questionnaire and the rating scale, the researcher was able to quantify and measure the students' intrinsic motivation scores accurately. These scores offer valuable insights into the students' internal drive and enthusiasm for language learning using WhatsApp as a learning platform at AEonWA.

The method of obtaining the participant's level of intrinsic motivation involves calculating a cumulative score by adding up the values corresponding to the 10 questionnaire items they have responded to. Using a Likert scale ranging from 1 to 4, which includes designations such as SA (Strongly Agree), A (Agree), D (Disagree), and SD (Strongly Disagree), each response reflects a different level of alignment with the statements presented. The sum of these values results in a cumulative score, providing insight into the participant's intrinsic motivation level. In total, the result of intrinsic motivation scores for each students can be seen as following:

Table 4.1 Students' motivation scores

NAMA	TOTAL SCORE
DS	30
AD	32
AH	31
PG	36
MDA	34
SS	30
TR	26
AR	31
AHN	34
RDD	25
NU	30
SAW	28
G	32
AS	28
A	25
YN	32
ADM	32
CC	24
DM	31
DRI	27
HN	34

PB	30
TSP	30
DR	30
ZHL	25

Based on the data presented in Table 4.1, the students' motivation scores initially ranged from 0 to 40 before being converted to a scale of 0 to 100. Upon examination of the data, it becomes evident that a considerable proportion of students obtained higher motivation scores compared to lower ones. This observation indicates a prevalent and noteworthy level of intrinsic motivation among the students at AEonWA. The data underscores that a majority of students display a strong internal drive and enthusiasm for their language learning experiences at the institution. Notably, the highest student's motivation score recorded was 36, indicating an exceptional level of intrinsic motivation exhibited by this individual. Similarly, the lowest score recorded was 24, still representing a commendable degree of motivation. Overall, these findings illustrate that the students at AEonWA are highly motivated to study, with a significant emphasis on intrinsic motivation, fostering a positive and encouraging learning environment within the institution.

Table 4.2 The Frequency Distribution Formula (Azwar, 2012)

Formula	Category
$X \leq (\mu - 1\sigma)$	Low
$(\mu - 1\sigma) < X \leq (\mu + 1\sigma)$	Moderate
$X > (\mu + 1\sigma)$	High

Mean (μ) = 29,88

Standar Deviasi (σ) = 3,205724047

$\mu - 1\sigma$ = 26,67427595

$\mu + 1\sigma$ = 33,08572405

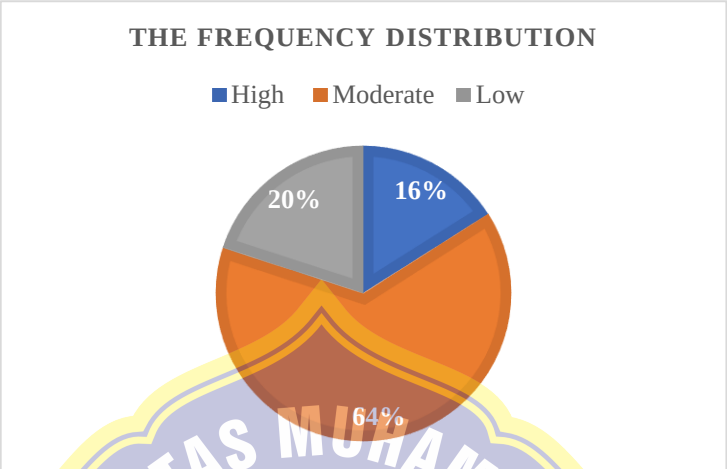

Figure 4.1 The Frequency Distribution

Based on the chart provided, it presents the distribution of student motivation score levels among the 25 students in AEonWA. The data shows that 4 students, representing 16% of the sample, achieved the highest learning motivation score. In addition, most students, specifically 16 students representing 64% of the sample, obtained a moderate motivation score. On the other hand, 5 students, representing 20% of the sample, obtained low motivation scores. This distribution pattern suggests that most students exhibited a moderate level of motivation in their learning experience at AEonWA. Although there were a few students with high motivation scores, and a minority with low motivation scores, the percentage prevalence of students with moderate motivation underscores the overall trend of medium motivation present among students.

