Effect of Gender in MGA (Multi Group Analysis) on Nano Influencer Relationship on Buying Decisions

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ARTICLE INFO

ABSTRACT

The problem currently facing students is that in the digital age they are still not maximizing opportunities for digital entrepreneurship, so a lot of time is wasted. As an influencer is one solution to get purchasing decisions from consumers. The research method using the Multigroup Analysis (MGA) approach with the partial least squares path modeling (PLSPM) approach is an effective method for analyzing moderation in various relationships in the research model. The samples taken were students who were active as influencers. The sampling technique was carried out using purposive sampling where there were 125 respondents throughout Jabodetabek. The results of the research are that all 4 hypotheses relating to nano influencers (ni) on decision buying (kp) through sex or gender moderators, whether male or female, all have a positive and significant effect, but men have advantages for sex or gender compared to women as moderators of nano influencer (ni) on decision buying (kp) are shown by a path coefficient value of 0.713.

1. INTRODUCTION

Here is the translation of the challenges faced by students in online selling: Students often face various challenges when trying to engage in online selling. Here are some of the main issues they frequently encounter: Limited Capital (Sanggrama et al., 2020; Yuliana et al., 2023): Students often have limited funds, making it difficult for them to provide initial capital for purchasing inventory, paying for advertisements, or developing a suitable e-commerce site. Limited Time: They need to divide their time between classes, assignments, and other campus activities, making it challenging to dedicate full attention to an online business that requires focus on marketing, customer service, and order management. Lack of Business Knowledge: Many students lack experience in running a business or in-depth knowledge of sales management, digital marketing, or logistics. This makes it difficult for them to set prices, plan promotions, and expand their market. High Competition: In the online world, competition is fierce. Students must compete with large stores or other sellers who have more experience and resources. Limited Network and Connections: Students who do not yet have a broad network or connections often struggle to market their products to potential customers. Limited access to influencers or public figures for product promotion also poses a challenge. Lack of Consumer Trust: As new sellers, students often struggle to build customer trust. Many buyers are hesitant to transact with stores that do not have a reputation or reviews. Technological Challenges (Doembana et al., 2023; Mulawarman, 2020): Students who lack technological understanding may face difficulties in building and managing an online store, optimizing their website, or using digital marketing tools such as SEO and Google Ads. Logistics and Shipping Management (Febriantoni, 2024): Online selling requires good logistics management, such as packaging and shipping. For students without storage space or experience in handling shipping, this becomes a significant challenge. Becoming a content creator, influencer, or endorser is one of the most effective ways for students who want to succeed in selling products online (Merliani et al., 2022; Nasafa, 2024; Nursabrina, 2023; Sahril et al., 2024; Shukmalla et al., 2023). Here are some reasons why this can be helpful: Building Reputation and Trust (Agnia & Oktini, 2023; Gracelia & Indriani, 2023; Naziih, 2022): As content creators or influencers, students can gradually develop a loyal follower base. With consistent and quality content, they can gain the trust of their audience. This trust is crucial in attracting customers to purchase the products they offer.

The definition of students here is male and female. where the age is between 15 years to 30 years,

education is dominated by senior high school (SMA/SMK). Becoming an influencer is well-suited for students for a variety of reasons that align with their circumstances and needs. Here are some key reasons why students can succeed in this role: Low Capital: To become an influencer, students do not need a large amount of capital. With creativity and access to basic tools like a smartphone and the internet, they can start creating content. This is different from conventional businesses that require significant capital for inventory, workspace, or promotion. Flexible Time: As influencers, students can manage their time flexibly. Content creation and management can be adjusted to fit their class schedules and assignments, ensuring that this job does not interfere with their busy academic life. Additional Income Opportunity: Becoming an influencer offers students the chance to earn extra income. As their follower base grows, students can generate revenue through endorsements, sponsorships, or collaborations with brands, without sacrificing their study time. Developing Important Skills: Being an influencer allows students to develop skills such as communication, digital marketing, video editing, photography, and social media management. These skills are valuable not only for the influencer role but also in the workplace after graduation. Building a Personal Brand: Students who become influencers will learn about personal branding, which is crucial in the professional world. As they enter the workforce, the reputation and popularity they've built on social media can be leveraged to advance their careers. Utilizing Social Networks: Students often have a broad social network on campus. This network can serve as an initial foundation for building a larger audience. Campus friends can be the first followers and help organically expand content reach through recommendations. Channeling Creativity: Becoming an influencer allows students the freedom to express themselves through various creative content such as writing, videos, or photography. For those who enjoy creating, this role is an ideal platform to pursue their hobbies. Real-World Experience: The experience of being an influencer provides real insight into the world of marketing, business collaboration, as well as time and project management. Students will also learn how to negotiate with clients, interact with followers, and run effective promotional campaigns—skills that are valuable for the future. Easy Access: Social media platforms like Instagram, TikTok, YouTube, and Twitter offer easy access for everyone, including students. They can start their journey as influencers without significant barriers or strict requirements. All that's needed is creativity, consistency, and dedication. With all these advantages, becoming an influencer is a great option for students, as it offers income, experience, and new skills, while still allowing them to stay focused on their academic life.

