

## Integrating SDG 4: The Influence of Family and Interests on Students' Decisions in Choosing Cross-Interest Economics Programs

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### ABSTRACT

**Objective:** This research aims to analyse the partial influence of family and student interest on the decision to choose an interdisciplinary economic programme in line with SDGs. **Method:** This research is quantitative in nature, using an online questionnaire distributed to students at SMAN 1 Mojosari through purposive sampling with a total sample of 69. The data analysis technique employed SEM-PLS assisted by WarpPLS. **Results:** The study found that external aspects such as family do not affect the decision to choose an interdisciplinary economic programme, while internal factors, namely interest, have a positive and significant effect. **Novelty:** The research emphasises the integration of SCCT theory and a previously unexamined population. The latest contribution is that schools should focus on strengthening and adapting interdisciplinary programmes to prioritise the students' own capabilities. Furthermore, this research reflects new knowledge about the self-efficacy of today's students who are already able to convince their parents about career and study paths in accordance with their interests.

## INTRODUCTION

A good education is one that aligns with the skills, knowledge, interests, and talents of each student (Dehbozorgi & Parizi, 2023; Nair & Kareem, 2025). This is highlighted in the educational quality assurance within the Sustainable Development Goals (SDGs) regarding quality education (Fuentes-Penna et al., 2025; Wang et al., 2025). These differences are accommodated by schools in Indonesia, particularly at the senior high school level. In the eleventh grade, students are faced with choosing several specialisation programmes or packages with preferred subject compositions. This is important as an insight into their potential university major or career field after graduation. One of the specialisation or cross-interest programmes is economics.

The cross-interest programme, particularly in economics, is one of the innovations of the Merdeka Curriculum at the senior high school level (Tapung, 2025). Science stream students have the opportunity to explore the world of economics more deeply through this programme. Through the economics cross-interest programme, students' understanding of the field of economics becomes broader. Choosing an economics interest programme is also related to students' career choices and their decisions to pursue higher education. Selecting a cross-interest programme becomes important because it has a significant impact on the continuity of students' learning (Salvador et al., 2023; Widiawati et al., 2019). One of the benefits is that cross-disciplinary knowledge makes students more flexible in facing a workforce that demands multidisciplinary skills (Koris et al., 2021; Marckwardt et al., 2022; Vereijken et al., 2023).

The choice of interdisciplinary programmes is certainly carefully considered by students and influenced by various internal and external factors. An internal factor that

tends to have a significant impact is the student's interest in learning (Pembargi et al., 2024; Trinova et al., 2022). This interest develops due to a desire to explore the concepts within the subjects, as the implications of these subjects are daily activities and are endless. Additionally, social, economic, political, environmental phenomena and other challenges that students continually face can become starting points for interest (Thoman et al., 2012). Students feel that the material they are studying is relevant to their aspirations and future career plans (Chen et al., 2016). This becomes the main consideration.

The external factor that tends to have a significant impact is the family. The family, as a social group, has a major influence on a child's behaviour and decisions, including in choosing their educational programme at the senior high school level. The main reason why the family is considered an external determining factor is that they wish for their child to have a decent job after graduation (Kim et al., 2016; Vautero et al., 2021). Parents who understand finance will naturally encourage a focus on economic programmes, while parents with a medical background will encourage their child to pursue science studies. Families also consider future financial risks when students continue their education. They actively provide input, motivation, and information to students, which influence the choice of interest programmes (Ginanjari & Prakoso, 2024).

The two factors above reflect the applicability of Social Cognitive Career Theory (SCCT). In this context, SCCT elaborates that students' interest in a particular field will shape their understanding, leading them to pursue that field (Chan et al., 2018; Lent & Brown, 2019). On the other hand, family support plays a role in reinforcing or even directing these decisions (Jung & Oh, 2018; Liu et al., 2025). It is the interaction between personal interest and family support that ultimately shapes students' decision-making behaviour.