2. Interview Result

The interviews played a vital role in the research, serving as a means to gain deeper insights into the data and understand the students' perspectives on the factors influencing their level of intrinsic motivation in language learning at AEonWA through WhatsApp. By engaging in open and in-depth conversations with the students, the interviews provided a platform for them to articulate their thoughts, feelings, and experiences related to their language learning journey. Through these candid discussions, students shared valuable information about the specific aspects of the learning environment, teaching methods, and personal experiences that either fostered or hindered their intrinsic

motivation. The interviews offered a qualitative dimension to the research, complementing the quantitative data obtained from the questionnaire and providing a more comprehensive understanding of the complexities involved in the students' motivation for language learning. The perspectives gathered through the interviews enriched the findings and contributed valuable insights that are instrumental in tailoring effective strategies to enhance and sustain students' intrinsic motivation in language learning at AEonWA.

The first interview was conducted with a student with a high level of motivation. student who coded PG with the highest motivation score.

> *How does using WhatsApp as a Mobile-Assisted Language Learning (MALL) tool motivate you to actively engage in language learning?*
>
> *Using WhatsApp as a Mobile-Assisted Language Learning (MALL) tool motivates me to actively engage in language learning due to its convenience and flexibility. With WhatsApp, I can access language learning resources, communicate with language partners or instructors, and practice language skills anytime and anywhere using my mobile device. This accessibility allows me to incorporate language learning into my daily routine, making it easier to stay motivated and committed to regular practice.*

Students with code PG explain that using WhatsApp as a Mobile-Assisted Language Learning (MALL) tool motivates him to actively engage in language learning due to the convenience and flexibility it offers. With WhatsApp, he gains access to a wide range of language learning resources, the ability to communicate with language partners or instructors, and the opportunity to practice language skills at their convenience using a mobile device (Palupi et al., 2023). This enhanced accessibility allows him to seamlessly integrate language learning into their daily routine, facilitating a more consistent and motivated approach to language practice. The convenience of accessing language materials and the flexibility of learning anywhere and anytime through WhatsApp contribute significantly to his motivation and commitment to improving their language proficiency.

Further interviews were also conducted with students with high motivation levels. student who coded HN with the second highest motivation score.

Can you share an instance where the convenience of accessing language learning materials on WhatsApp has positively influenced your motivation to learn?

While traveling or waiting in line, I can quickly open WhatsApp and engage with the learning materials. This on-the-go access eliminates the need to carry physical books or rely on a computer, making language learning more convenient and adaptable to my lifestyle. The ability to utilize free time for language learning efficiently has a positive impact on my motivation, as I am able to make consistent progress even during busy times.

Student with code HN explain that she finds that using WhatsApp as a Mobile-Assisted Language Learning (MALL) tool offers great convenience and adaptability to their lifestyle. They appreciate the ability to access language learning materials while traveling or waiting in line, simply by opening WhatsApp on their mobile device. The accessibility of language learning materials through WhatsApp on mobile devices allows learners to make productive use of their downtime. With just a simple click, they can access a wealth of resources and engage in language learning no matter where they are. This access eliminates the need to carry physical books or rely on a computer, making language learning more flexible and accessible during various daily activities. The individual values the opportunity to utilize their free time efficiently for language learning, which positively impacts their motivation. They find that being able to make consistent progress in their language studies, even during busy times, boosts their motivation to engage actively in learning and achieve their language learning goals. The convenience and flexibility provided by WhatsApp as a language learning tool align well with their lifestyle. Due to the fact that the majority of students in AEonWA belong to Generation Z, a generation that has grown up in a highly digitalized world with easy access to gadgets and technology as an integral part of their daily lives (Dolot, 2018), language learning has seamlessly integrated into their routines, becoming an enjoyable and effortless experience.

What specific features of WhatsApp contribute to your motivation for language learning?

