

THE INFLUENCE OF MINDSET, FINANCIAL LITERACY, PSYCHOLOGY AND INFORMATION TECHNOLOGY ON PURCHASING DECISIONS AND STOCK PURCHASE SATISFACTION ON INDONESIAN STOCK EXCHANGE INVESTORS IN EAST KALIMANTAN

YURDI MAULIDANI ¹, SLAMET RIYADI ^{2*} and SUNU PRIYAWAN ³

^{1,2,3} Universitas 17 Agustus 1945 Surabaya. *Corresponding Author Email: slametriyadi10@untag-sby.ac.id

Abstract

This research aims to prove and analyze the influence of mindset, financial literacy, psychology, information technology, purchasing decisions and investor satisfaction in purchasing in East Kalimantan. The population was 10,592 active investors, and the sample in this study consisted of 384 respondents/investors. Data were collected through a questionnaire instrument using statements with a Likert scale of 1-5. The analysis technique uses Structural Equation Modeling (SEM) with WarpPLS. The results of the data analysis prove that mindset has no significant influence on investors' share purchase decisions in East Kalimantan. Still, the mindset significantly impacts investor satisfaction in purchasing shares in East Kalimantan. Financial literacy significantly affects investors' share purchase decisions in East Kalimantan, but financial literacy has an insignificant impact on investor satisfaction in purchasing shares in East Kalimantan. Psychology substantially influences purchasing decisions and satisfaction with investors' share purchases in East Kalimantan. Information technology does not significantly affect investors' purchase decisions regarding shares in East Kalimantan, but it substantially affects investor satisfaction in purchasing shares in East Kalimantan. Purchasing decisions do not significantly affect investor satisfaction when buying shares in East Kalimantan. The advice is to continue to provide regular guidance regarding forming a positive mindset, helping to improve financial and psychological understanding to investors, both old and new. Based on the results of this research, direct guidance will increase the value of purchasing decisions and investor satisfaction in purchasing shares in East Kalimantan.

Keywords: Mindset, Financial Literacy, Psychology, Information Technology, Purchasing Decisions, Satisfaction.

INTRODUCTION

In the current digital era, the capital market is experiencing a significant transformation, influenced by various factors such as investor mindset, financial literacy, psychology, and the application of information technology. Especially in Indonesia, the growth of investors on the Indonesia Stock Exchange (BEI) shows a significant increase, with investors in East Kalimantan being no exception. However, despite this growth, a deep understanding of how these factors influence purchasing decisions and stock purchase satisfaction remains limited. This research aims to fill this gap by examining the influence of mindset, financial literacy, psychology and information technology on purchasing decisions and share purchase satisfaction among BEI investors in East Kalimantan. By understanding these dynamics, investors can make more informed and informed decisions, while market players and regulators

can develop more effective strategies and policies to support sustainable capital market growth. Financial literacy is often considered an essential foundation for making wise investment decisions. According to (Akims et al. 2023), financial literacy influences an individual's ability to make effective investment decisions, which impacts satisfaction and long-term investment results. In addition, as described by (Quaicoe and Eleke-Aboagye 2021) in their prospect theory, psychological factors also play a crucial role in investment decision-making, often leading to behaviour that deviates from pure economic rationality.

The role of information technology in capital markets cannot be ignored. Technological advances have made accessing market information and analytical tools easier, allowing investors to make faster, more data-driven decisions. According to a study by (Hvide et al. 2022), information technology has increased capital market participation by providing broader information and access to investment platforms (Halik, Arif, and Yucha 2021). Considering these factors, this research explores how mindset, financial literacy, psychological factors, and information technology collectively influence purchasing decisions and share purchase satisfaction among BEI investors in East Kalimantan. Through comprehensive analysis, this study is expected to provide valuable insights for investors, market players and policymakers to promote more effective and satisfactory investment practices in the Indonesian capital market.

LITERATURE REVIEW

Mindset and Purchasing Decisions

Mindset theory is related to the way individuals view and interpret the world, which can be divided into two types: growth mindset and fixed mindset. According to (Yeh, Ting, and Chiang 2023), individuals with a growth mindset believe that their abilities can develop through dedication and hard work, while those with a fixed mindset believe that their basic abilities cannot change. In an investment context, investors with a growth mindset may be more open to learning and taking risks, which influences stock purchasing decisions.