It is evident that students are highly suited to becoming influencers, where the end result is that consumers make purchases online. One significant factor that aids online purchasing is the presence of influencers, making it easier for consumers to discover the products they need or desire. Additionally, gender also plays a critical role in decision-making when purchasing a product. Gender has a significant influence on the relationship between influencers and purchasing decisions. Here are several ways in which gender affects purchase decisions through influencers: Audience Interests Based on Gender: Influencers often attract followers whose interests or needs align with their gender. For example, female influencers focused on fashion and beauty tend to attract female audiences who are more inclined to purchase the products they promote. Conversely, male influencers promoting tech or sports products will draw in male audiences who are more interested in those categories. Trust and Emotional Connection: Followers tend to trust influencers who share similarities with them, including gender. When someone feels a closer connection to an influencer of the same gender, they are more easily influenced to purchase the recommended products. Influencers who can form an emotional bond with their audience based on gender are often more effective at influencing purchase decisions. Product Relevance to Gender: Many products are associated with gender, such as beauty products for women or grooming products for men. Influencers whose gender aligns with the product are more trusted and seen as relevant by their audience. For instance, a male influencer promoting men's grooming products will be more effective in attracting male consumers to buy. Gender Stereotypes and Social Perception: Gender stereotypes also influence how influencers are perceived. For example, female influencers are more accepted when promoting beauty products, while male influencers are more effective in promoting tech or sports products. These perceptions affect how much influence an influencer has on their audience's purchasing decisions. Response to Communication Style: Men and women typically respond differently to communication styles. Female influencers might be more successful with an emotional and storytelling approach, while male influencers may be more effective with a

straightforward and fact-based communication style. Matching the communication style to the gender preferences of the audience can enhance the effectiveness of a campaign in influencing purchase decisions. Gender Influence in Market Segmentation: Brands often use gender as a basis for market segmentation. When working with influencers, brands typically choose influencers that align with their gender-based target market (Aviandy & Damayanti, 2022; Genadi et al., 2024; Sumardiono, 2022). This decision is often based on the influencer's ability to impact a particular gender group. Gender Influence on Gender-Neutral Products: Although some products are gender-neutral, the gender of the influencer can still affect how the audience responds to their recommendations. For instance, male and female influencers may promote tech products differently, potentially attracting different segments of the audience, even if the product is gender-neutral. Overall, gender plays an important role in the relationship between influencers and purchasing decisions. Gender influences audience preferences, product relevance, and communication styles, ultimately determining how strongly an influencer can impact consumer behavior.

Based on a review of various literature collected from Google Scholar, ScienceDirect, and other trusted sources, no research has been found that specifically examines two variables, namely the influence of nano influencers on purchasing interest which is moderated by the variable gender or sex.

Seeing this gap, the author saw an opportunity to conduct research regarding the influence of nano influencers on purchasing interest, as well as providing a deeper understanding of these variables. And will answer hypotheses including: nano influencer (ni) has a positive and significant effect on buying decisions (kp), nano influencer (ni) has a positive and significant effect on buying decisions (kp) in men, nano influencer (ni) has a positive and significant influence on buying decisions (kp) in women, there is a significant difference in the influence of nano influencers (ni) on buying decisions (kp) between men and women. The aim of this research is to determine the effect of gender on the relationship between nano influencers and purchasing decisions.