The phenomenon is felt by almost all schools implementing the independent curriculum, one of which is Mojokerto Senior High School 1 (SMAN 1 Mojokerto). This is one of the favourite schools in Mojokerto, East Java, and is active in developing character and specialised fields for its students. The selection of cross-interest programmes takes place in the eleventh grade, while the tenth grade covers all compulsory and general subjects. Based on preliminary research, there is confusion and hesitation among the majority of students in choosing one of the cross-interest programmes, namely economics. Therefore, students tend to play it safe by choosing other cross-interest programmes such as mathematics, biology, chemistry, and so on.

Several previous studies have examined internal and external factors influencing the decision to choose cross-interest programmes. In the university domain, more international research has emerged. One such study by Dube et al., (2022) indicates that university reputation and the programmes offered are the main considerations for students alongside the requirements that must be met. Meanwhile, when focusing on Indonesia, research by Kortin et al., (2020) states that interest, motivation, family, teachers and peers simultaneously have a significant effect on the decision to choose a

cross-interest economics programme at SMA Negeri 4 Makassar. Furthermore, research by Arnentis et al., (2022) found that the majority of cross-interest programme choices are purely based on students' internal motivation.

Based on previous literature reviews, a research gap has been identified, namely the lack of studies on internal and external factors regarding the decision to choose cross-interest economic programs broadly across various regions, especially in Indonesia. This needs to be addressed to enhance the generalisability of the results. Therefore, this study aims to analyse the direct influence of students' and families' interests on the decision to choose cross-interest economic programs. The novelty of this research lies in the use of the population at SMA Negeri 1 Mojosari with the most recent data that has not been studied before.

The theoretical contribution of this research is to enhance understanding and study the implications of SCCT more specifically on cross-interest programme selection decisions, as well as to enrich the literature by revealing the interaction between internal factors (student interests) and external factors (family support). The practical contribution of this research is that it can serve as a reference for education policymakers to strengthen the implementation of the Independent Curriculum, which is oriented towards learning freedom and the development of student interests.

## RESEARCH METHOD

This study was conducted using a quantitative approach involving twelfth-grade students of SMAN 1 Mojosari aged between 17 and 18 years. Purposive sampling technique was used to select 69 students enrolled in the cross-interest economics programme. In this context, the chosen respondents were students taking the cross-interest programme in Economics, not the general student population. This technique allows the researcher to select a sample that truly has experience and understanding related to the phenomenon being studied. The number of respondents listed is considered sufficient for simple or multiple linear regression analysis, as it meets the minimum sample size assumption for statistical analysis of more than 30 respondents.

Data collection was carried out using structured questionnaires consisting of three main components: family influence, student interest, and student decision. A five-point Likert scale was used to measure the level of influence and interest of the respondents. Data analysis was conducted using SEM-PLS, which includes tests of reliability and validity, the testing of the structural model, interpretation of path coefficients, and evaluation of the model's Goodness of Fit. WarpPLS was chosen as the tool because it can process small datasets with a high level of non-linearity. This method is expected to produce reliable and valid findings in understanding the influence of family and interest on students' decisions in choosing cross-interest economic programs.

## RESULTS AND DISCUSSION

### Results

**Validity and Reliability Test****Table 1.** Convergent validity test.

No	Indicator	Factor loading	Information	P value	Information
1	X1.1	0.902	Fulfilled	<0.001	Fulfilled
2	X1.2	0.888	Fulfilled	<0.001	Fulfilled
3	X1.3	0.840	Fulfilled	<0.001	Fulfilled
4	X 2.1	0.829	Fulfilled	<0.001	Fulfilled
5	X2.2	0.867	Fulfilled	<0.001	Fulfilled
6	X2.3	0.796	Fulfilled	<0.001	Fulfilled
7	Y1. 1	-0.082	Not fulfilled	0.243	Fulfilled
8	Y1.2	0.799	Fulfilled	<0.001	Fulfilled
9	Y1.3	0.162	Not fulfilled	0.079	Not fulfilled
10	Y1.4	0.204	Not fulfilled	0.036	Fulfilled
11	Y1.5	0.809	Fulfilled	<0.001	Fulfilled

From the results of the convergent validity test above, a decision is made based on the following criteria: If the factor loading (eg for fam = 0.902 > 0.30 then it meets convergent validity. If the factor loading is significant ( e.g. for fam 0.902;  $p < 0.001$  ) then it meets convergent validity < 0.05.