Financial Literacy and Purchasing Decisions

Financial literacy refers to the ability to use financial knowledge and skills to make effective investment decisions. According to (Nguyen, Polách, and Vozňáková 2019), financial literacy plays a key role in financial decisions, including investment. Investors who are more financially literate tend to make more informed decisions and better consider risks.

Investment Psychology and Purchasing Decisions

Investment psychology examines how emotions and psychology influence investment decisions. (Nofsinger 2017) prospect theory explains how investors often make decisions based on the prospect of relative gains and losses, not the outcome. Psychological factors such as self-confidence, perceived control, and risk aversion can influence stock purchasing decisions.

Information Technology and Purchasing Decisions

Information technology has revolutionized how investors access information and carry out

transactions in the stock market. According to (Widiastuti, Haryono, and Said 2019 ;Ekasari, Arif, and Nurcholis 2023), information system quality (including information quality and service quality) significantly affects user satisfaction and system use. In the context of the stock market, the accessibility and ease of use of online investment platforms can influence purchasing decisions and investment satisfaction.

Share Purchase Satisfaction

Purchase satisfaction in this context can be explained through (Xu, Cenfetelli, and Aquino 2016) theory of cognitive dissonance, which states that individuals strive to have consistency between their beliefs and behaviour. Investment results can influence satisfaction with purchasing shares compared to initial expectations and experience during the purchasing process.

METHOD

This type of research explains the causal relationship between variables or explanatory research, namely research to determine and define the influence between existing variables followed by hypothesis testing. The research, planned in three cities in East Kalimantan province (Samarinda, Balikpapan and Bontang), is expected to provide more complete and transparent information about consumer behaviour variables influencing investors' decisions and satisfaction in investing in the capital market. The population in this research is all investors who are actively purchasing shares on the Indonesia Stock Exchange, East Kalimantan Representative Office. The population in the study was 10,592 SIDs active in transactions on the Indonesia Stock Exchange for the East Kalimantan Representative Office. Based on data from the Indonesian Stock Exchange representing East Kalimantan in September 2023, it is stated that the total investor population is 10,592, with an error rate of 5%. Based on the formula above, the calculation to determine the sample size is as follows:

$$n = \frac{(10.592)}{1 + (10.592) (0,05)^2}$$

$$n = \frac{(10.592)}{1 + (10.592) (0,0025)}$$

$$n = \frac{(10.592)}{1 + 201,082}$$

$$n = \frac{(10.592)}{27,48}$$

$$n = 384,5$$

$$n = 384$$

The sampling method selects samples randomly and provides equal opportunities for each element of the entire population. Technique. The probability sampling chosen is cluster random sampling. Specifically, this technique determines samples based on unique cluster areas and

can represent the population as investors in the capital market. The number of samples is 384. Details can be seen in the following table:

Table 1: Total Sample

No.	City	Total Population	Total Sample
1.	Balikpapan	4.749	174
2.	Samarinda	3.644	134
3.	Bontang	2.199	76
Total Investor		10.592	384

About the measurement scale in preparing the questionnaire, the researcher used a Likert scale, namely closed questions that measure attitudes from a negative to a positive level.

Table 2: Instrument Rating Weight

Category	Assessment Weight
Strongly Agree (SA)	5
Agree (A)	4
Neutral (N)	3
Disagree (DA)	2
Strongly Disagree (SDA)	1

For quantitative analysis, the answers can be given the same interval score, which is calculated using the following formula:

$$Interval (I) = \frac{Range (R)}{Category (C)} = \frac{5 - 1}{5} = 0.80$$

Range (R) = highest score – lowest score = 100 – 0 = 100%

Category (C) = 5 is the number of objective criteria for a variable

Answers can be categorized as follows:

Agree/always/very positive given a score = 4.21 – 5.00

Agree/often/positive given a score = 3.41 – 4.20

Neutral/sometimes/fairly scored = 2.61 – 3.40

Disagree/rarely/negative given a score = 1.81 – 2.60

Strongly disagree/never given a score = 1.00 – 1.80

RESULT

Illustrates that the construct of each variable has been fulfilled because the AVE root value is greater than the correlation with other constructs. The root of AVE from Mindset is 0.634, Financial Literacy is 0.532, Psychological is 0.543, Information Technology is 0.526, Purchase Decision is 0.517 and Satisfaction is 0.587. The overall root AVE of each of these variables is greater than the correlation of other constructs, so it can be stated that the data or indicators used for each construct have met the validity testing criteria or are declared valid.