Hypothesis Development

Based on the results of the literature review, there are several research hypotheses that can support researchers in continuing this research. The related research hypotheses are as follows:
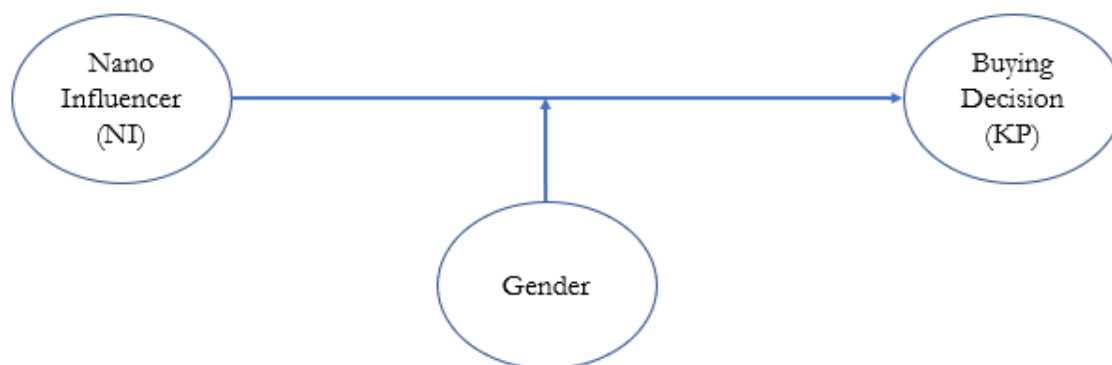

Figure 1. Nano Influencer Framework for Purchase Interest moderated by the gender variable

From the framework above, it is important to note that a nano influencer refers to: The Nano Influencer Theory focuses on a marketing concept involving individuals with a relatively small number of social media followers, typically ranging between 1,000 and 10,000. Although they have a smaller audience compared to larger influencers, nano influencers tend to have higher engagement rates. As influencer marketing strategies evolve, many brands are starting to recognize that nano influencers are often more authentic, have closer relationships with their followers, and can exert a stronger influence within certain communities(Allen, 2022; Soto-Vásquez & Jimenez, 2022). Meanwhile, the moderating variable is gender, which refers to: Gender Theory is an academic approach that examines the differences between biological sex and gender as a social and cultural construct. This theory views gender not only as a biological fact but also as a social construct shaped by norms, culture, history, and social interactions. In other words, even though someone is born with a specific biological sex (male or

female), the way they understand and express their gender identity can be influenced by their social and cultural environment(Cislaghi & Heise, 2020; Lindqvist et al., 2021). As for the term purchase decision, it refers to: The Purchase Decision or buying decision Theory is a concept in marketing and consumer behavior that studies how individuals or groups make decisions to buy a product or service. This theory focuses on understanding the various factors that influence the consumer decision-making process, starting from the recognition of a need to the final decision to purchase, followed by post-purchase evaluation. The process involves several stages and is influenced by psychological, social, and economic factors(Gunawan et al., 2019; Rachmawati et al., 2019).