The option to join language learning groups on WhatsApp provides a sense of community and connection with other learners. Though I may not be the most active participant, knowing that I am part of a

supportive group of learners motivates me to seek guidance when needed and occasionally share my progress

In a subsequent interview conducted with student who coded SAW with a moderate level of motivation, he found that the choice to join a language learning group on WhatsApp offered a valuable sense of community and connection with other learners. Although he may not be the most active participants in the group, they still value being part of a supportive community of language learners. Knowing that they are part of a group of like-minded individuals who share the same language learning goals motivates them to seek guidance or help when needed. The supportive environment in a language learning group fosters a sense of encouragement and reassurance, which encourages individuals to share their progress occasionally and celebrate their achievements with others. Being part of such a community contributes positively to their motivation, giving them a sense of belonging and a network of peers with whom they can share their language learning journey.

How does using WhatsApp as a Mobile-Assisted Language Learning (MALL) tool motivate you to actively engage in language learning?

Using WhatsApp as a Mobile Assisted Language Learning (MALL) tool did not significantly motivate me to actively engage in language learning. Although WhatsApp can provide access to learning materials and resources, I still find it difficult to consistently participate in language learning activities.

The last interview sample was obtained from student who coded ZHL with the lowest motivation score. She expresses that using WhatsApp as a Mobile-Assisted Language Learning (MALL) tool did not significantly motivate them to actively engage in language learning. Despite the app's potential to provide access to learning materials and resources, she faces challenges in consistently participating in language learning activities. Their engagement in language learning through WhatsApp remains limited, and they find it difficult to sustain consistent practice or utilize the available resources effectively. The challenges encountered in language learning may be attributed to various factors, including dissatisfaction with the course content and struggles with self-discipline (Esra Meşe, 2021). Their low motivation level hinders their ability to fully leverage WhatsApp as a language learning tool, leading to a lack of active involvement in language learning activities on the platform. Despite the convenience and accessibility offered by WhatsApp, the individual's current motivation level remains a significant

obstacle to their full engagement in language learning through this medium.

4.1.2 The Correlation Between Students' Intrinsic Motivation And Their Output

Researcher calculated students' intrinsic motivation scores (X) and student academic scores (Y) to see the correlation between the two variables. After the researcher gets the total student motivation score and student academic score, then, the two scores are correlated using Pearson's Product Moment. Moment. The scores reflecting students' outcomes are acquired from the final exam results of participants who engaged in the program. This approach is employed because final exam results provide a quantifiable and standardized measure of participants' academic performance and language proficiency. By utilizing these exam scores as indicators of participants' achievements, researchers can objectively assess the extent to which participants have acquired knowledge and skills from the program. This empirical data not only validates the effectiveness of the program but also enables researchers to correlate these scores with other variables, such as participants' intrinsic motivation levels assessed through the questionnaire.

To convert students' motivation scores to a scale of 0 - 100 within the same range as the final exam scores, a linear transformation can be applied using the following formula:

Converted Score = (Obtained IM Score / 40) * 100

Obtained IM Scores = The original score of a student's intrinsic motivation.

40 = The maximum intrinsic motivation score.

This formula effectively scales the motivation scores to a range of 0 to 100, ensuring that the distribution of the motivation scores is spread across the same range as the final exam scores. It helps create a common scale that allows for easy comparison and analysis between students' intrinsic motivation scores and their final exam scores, offering a comprehensive perspective on how motivation aligns with academic performance. The results of the calculation of student motivation scores (X) and student academic scores (Y) can be seen as follows:

Table 1.3 Students Intrinsic Motivation Scores and Academic Scores

Students	Motivation	Motivation Level	Academic Score
DS	75	Moderate	90
AD	80	Moderate	80
AH	78	Moderate	90
PG	90	High	88
MDA	85	High	80
SS	75	Moderate	92
TR	65	Low	75
AR	78	Moderate	80
AHN	85	High	80
RDD	63	Low	81
NU	75	Moderate	90
SAW	70	Moderate	88
G	80	Moderate	80
AS	70	Moderate	80
A	63	Low	75
YN	80	Moderate	85
ADM	80	Moderate	88
CC	60	Low	75
DM	78	Moderate	85
DRI	68	Moderate	85
HN	85	High	75
PB	75	Moderate	77
TSP	75	Moderate	85
DR	75	Moderate	75
ZHL	63	Low	90

1. The Result of Normality Test

The normality test was employed to determine whether the data follows a normal distribution or not. This test was conducted on the data obtained from the sample class before conducting the correlation analysis. If the significance value (sig.) is greater than 0.05 (sig. > 0.05), it indicates that the data exhibits a normal distribution.