Table 3: Correlation between Latent Variables with Square Root AVE

Variable	Mindset	Finansial Literation	Psychological	Information Technology	Purchasing Decisions	Satisfaction
Mindset	(0.634)	0.313	0.099	-0.031	-0.012	0.055
Finansial Literation	0.313	(0.532)	0.134	-0.005	-0.115	-0.059
Psychological	0.099	0.134	(0.543)	0.480	-0.091	0.218
Information Technology	-0.031	-0.005	0.480	(0.526)	-0.016	0.184
Purchasing Decisions	-0.012	-0.115	-0.091	-0.016	(0.517)	-0.048
Satisfaction	0.055	-0.059	0.218	0.184	-0.048	(0.587)

The statement indicators for each research variable have a composite reliability value of more than 0.70. Cronbach's alpha coefficient also shows a value greater than 0.6 for each variable. Each indicator/statement item used in the research instrument has met the reliability criteria. Therefore, the research construct evaluation results were declared valid and reliable with a validity and reliability level of greater than 0.70.

Table 4: Composite Reliability dan Cronbach's Alpha Coefficient

Variable	Composite reliability coefficients	Cronbach's alpha coefficients	Information
Mindset	0.869	0.831	Reliable
Finansial Literation	0.784	0.710	Reliable
Psychological	0.768	0.655	Reliable
Information Technology	0.782	0.691	Reliable
Purchasing Decisions	0.740	0.646	Reliable
Satisfaction	0.753	0.607	Reliable

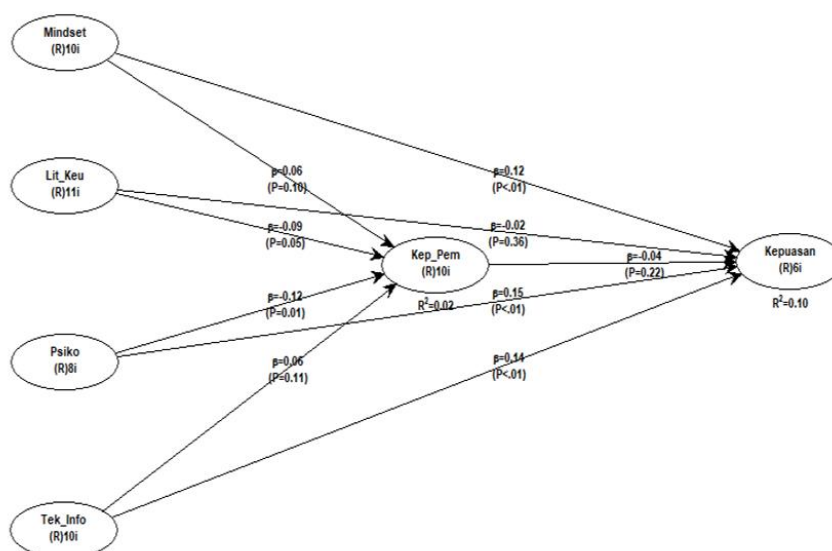


Figure 1: Path Coefficients in Structural Models

(1) the mindset variable is not significant to the purchasing decision variable, (2) the mindset variable is significant to the satisfaction variable (3) the financial literacy variable has a significant effect on the purchasing decision variable, (4) the financial literacy variable has an insignificant effect on the satisfaction variable, (5) psychological variables have a significant effect on purchasing decision variables, (6) psychological variables have a significant effect on satisfaction variables, (7) information technology variables have no significant effect on purchase decision variables, (8) information technology variables have a significant effect on satisfaction variables, (9) variables Purchasing decisions have no significant effect on the satisfaction variable.

Hypothesis 1

Testing the influence of mindset on stock purchase decisions. The test results in Table 5.19 show a path coefficient of 0.06 with a P-value of 0.10. This P-value value is more significant than 0.05, meaning that the mindset variable has no significant effect on the purchasing decision variable. This means that hypothesis 1, which states that mindset significantly impacts stock purchase decisions in East Kalimantan, is rejected.

Hypothesis 2

Testing the influence of mindset on satisfaction. The test results in Table 5.19 show a path coefficient of 0.12 with a P-value of 0.01. This P-value value is smaller than 0.05, meaning that the mindset variable significantly affects the purchase satisfaction variable. This means that hypothesis 2, which states that mindset significantly impacts satisfaction with purchasing shares in East Kalimantan, is accepted.