2. METHOD

This research adopts a quantitative approach using Structural Equation Modelling (SEM) through Multi-Group Analysis (MGA) (Adirinekso, 2021; Hadita & Panjaitan, 2020; Ilmani & Herlina, 2022; Sukimin et al., 2022). The sample used in this study consists of 124 respondents from the Greater Jakarta area (Jabodetabek), selected using a non-probability purposive sampling technique, where the sample is chosen based on specific criteria relevant to the research focus. Data were collected using a Likert scale, commonly used to measure respondents' attitudes or perceptions. Several analyses performed in this research include: Outer Loading Test: The outer loading test aims to evaluate how well each indicator represents the construct being measured. An outer loading value above 0.7 indicates that the indicator has a strong contribution to the construct. If the value is below 0.7, the indicator may be considered for removal to improve the model's quality (Hair et al., 2019). Composite Reliability Test: Composite reliability is used to measure the internal reliability of a construct as a whole. Unlike Cronbach's Alpha, which tends to be conservative, composite reliability provides more accurate results as it considers the outer loading of each indicator. A composite reliability value above 0.7 indicates that the construct has good internal consistency (Hair et al., 2019). Average Variance Extracted (AVE) Test: AVE measures the proportion of variance that can be explained by the construct from its indicators. It is also used to assess convergent validity, i.e., whether the indicators reflect the same construct. The desired AVE value should be greater than 0.5, indicating that the construct can explain more than 50% of the variance from its indicators (Hair et al., 2019). Cronbach's Alpha Test: Cronbach's Alpha is a reliability measure that assesses the internal consistency between indicators used to measure a construct. A good Cronbach's Alpha value should be above 0.7 (Hair et al., 2019), indicating that the construct has good consistency among its indicators. Although composite reliability is preferred in PLS-SEM, Cronbach's Alpha is still used to ensure indicator consistency. Discriminant Validity Test: Discriminant validity ensures that a construct is distinct from other constructs in the model, so different constructs do not share the same indicators. This test is conducted using the Fornell-Larcker Criterion, where the square root of the AVE for each construct should be greater than the correlation between that construct and others. Additionally, the Heterotrait-Monotrait Ratio (HTMT) method can be used, with a recommended maximum HTMT value of 0.85. Path Coefficient Test: Path coefficients evaluate the strength and direction of relationships between constructs in the model. The path coefficient value indicates how much influence one construct has on another. The significance of this relationship is tested using t-statistics or p-values, where a t-statistic above 1.96 at a 5% significance level indicates that the relationship is significant. PLS-MGA Test: Partial Least Squares Multi-Group Analysis (PLS-MGA) is used to identify the differences in effects between groups in the research model. MGA allows the assessment of whether there are significant differences between groups, such as those based on gender or culture. Differences in path coefficients between groups are measured, and if the p-value is below 0.05 (Hair et al., 2019), then there is a significant difference between the groups. Parametric Test: The Welch-Satterthwait Test aims to assess differences between groups based on the assumption of normal data distribution. Although PLS-SEM does not require a normal distribution, parametric tests such as the Independent Sample T-Test or ANOVA are often used as comparisons in multi-group analysis. However, in the context of PLS-MGA, non-parametric tests are often prioritized, as the data typically do not meet the assumption of normal distribution. Overall, these tests aim to ensure that the model used in this research is valid and reliable in explaining the relationships between variables and can detect significant differences between respondent groups.

3. RESULTS

Charateristic Responden

Attached below are respondent profiles regarding gender moderation between nano influencers (ni) on purchasing decisions (kp) in the JABODETABEK area;

Tabel 1. Profil Responden

Catagories	Details	Amount	Percentage (%)
Gender	Men	27	21,6
	Women	98	78,4
Age	15-20	30	24
	21-30	95	76
Education	SMA	89	71,2
	Diploma	2	1,6
	S1	34	27,2
University location	Bekasi	6	4,8
	Bogor	10	8
	Depok	2	1,6
	Jakarta Barat	4	3,2
	Jakarta Pusat	8	6,4
	Jakarta Selatan	18	14,4
	Jakarta Timur	57	45,6
	Jakarta Utara	2	1,6
	Tangerang	18	14,4

Source: processing of personal data (2024)

Respondents in this study totaled 125 people, consisting of 27 men and 98 women. This shows that the majority of respondents were women, with a percentage of 78.4%, while men only accounted for 21.6% of all respondents. Age is dominated by 21-30 years old with the remaining 76% being 15-20 years old, education is dominated by high school, then followed by first degree (S1) and diploma, student respondents in the East Jakarta region are dominated by 57% followed by South Jakarta and Tangerang 18% each, Bogor 10 percent and the remaining below 10% are Bekasi, Depok, North Jakarta, West Jakarta and finally North Jakarta. Data was collected primarily through an online survey using Google Form. The data collection process lasted for two months, namely from July to August 2024. This method provides flexibility for respondents to answer questionnaires anytime and anywhere, making it possible to collect large amounts of data in an efficient way.

Some of the results of the tests are attached below to ensure that the sex or gender variable can appropriately moderate the nano influencer variable (ni) on purchasing decisions (kp).