**Table 2.** Results of discriminant validity test on X1.

No	Indicator	Loading	Cross loading		Information
		FAM	INTRST	DCS	
1	X1.1	0.902	0.010	0.074	Fulfilled
2	X1.2	0.888	-0.091	0.080	Fulfilled
3	X1.3	0.840	0.085	-0.164	Fulfilled

**Table 3.** Results of discriminant validity test on X2.

No	Indicator	Loading	Cross loading		Information
		FAM	INTRST	DCS	
1	X2 .1	0.829	-0.026	-0.163	Fulfilled
2	X2 .2	0.867	-0.206	0.062	Fulfilled
3	X2 .3	0.796	0.252	0.101	Fulfilled

**Table 4.** Results of discriminant validity test on Y1.

No	Indicator	Loading	Cross loading		Information
		FAM	INTRST	DCS	
1	Y1 .1	-0.082	-0.105	-0.006	Not Fulfilled
2	Y1 .2	0.799	0.062	-0.197	Fulfilled
3	Y1 .3	0.162	0.057	-0.042	Fulfilled
4	Y1.4	0.204	-0.001	0.198	Fulfilled

5	Y1.5	0.809	-0.082	0.152	Fulfilled
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The results of the Discriminant Validity Test above were decided based on the following criteria: Each Indicator. For example, for X1.1 with loading 0.902 and cross loading for (INTRST 0.010, and for DCS 0.074), if loading > cross loading then discriminant validation is met.

For the reliability test, Cronbach's Alpha coefficient was used. The minimum value must be greater than 0.6. All instruments were declared to have passed this test and could be proceeded to the inner model.

### *Descriptive Analysis Result*

Most of the respondents were female (55 percent) and male 45%. They were all in the late teenage age group (17-18 years), which is the ideal age to choose education according to interests and family support. This balanced number of respondents shows that the 12th grade students of SMAN 1 Mojosari are representative. The questionnaire results showed that the influence of family on students' decisions to follow the economics cross-interest program was quite significant. Most students said that parental assistance, such as advice or encouragement, was an important factor in making decisions. Some students also said that family opinions about future economics programs also influenced their decisions. The responses showed that the family environment greatly influenced students' decisions and there were also students who stated that they chose this program because of practical considerations, such as the ease of following subjects compared to other programs as well. According to descriptive analysis, two main components personal interest and family support influenced by students' decisions to enter the cross-interest economics program. Family provides great motivation, and financial interests drive them to make decisions. Family influences female respondents, while individual interests influence male respondents.

### *Fit Model*

**Table 5.** Model fit and quality indices.

No.	Model fit and quality indices	Fit criteria	Analysis results	Information
1	Average path coefficient (APC)	P<0.05	0.204	Does not meet model fit requirements
2	Average R-squared (ARS)	P<0.05	0.086	Does not meet model fit

3	Average adjusted R-squared (AARS)	P<0.05	0.059	requirements Meets model fit requirements
4	Average block VIF (AVIF)	acceptable if $\leq 5$ , ideally $\leq 3.3$	1.001	Ideal
5	Average full collinearity VIF (AFVIF)	acceptable if $\leq 5$ , ideally $\leq 3.3$	1.233	Ideal
6	GoF Tenenhaus (GoF)	small $\geq 0.1$ , medium $\geq 0.25$ , large $\geq 0.36$	0.223	Medium
7	Sympson's paradox ratio (SPR)	acceptable if $\geq 0.7$ , ideally = 1	1.000	Ideal
8	R-squared contribution ratio (RSCR)	acceptable if $\geq 0.9$ , ideally = 1	1.000	Ideal
9	Statistical suppression ratio (SSR)	acceptable if $\geq 0.7$	1.000	Ideal
10	Nonlinear bivariate causality direction ratio (NLBCDR)	acceptable if $\geq 0.7$	0.500	Not accepted