Hypothesis 3

Testing the influence of financial literacy on decisions. The test results in Table 5.19 show a path coefficient of 0.09 with a P-value of 0.05. This P-value value is less than or equal to 0.05, meaning the financial literacy variable significantly affects the purchasing decision variable. This means that hypothesis 3, which states that financial literacy significantly impacts stock purchase decisions in East Kalimantan, is accepted.

Hypothesis 4

Testing the effect of financial literacy on satisfaction. The test results in Table 5.19 show a path coefficient of 0.02 with a P-value of 0.36. This P-value value is more significant than 0.05, meaning that the financial literacy variable has no significant effect on the purchase satisfaction variable. This means that hypothesis 4, which states that financial literacy significantly impacts share purchase satisfaction in East Kalimantan, is rejected.

Hypothesis 5

Testing psychological influences on decisions. The test results in Table 5.19 show a path coefficient of 0.12 with a P-value of 0.01. This P-value value is smaller than 0.05, meaning psychological variables significantly influence purchasing decision variables. This means that hypothesis 5, which states that psychology impacts stock purchase decisions in East

Kalimantan, is accepted.

Hypothesis 6

Testing the psychological influence on satisfaction. The test results in Table 5.19 show a path coefficient of 0.15 with a P-value of 0.01. This P-value value is smaller than 0.05, meaning that psychological variables significantly affect the purchase satisfaction variable. This means that hypothesis 6, which states that psychology significantly impacts satisfaction with share purchases in East Kalimantan, is accepted.

Hypothesis 7

Testing the influence of information technology on decisions. The test results in Table 5.19 show a path coefficient of 0.06 with a P-value of 0.11. This P-value value is more significant than 0.05, meaning that the information technology variable has no significant effect on the purchasing decision variable. This means that hypothesis 7, which states that information technology substantially impacts stock purchase decisions in East Kalimantan, is rejected.

Hypothesis 8

Testing the influence of information technology on satisfaction. The test results in Table 5.19 show a path coefficient of 0.14 with a P-value of 0.01. This P-value value is smaller than 0.05, meaning that the information technology variable significantly affects the purchase satisfaction variable. This means that hypothesis 8, which states that information technology significantly impacts share purchase satisfaction in East Kalimantan, is accepted.

Hypothesis 9

Testing the influence of purchasing decisions on satisfaction. The test results in Table 5.19 show a path coefficient 0.05 with a P-value of 0.22. This P-value value is more significant than 0.05, meaning that the purchasing decision variable has no significant effect on the purchasing satisfaction variable. This means that hypothesis 9, which states that purchasing decisions substantially impact satisfaction with share purchases in East Kalimantan, is rejected.

DISCUSSION

The mindset variable with growth mindset and fixed mindset indicators received an average score of 3.96. This value explains that the mindset of East Kalimantan investors in trading shares is in the high/good classification. The results of the PLS-SEM analysis, the magnitude of the regression between the mindset variable and the purchasing decision variable is $\beta = 0.06$ and $P = 0.10$, meaning that the mindset variable has no significant effect on the purchasing decision variable. This means that hypothesis 1, which states that mindset significantly impacts stock purchase decisions in East Kalimantan, is rejected.

The results of this study do not support the research of (Liu, Mao, and Deng 2018), (Sohn and Ko 2021), (Kim and Im 2018) who prove that the mindset variable has a significant effect on purchasing decisions.

The research results contradict research which states that mindset influences purchasing decisions. Mindset refers to the cognitive processes important in explaining a person's judgments and decisions in a particular way (Petty and Briñol 2015), (Gollwitzer 2012). According to (Dweck and Yeager 2019), mindset is a person's pattern of thinking that influences that person's approach to dealing with a phenomenon. Based on the opinion expressed by Irwan (2015), the investor mindset is the investor's mindset in responding to events. When investors experience losses after purchasing, how do investors face these challenges? Investors have a positive mindset with the view that failure is a lesson, and investors with a negative mindset remain with the view that they are afraid of failing again, so they feel hopeless.