Outer Model Test

The aim of the outer model test is to evaluate the quality and validity of the measurement model in Structural Equation Modeling (SEM), especially in the Partial Least Squares (PLS) approach. This test aims to ensure that the indicators used can accurately describe the construct or latent variable in question. In detail, the objectives of the outer model test include: Convergent Validity: Ensuring that the indicators used really measure the same construct, by checking the outer loadings. A high outer loading value (usually above 0.7) indicates that the indicator is relevant to the construct being measured. Internal Reliability: Assessing the consistency of indicators in measuring a construct through tests such as Composite Reliability and Cronbach's Alpha. A reliability value above 0.7 is considered a good indication and includes Averaga Variance Extracted (AVE) which must be above 0.5 and is considered good. Discriminant Validity: Ensures that each construct is different from other constructs and has no overlap, usually tested using the Fornell-Larcker Criterion or Heterotrait-Monotrait Ratio (HTMT). Overall, the outer model test aims to ensure that the constructs developed in the model can be measured accurately and consistently with the indicators that have been determined.

Table 2. Validitiy and Reliability in Outer Model complete

Variables	item	Outer Loading	AVE	Cronbach's Alpha	Composite Reliability
Decision Buying (kp)	kp1	0.775	0,633	0,884	0,912
	kp2	0.798			
	kp3	0.796			
	kp4	0.815			
	kp5	0.789			
	kp6	0.800			
Nano Influencer (ni)	ni6	0.848	0,741	0,884	0,920
	ni7	0.859			
	ni8	0.890			
	ni9	0.846			

Source: processing of personal data (2024)

From Table 2. Validity and Reliability in Outer Model Test Complete or overall, it can be seen that all the indicators for both nano influencer (ni) and buying decision (kp) are all above 0.7, aka valid, it can be seen that there are 6 buying decisions (kp). the largest indicator is KP4 of 0.815, meaning"Influencers who are involved in social trends influence the purchasing decisions of their followers more" all respondents strongly agree with this statement, and the smallest value is kp1 of. 0.800 means "followers are more likely to buy a product if it is mentioned in an influencer's review on social media." All respondents strongly agree but it is not dominant as the indicator value is greater than kp1. For nano influencers, there are 4 valid indicators, where the largest value is ni8 of 0.890, meaning "followers follow recommendations or suggestions given by me." All respondents strongly agree with this statement and the smallest indicator value is ni9 of 0.854, meaning "I can "forming followers' preferences or loyalty towards brands or products" all respondents strongly agreed but it was not as dominant as the indicator value being greater than ni9. For the overall value of both Averaga Variance Extracted (AVE) and Composite Reliability (CR) as well as Cronbach's Alpha above an average of 0.5 and 0, meaning all data is good or valid, namely 0.633 and 0.741 for AVE kp and ni, 0.884 for Cronbach's Alpha kp and the final ni is 0.912 and 0.920 for CR.

Table 3. Validitiy and Reliability in Outer Model Test Man

Variables	item	Outer Loading	AVE	Cronbach's Alpha	Composite Reliability
Decision Buying (kp)	kp1	0,800	0,766	0,939	0,951
	kp2	0,911			
	kp3	0,821			
	kp4	0,896			
	kp5	0,934			
	kp6	0,882			
Nano Influencer (ni)	ni6	0,892	0,789	0,913	0,937
	ni7	0,924			
	ni8	0,883			
	ni9	0,854			

Source: processing of personal data (2024)

From Table 3. Validity and Reliability in Outer Model Test Man for men, it can be seen that all the indicators for both nano influencer (ni) and buying decision (kp) are all above 0.7, aka valid, it can be seen that there are 6 buying decisions (kp). The largest indicator is KP5 of 0.934, meaning

"Marketing campaigns that use influencers are more effective in influencing followers' purchasing decisions than traditional campaigns." All respondents strongly agreed with this statement, and the smallest value was KP1 of. 0.800 means "followers are more likely to buy a product if it is mentioned in an influencer's review on social media." All respondents strongly agree but it is not dominant as the indicator value is greater than kp1. For nano influencers there are 4 valid indicators where, the largest value is ni7 of 0.924 meaning "I can have a very big influence on followers in purchasing decisions" all respondents strongly agree with this statement and the smallest indicator value is ni9 of 0.854 meaning " "I can form a preference or loyalty to followers towards a brand or product," all respondents strongly agreed but it was not as dominant as the indicator value being greater than ni9. For the overall value of both Averaga Variance Extracted (AVE) and Composite Reliability (CR) as well as Cronbach's Alpha above an average of 0.5 and 0, meaning all data is good or valid, namely 0.766 and 0.789 for AVE kp and ni, 0.939 and 0.913 for Cronbach's The final alpha kp and ni were 0.951 and 0.937 for CR.