Table 4.4 The Resul of Normality Test Using One-Sample Kolmogorov-Smirnov Test

		Students Score
N		25
Normal Parameters[a,b]	Mean	82,76
	Std. Deviation	5,703
Most Extreme Differences	Absolute	,166
	Positive	,166
	Negative	-,141
Test Statistic		,166
Asymp. Sig. (2-tailed)		,075[c]

Based on the results of the normality test with a significance value (sig.) of 0.075, the data distributions are considered to be normal as the significance value is higher than the threshold of 0.05. In statistical analysis, a significance value greater than 0.05 is commonly used as the criteria to determine normal distribution.

2. The Result of Homogeneity Test

Data homogeneity test was conducted using Levene's Test statistical technique. The basis for decision making in Levene's Test, can be done through a probability approach, the significance used is α = 0.05. The basis for decision making is to look at the probability number, with the following conditions:

- If the Sig . > 0.05 then the assumption of homogeneity is met.
- If the Sig. < 0.05 then the homogeneity assumption is not met.

Table 4.5 The Resul of Homogeneity Test Using One-Sample Kolmogorov-Smirnov Test

		Levene Statistic	df1	df2	Sig.
Y	Based on Mean	,817	2	22	,455

	Based on Median	,283	2	22	,756
	Based on Median and with adjusted df	,283	2	19,180	,757
	Based on trimmed mean	,808	2	22	,459

Based on the results of the data homogeneity test presented in the table, it is evident that the significance value (Sig.) for the student achievement data is 0.459, which is greater than the predetermined significance level of 0.05. This significant value being higher than 0.05 indicates that the assumption of homogeneity is met for the data variance.

3. The Result of Hypothesis Test

The hypothesis test was conducted using SPSS version 25 with the Pearson Product Moment correlation analysis techniques to determine the significance of the correlation coefficient and to assess the level of contribution of the independent variable, intrinsic motivation, towards the dependent variable, student learning output. The research hypotheses are formulated as follows:

H0 = There is no significant correlation between intrinsic motivation and student learning output.

Ha = there is significant correlation between intrinsic motivation and students learning output.

If the significance value is below 0.05, it indicates that the correlation is statistically significant, meaning that the relationship between the variables is not due to chance and has practical importance. On the other hand, if the significance value is above 0.05, the correlation is considered not significant, suggesting that any observed relationship between the variables is likely due to random variation. Hypothesis testing results can be seen in the table below:

Table 4.6 The Result of Hypothesis Test Using Pearson Product Moment Correlation

		Intrinsic Motivation	Students Score
Intrinsic Motivation	Pearson Correlation	1	,156
	Sig. (2-tailed)		,457
	N	25	25
Students Score	Pearson Correlation	,156	1
	Sig. (2-tailed)	,457	
	N	25	25

The findings of this study indicate that there is no significant correlation between motivation and student learning outcomes in the form of grades. The correlation coefficient, which measures the strength and direction of the relationship between the two variables, is very low at 0.156. This low coefficient value suggests that there is virtually no discernible association between motivation and student grades as the coefficient is close to 0.00. Additionally, the significance level of 0.457, which compares the observed correlation with the expected random correlation, is greater than the conventional significance level of 0.05. As a result, the correlation is deemed not significant, meaning that the observed relationship between motivation and student grades is likely due to chance or random variation. Consequently, this finding cannot be generalized to the entire population, and the null hypothesis (H_0), stating no significant correlation, is accepted. In conclusion, the study indicates that motivation does not have a significant correlation with students scores, suggesting that other factors may play a more dominant role in influencing academic performance.

4.2 Discussion

Based on the data description and analysis provided earlier, the findings suggest that the intrinsic motivation of students in online learning is generally moderate, accounting for approximately 64% of the participants. The mean value of 29.88 further supports this conclusion, indicating that the average level of intrinsic motivation among the students falls within the moderate range. This implies that students are moderately motivated to engage in online learning activities, with a

balance between enthusiasm and challenges. The moderate motivation level suggests that students may have varying degrees of interest and dedication to their online learning experiences. While some students may be highly motivated, others may exhibit lower levels of enthusiasm. Overall, the study reveals that the majority of students demonstrate a moderate level of intrinsic motivation, signifying their willingness to participate in online learning, which could contribute to positive academic outcomes and engagement in the learning process.