Investors with a growth or development mindset will believe that failure or loss is a lesson in carrying out stock buying and selling activities. This learning makes investors better understand how to minimize risks that will occur. The results of this research show that mindset influences purchase satisfaction. In the satisfaction variable, there are indicators of conformity to expectations and interest in doing it again. The developing mindset of investors tends to work hard to achieve the goals they have in mind, thus making investors make repeat purchases with the experience they have. Investors' financial literacy in buying and selling shares in East Kalimantan is excellent. Financial literacy has the potential to increase; this can be guaranteed by the existence of special learning facilities for investors, which are carried out in each respective security. Based on the WarpPLS SEM output results, the magnitude of the regression between the financial literacy variable and the purchasing decision variable obtained a value of $\beta = 0.09$ and $P = 0.05$, meaning that the financial literacy variable has a significant effect on the purchasing decision variable. This means that hypothesis 3, which states that financial literacy significantly impacts stock purchase decisions in East Kalimantan, is accepted.

The results of this research are in line with and support research conducted by (Aseptia, Widyaningrum, and Davina 2023), (Jappelli and Padula 2013), (Janor et al. 2016), which prove that financial literacy variables have a significant effect on purchasing decisions. Financial literacy helps investors carry out fundamental analysis on issuers. With fundamental analysis, investors can choose companies with good potential for purchase. However, in this study financial literacy did not significantly affect purchase satisfaction. This is because the unpredictable movement of share prices resulting from various things such as politics and economics, as well as other issues unrelated to the investor's ability, makes investors have unpredictable risks; this causes investors to experience losses so that investor satisfaction with purchases is not as expected.

Psychological factors determine investors in making purchases. Psychology is closely related to personality and environment. When assessing something, personality refers to motivation and perception, while environment refers to the information received. The results of the perception explain that investors prefer stock instruments over other instruments in the capital market. In stock transactions, investors can not only receive profits from buying and selling shares but also gain profits from dividend distribution (long-term investment). Then, investors make stock purchase decisions by getting information from colleagues or brokers.

Recommendations from experts make investors more confident in determining companies with sound potential. Technological developments make it easier for investors to carry out transactions in buying and selling shares independently. With technology, investors can access financial information and news related to companies that investors have determined. Even though technology can provide detailed information in stock activities, what needs to be paid attention to is the investor's fundamental and technical abilities. Technology is a supporting facility in carrying out stock transactions. Technology makes things easier for investors. The information received by investors is more detailed. Developments in manual stock transactions and technological developments mean that stock transactions can be done anywhere, making investors more flexible.

CONCLUSION

Based on the discussion in the previous chapter regarding the results of the relationship between investor mindset on purchasing decisions and satisfaction in buying shares, financial literacy on purchasing decisions and satisfaction in buying shares, investor psychology on purchasing decisions and satisfaction in buying shares, information technology on purchasing decisions and satisfaction in buying shares, as well as stock purchasing decisions on investor satisfaction in buying shares. So overall, it can be concluded as follows:

1. Mindset does not significantly affect investors' share purchase decisions in East Kalimantan. The results of this study cannot confirm the theory put forward previously
2. Mindset significantly affects investor satisfaction in East Kalimantan when purchasing shares. These results can confirm the theory put forward previously.
3. Financial literacy significantly affects investors' share purchase decisions in East Kalimantan. These results can confirm previous theories
4. Financial literacy does not significantly affect investor satisfaction in East Kalimantan in purchasing shares. The results of this study cannot confirm previous research
5. Psychology significantly influences investors' share purchase decisions in East Kalimantan. The results of this research can confirm previous research theories
6. Psychology significantly affects investor satisfaction in East Kalimantan when purchasing shares. These results are in line with previous research
7. Information technology does not significantly affect investors' share purchase decisions in East Kalimantan. The results of this study cannot confirm the theory put forward previously.
8. Information technology significantly affects investor satisfaction in East Kalimantan when purchasing shares. The results of this research are in line with and support previous research
9. Purchase decisions do not significantly affect investor satisfaction in East Kalimantan in purchasing shares. The results of this study cannot confirm the theory put forward.