Table 4. Validitiy and Reliability in Outer Model Test Woman

Variables	item	Outer Loading	AVE	Cronbach's Alpha	Composite Reliability
Decision Buying (kp)	kp1	0,775	0,592	0,863	0,897
	kp2	0,759			
	kp3	0,791			
	kp4	0,790			
	kp5	0,731			
	kp6	0,770			
Nano Influencer (ni)	ni6	0,828	0,728	0,876	0,914
	ni7	0,840			
	ni8	0,896			
	ni9	0,847			

Source: processing of personal data (2024)

From Table 4. Validity and Reliability in Outer Model Test Woman for women, it can be seen that all the indicators for both nano influencer (ni) and buying decision (kp) are all above 0.7, i.e., valid, it can be seen that there are 6 buying decision (kp) indicators. where the largest is KP3 of 0.791, meaning "Follower are more likely to buy products promoted by influencers with many followers on social media." All respondents strongly agree with this statement, and the smallest value is kp5 of. 0.731 means "Marketing campaigns that use influencers are more effective in influencing followers' purchasing decisions than traditional campaigns." All respondents strongly agree but it is not dominant as the indicator value is greater than kp5. For nano influencers, there are 4 valid indicators, where the largest value is ni8 of 0.896, meaning "followers follow recommendations or suggestions given by me." All respondents strongly agree with this statement and the smallest indicator value is ni6 of 0.828, meaning "followers believe regarding the product or service recommendations I provide" all respondents strongly agreed but it was not dominant such as an indicator value greater than ni6. For the overall value of both Averaga Variance Extracted (AVE) and Composite Reliability (CR) as well as Cronbach's Alpha above an average of 0.5 and 0, meaning all data is good or valid, namely 0.596 and 0.728 for AVE kp and ni, 0.863 and 0.876 for Cronbach's The final alpha kp and ni were 0.897 and 0.914 for CR.

Table 5. Fornell-Larcker Criterion Complete

	Decision buying (Kp)	Nano influencer (ni)
Decision buying (kp)	0,796	
Nano influencer (ni)	0,497	0,861

Source: processing of personal data (2024)

In table 5, the Fornell-Larcker Criterion Complete or complete AVE value or square number for the variable or variable Decision buying (Kp) = 0.796 is greater than the relationship or correlation

number between Decision buying (kp) and nano influencer (ni) of 0.497. Therefore, the value or square root number of AVE for each variable or latent variable is greater or higher than the correlation value between the latent variable (variable) and other latent variables (variables), for this reason the planned instrument/questionnaire or questionnaire has good discriminant validity. either based on the Fornell-Larcker Criten Man approach or men.

Table 6. Fornell-Larcker Criterion Man

	Decision buying (Kp)	Nano influencer (ni)
Decision buying (kp)	0,875	
Nano influencer (ni)	0,713	0,888

Source: processing of personal data (2024)

In table 6 Fornell-Larcker Criterion Man or male, the AVE value or square number for the variable or variable Decision buying (Kp) = 0.875 is greater than the relationship or correlation number between Decision buying (kp) and nano influencer (ni) of 0.713. Therefore, the value or square root number of AVE for each variable or latent variable is greater or higher than the correlation value between the latent variable (variable) and other latent variables (variables), for this reason the planned instrument/questionnaire or questionnaire has good discriminant validity. either based on the Fornell-Larcker Criten Man approach or men.

Table 7. Fornell-Larcker Criterion Woman

	kp	ni
kp	0,770	
ni	0,444	0,853

Source: processing of personal data (2024)

In table 7 Fornell-Larcker Criterion Man or male, the AVE value or square number for the variable or variable Decision buying (Kp) = 0.770 is greater than the relationship or correlation number between Decision buying (kp) and nano influencer (ni) of 0.444. Therefore, the value or square root number of AVE for each variable or latent variable is greater or higher than the correlation value between the latent variable (variable) and other latent variables (variables), for this reason the planned instrument/questionnaire or questionnaire has good discriminant validity. either based on the Fornell-Larcker Criten Man approach or men.