The questionnaire was made from motivation indicators. The Indicators can be shown on table below:

Table 4.7 The Questionnaire Indicator

Variable	Indicators	Items Number
Intrinsic Motivation	Self-determination	5, 8
	Competence	6, 7
	Curiosity	3, 4
	Enjoyment	1, 2
	Interest	9, 10

There were two statements for each indicators. The detail percentage of intrinsic motivation factor can be shown on the following chart.

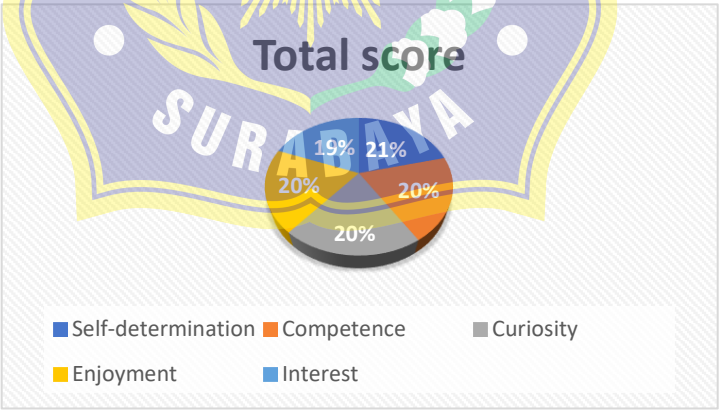

Figure 4.2 Students' Intrinsic Motivation

According to chart 4.2, the total scores for each intrinsic factor are as follows: self-determination (158), Competence (148), Curiosity (151), Enjoyment (147), and Interest (143). The highest score is found in the "Self-determination" factor, indicating that when students feel a sense of autonomy and control over their learning process, they are more likely to be intrinsically motivated. Empowering students to set their own learning goals and take ownership of their academic journey fosters a stronger internal drive and higher levels of engagement, resulting in a higher score for this factor. On the other hand, the lowest score is in the "Interest" factor, signifying that students may not find the content or learning activities engaging enough to capture their curiosity. Factors such as teaching methods, material relevance, and past experiences with the subject can influence interest levels, and when students lack interest, their intrinsic motivation to actively participate in learning activities diminishes, leading to a lower score in this factor (Mauliya et al., 2020).

The overall findings at AEonWA revealed a major trend of moderate motivation among the students in their learning experience. Although some students showed high motivation scores and a minority showed low motivation scores, most were within the moderate range. This suggests that most students have a balanced level of intrinsic motivation, showing reasonable interest and engagement in their academic activities. The presence of a few highly motivated students suggests that the educational environment at AEonWA is able to foster and inspire a strong internal drive and enthusiasm for learning. On the other hand, the minority of students with low motivation scores highlights the importance of addressing individual factors that may inhibit their engagement and interest.

In interviews with students using WhatsApp as a Mobile-Assisted Language Learning (MALL) tool, those with high intrinsic motivation praise the app's convenience and flexibility, allowing them to access language resources, practice skills, and communicate with others at their convenience. This enhances their motivation and commitment to improving language proficiency. Students with moderate intrinsic motivation value the sense of community and connection fostered by joining language learning groups on WhatsApp, even if their active participation is limited. The supportive environment encourages occasional progress sharing and fosters a sense of belonging. However, for students with low motivation, the use of WhatsApp as a language learning tool does not significantly enhance their engagement due to their current motivation levels. This highlights the challenge of utilizing

technology effectively in motivating students who face intrinsic obstacles to consistent participation.

The finding of correlation test reveal that there is no significant correlation between motivation and student learning outcomes, as indicated by a very low correlation coefficient of 0.156, close to 0.00. The significance level of 0.457 further confirms that the observed correlation is not statistically significant, suggesting that the relationship between motivation and student grades is likely due to chance or random variation. As discovered by Nurhidayah (2019), in her research, she found that there is no substantial correlation between student motivation levels and their language learning outcomes. Therefore, the null hypothesis (H0) stating no significant correlation is accepted. In conclusion, the study indicates that motivation does not have a significant impact on students' academic performance, and other factors may play a more dominant role in influencing their grades.