Reference

- 1) Akims, Malgit Amos, Funmilayo Shalom Abayomi, Kanang Amos Akims, Hannington Kigame Avedi, Eweet Toto Josephat, and Cavine Onyango Ouma. 2023. "Financial Literacy, Investor Awareness and Investment Decisions: A Review of Literature." *Asian Journal of Economics, Finance and Management* 13–18.
- 2) Asepta, Uki Yonda, Santi Widyaningrum, and Valencia Cicilia Davina. 2023. "The Effect of Financial Literacy and PT Pegadaian's Sadari Emas Event on Purchasing Decisions for Gold Savings Products at PKK Tulungrejo, Batu." *Jurnal Ekonomi Dan Bisnis Digital* 2(3):927–42.
- 3) Dweck, Carol S., and David S. Yeager. 2019. "Mindsets: A View from Two Eras." *Perspectives on Psychological Science* 14(3):481–96.
- 4) Ekasari, Ratna, Donny Arif, and Muhammad Nurcholis. 2023. "Service Quality and After-Sales Service on IoT-Based Car User Satisfaction and Repeat Purchases Services in Indonesia." *ABAC Journal* 43(3):60–83.
- 5) Gollwitzer, Peter M. 2012. "Mindset Theory of Action Phases." *Handbook of Theories of Social Psychology* 1:526–45.
- 6) Halik, Abdul, Donny Arif, and Nikma Yucha. 2021. "The Influence of Intellectual Capital through Human Capital and Structural Capital towards Financial Performance Manufacturing Companies (Sector Garment and Textile)." *International Journal of Learning and Intellectual Capital* 1(1):1. doi: 10.1504/ijlic.2021.10042858.
- 7) Hvide, Hans K., Tom G. Meling, Magne Mogstad, and Ola L. Vestad. 2022. *Broadband Internet and the Stock Market Investments of Individual Investors*. National Bureau of Economic Research.
- 8) Janor, Hawati, Rubayah Yakob, Noor Azuan Hashim, Zanariah Zanariah, and Che Aniza Che Wel. 2016. "Financial Literacy and Investment Decisions in Malaysia and United Kingdom: A Comparative Analysis." *Geografia* 12(2).
- 9) Jappelli, Tullio, and Mario Padula. 2013. "Investment in Financial Literacy and Saving Decisions." *Journal of Banking & Finance* 37(8):2779–92.
- 10) Kim, Do Yuon, and Hyunjoo Im. 2018. "Good or Better; the Effect of Comparative Mindset with Recommended Products on Product Evaluation and Purchase Decision." in *International Textile and Apparel Association Annual Conference Proceedings*. Vol. 75. Iowa State University Digital Press.
- 11) Liu, Xiaoping, Lijing Mao, and Wenxiang Deng. 2018. "The Influence of Consumer Mindset and Corporate Social Responsibility on Purchase Intention." *Social Behavior and Personality: An International Journal* 46(10):1647–56.
- 12) Nguyen, Thi Anh Nhu, Jiří Polách, and Iveta Vozňáková. 2019. "The Role of Financial Literacy in Retirement Investment Choice." *Equilibrium. Quarterly Journal of Economics and Economic Policy* 14(4):569–89.
- 13) Nofsinger, John R. 2017. *The Psychology of Investing*. Routledge.
- 14) Petty, Richard E., and Pablo Briñol. 2015. "Emotion and Persuasion: Cognitive and Meta-Cognitive Processes Impact Attitudes." *Cognition and Emotion* 29(1):1–26.
- 15) Quaicoe, Alexander, and Paul Quaisie Eleke-Aboagye. 2021. "Behavioral Factors Affecting Investment Decision-Making in Bank Stocks on the Ghana Stock Exchange." *Qualitative Research in Financial Markets* 13(4):425–39.
- 16) Sohn, Yong Seok, and Man Ting Ko. 2021. "The Impact of Planned vs. Unplanned Purchases on Subsequent Purchase Decision Making in Sequential Buying Situations." *Journal of Retailing and Consumer Services* 59:102419.

- 17) Widiastuti, Rini, Bambang Santoso Haryono, and Abdullah Said. 2019. "Influence of System Quality, Information Quality, Service Quality on User Acceptance and Satisfaction and Its Impact on Net Benefits (Study of Information System Users Lecturer Performance Load (BKD) in Malang State University)." *HOLISTICA—Journal of Business and Public Administration* 10(3):111–32.
- 18) Xu, Jingjun David, Ronald T. Cenfetelli, and Karl Aquino. 2016. "Do Different Kinds of Trust Matter? An Examination of the Three Trusting Beliefs on Satisfaction and Purchase Behavior in the Buyer–Seller Context." *The Journal of Strategic Information Systems* 25(1):15–31.
- 19) Yeh, Yu-chu, Yu-Shan Ting, and Jui-Ling Chiang. 2023. "Influences of Growth Mindset, Fixed Mindset, Grit, and Self-Determination on Self-Efficacy in Game-Based Creativity Learning." *Educational Technology & Society* 26(1):62–78.