Table 8. Path Coefficients complete

Path	Original Sample (o)	Standard Deviation	T Statistics	P Values	Hyphothesis
ni -> kp	0.497	0.074	6.737	0.000	Significant

Source: processing of personal data (2024)

In table 8. Complete Path Coefficients are complete where nano influencer (ni) has a positive influence on purchasing decisions (kp) with an original sample value (0) or path coefficient of 0.497 and significant, with a number or value of P Values = 0.000 < 0.05 (Overall, both men and women where significant or hypothesis is accepted) (Lengkawati & Saputra, 2021; Shadrina & Yoestini, 2022; Wahyudi, 2022; Wiliana et al., 2021).

Table 9. Path Coefficients Man

Path	Original Sample (o)	Standard Deviation	T Statistics	P Values	Hyphothesis
ni -> kp	0.713	0.094	7.561	0.000	Significant

Source: processing of personal data (2024)

In table 9. Path Coefficients nan or male where nano influencer (ni) has a positive influence on purchasing decisions (kp) with an original sample value (0) or path coefficient of 0.713 and significant,

with a number or value of P Values = 0.000 < 0 .05 (that the significant male or hypothesis is accepted) (Nisa, 2022; Velicia & Amelda, 2024).

Table 10. Path Coefficients Woman

Path	Original Sample (o)	Standard Deviation	T Statistics	P Values	Hyphothesis
ni -> kp	0.444	0.084	5.296	0.000	Significant

Source: processing of personal data (2024)

In table 10. Path Coefficients woman or women where nano influencer (ni) has a positive influence on purchasing decisions (kp) with an original sample value (0) or path coefficient of 0.444 and significant, with a number or value of P Values = 0.000 < 0.05 (that women are significant or the hypothesis is accepted) (Aprilia & Arifin, 2023; Ashanty, 2024; Fadhilah et al., 2023; Sadevia & Artika, 2023; Salma, 2022; Syahputri et al., 2024; Uyuun, 2022; Velicia & Amelda, 2024).

Table 11. Path Coefficient PLS MGA

	Path Coefficients	p-Value original 1-tailed	p-Value
ni -> kp	0.269	0.017	0.035

Sumber data: data diolah mandiri (2024)

Table 12. Path Coefficient Welch-Satterthwait Test

	Path Coefficients	t-Value	p-Value
ni -> kp	0.269	2.218	0.033

Sumber data: data diolah mandiri (2024)

In tables 11 and 12 for the Path Coefficient PLS MGA and Path Coefficient Welch-Satterthwait Test, for MGA for test results where the P Value (PLS-MGA) = 0.035 < 0.05 and the Welch-Satterhwait Test MGA for test results where the P value Value (Path Coefficient Welch-Satterthwait Test) = 0.033 < 0.05, so it can be concluded from the above that sex or gender significantly moderates the variable/modifier nano influencer (ni) has a positive effect on purchasing decisions (kp)(Helbert & Ariawan, 2021). In other words, there is a difference in nano influencers (ni) having a positive effect on purchasing decisions (kp) between Man or men and Woman or women where the hypothesis is stated to be accepted

4. CONCLUSSION

Nano influencer (ni) regarding decision buying (kp) has been answered with sex or gender as a moderator. Where 4 hypotheses have been answered for nano influencer (ni) has a positive and significant influence on buying decisions (kp) meaning that the path coefficient is 0.497 and significant, with a number or value of P Values = 0.000 < 0.05 (Overall, both men or women where it is significant or the hypothesis is accepted), then nano influencer (ni) has a positive and significant effect on buying decisions (kp) in men, meaning that the path coefficient is 0.713 and significant, with a number or value of P Values = 0.000 < 0.05 (that men are declared significant or the hypothesis is accepted), nano influencer (ni) has a positive and significant effect on buying decisions (kp) in women, meaning that the path coefficient is 0.444 and significant, with a number or P value = 0.000 < 0.05 (that women are declared significant or the hypothesis is accepted), there is a significant difference in the influence of nano influencers (ni) on buying decisions (kp) between men and women, which is interpreted as MGA for the test results where the P Value (PLS-MGA) = 0.035 < 0 .05 and the Welch-Satterhwait Test MGA for test results where the P Value (Path Coefficient Welch-Satterthwait Test) = 0.033 < 0.05, it can be concluded from the above that sex or gender differences significantly moderate the nano influencer variable/variable (ni) has a positive effect on purchasing decisions (kp).

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