The findings of this study shows significant result with previous study. The interviews conducted with students at AEonWA underscored the convenience and flexibility of WhatsApp, as praised by individuals with high motivation. This aligned with Almadhady et al. (2020) findings, which revealed that students utilizing Mobile Assisted Language Learning (MALL) applications for enhancing speaking skills demonstrated motivation, attributed to the applications' ease of use and perceived usefulness. The AEonWA interviews highlighted how WhatsApp's accessibility facilitated the seamless access to language resources, skill practice, and effective communication, ultimately amplifying participants' motivation to elevate their language proficiency. This finding aligns with the favorable reception of technology-based learning tools such as WhatsApp, particularly among students who exhibit high motivation scores. These students highly value the accessibility and adaptability of WhatsApp, recognizing its compatibility with diverse learning styles. This resonance with technology-driven learning tools is in line with Sabah's (2013) research, which emphasized a well-established connection between students' technological competencies and their perspectives on e-learning. In Sabah's study, students who possessed prior experience with computers and engaged in frequent computer usage were more inclined to embrace e-learning as a mode of education. This mutual alignment underscores the significance of students' technological familiarity and comfort in shaping their attitudes toward technology-driven learning tools, substantiating their positive engagement with platforms like WhatsApp.

On the other hand, The findings from AEonWA illustrate that students with lower motivation scores faced challenges in consistently engaging with WhatsApp as a language learning tool due to inherent obstacles impeding their motivation. This underscores the significance of individual factors, including prior technological experience, usability, perceived utility, and the learning environment, in shaping students' motivation and acceptance of Mobile Assisted Language Learning tools. While highly motivated students benefit from the flexibility and convenience of technologies like WhatsApp, addressing concerns raised by less motivated peers, such as enhancing course content, improving communication, and establishing a supportive learning environment, is pivotal for optimizing their involvement in technology-based learning. In line with this, Meşe & Sevilen's (2021) qualitative case study echoes these findings, revealing an overall unfavorable sentiment among students towards online education due to dissatisfaction with course content, self-discipline challenges, and communication issues. These insights emphasize the need to address multifaceted concerns to enhance engagement and effectiveness in technology-based learning initiatives.

The findings of the present study highlight a lack of significant correlation between motivation and student learning outcomes, as evidenced by a notably low correlation coefficient of 0.156. This coefficient, which gauges the strength and direction of the relationship between the variables, indicates a near-absence of discernible association between motivation and student grades, with its proximity to 0.00 further emphasizing the negligible connection. Furthermore, the significance level of 0.457, comparing the observed correlation against the expected random correlation, surpasses the conventional threshold of 0.05. These results stand in contrast to the outcomes of Mastura's (2019) research, where a strong positive correlation was established between students' motivation in learning and their academic achievement. The significant index of 0.000 and the correlation coefficient of 0.680 underscored the robust relationship between motivation and academic performance, with the rejection of the null hypothesis in favor of the alternative hypothesis further supporting the statistically significant correlation. These divergent findings could be attributed to a range of factors, encompassing differences in sample size, study demographics, research methodologies, and contextual nuances. While the current study was confined to the specific educational environment at AEonWA, revealing a modest and non-significant correlation, Mastura's investigation spanned two distinct universities with distinct student populations, potentially yielding disparate outcomes.

It is essential to consider that intrinsic motivation and its impact on academic performance can be influenced by various individual and environmental factors. These may include students' personal characteristics, learning styles, cultural background, teaching methods, and educational support provided by the institutions. Furthermore, academic achievement is a complex outcome influenced by multiple variables, and while motivation plays a significant role, it may not be the sole determinant of students' grades. Therefore, the contrasting findings highlight the importance of further research to better understand the relationship between motivation and academic performance in different educational contexts. It also underscores the need to consider multiple factors that contribute to students' success and performance in academia, rather than relying solely on one aspect such as motivation.

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