### Hypothesis Testing Results

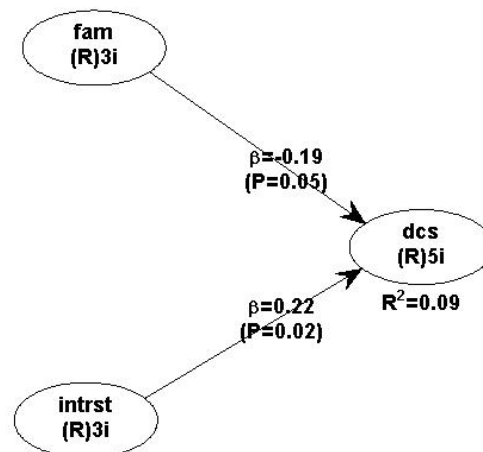


Figure 1. Hypothesis result

Table 6. Hypothesis test results.

No.	Relationship between variables (Exogenous variables → Endogenous variables)		Path coefficient	P-value	Information
1	FAM	DCS	-0.186	0.051	Not Significant
2	INTRST	DCS	0.222	0.025	Significant

From the results of the hypothesis test above, the interpretation can be further explained as follows:

H1 = Effect of (FAM) on (DCS)

The influence of (FAM) on (DCS) has a path coefficient of  $r = -0.186$  and because  $p$  is higher than  $0.05$ , it is said to be not significant, so the hypothesis is rejected.

H2 = Effect of (INTRST) on (DCS)

The influence of (INTRST) on (DCS) has a path coefficient of  $r$  of  $0.222$  and because  $p$  is smaller than  $0.05$ , it is said to be significant, so the hypothesis is accepted. The positive path coefficient of  $0.222$  means that the better the INTRST, the higher the DCS.

## Discussion

### *Family regarding the Decision to choose a Cross-interest Economic Programme*

Based on the results of the influence tests that have been conducted, it is known that family influence does not have a significant effect on the decision to choose the cross-interest economics programme. This means that students' decisions in selecting the cross-interest economics programme are not influenced by family encouragement, motivation, or opinions. The indication is that students are able to prioritise their personal interests and aspirations over family pressure or expectations (Alfaiz et al., 2021).

This finding is particularly interesting as it points to students' ability to prioritise their own desires and interests over parental intervention. Parents' expectations to choose cross-interest programmes other than economics can be negotiated by students with confidence in their actual abilities. Strong self-efficacy and personal goals encourage students to understand and succeed in the field of economics and view it as a relevant path for their future. Although involving a different population, these results align with research Ulwan et al., (2025) indicating that family background does not directly influence study programme choice. Family background is also linked to the extent of family intervention in their children (Fadlan, 2022; Ros et al., 2019).

This is very important to highlight amid the prevalence of families imposing their will on their children, especially in the academic sphere. Students at the research location already possess a good and advanced mindset, enabling them to convince their parents about their own choices. When viewed from the perspective of cross-interest economic programmes, this can also easily be linked to job market needs in the digital and dynamic era. The strong potential of economics lessons to be developed as a future profession also plays an important role in reducing parental pressure on their children's specialisation.

### *Student Interest in the Decision to choose Cross-interest Economics Programmes*

Based on the results of the influence test that has been conducted, it is known that students' interest has a positive and significant effect on the decision to choose the cross-interest economics programme. This means that the higher the students' interest in the field of economics, the greater their tendency to choose the cross-interest economics programme (Nguyen et al., 2023; Worthington & Higgs, 2004).

This finding is in line with the existence of SCCT. In this context, students with high interest in the field of economics show a strong level of self-efficacy. In other words, they believe they are capable of facing challenges and growing in economic learning, even if they come from other majors such as science. Moreover, they have positive

outcome expectations, which is the belief that learning economics will provide tangible benefits for the future, such as broader career opportunities or the ability to manage personal finances (Marchant & Eliason, 2024; Quadria & Jahan, 2025). The combination of these beliefs and expectations encourages the formation of personal goals to enrol in cross-interest economic programmes. Therefore, interest is not just a preference, but also a significant motivation to make a rational decision (Müller & Louw, 2004).

These results are consistent with research findings Sylaska & Mayer, (2024) which indicate that a better understanding of personality, both of oneself and others, and being more actively involved in the process of choosing a major, compared to other students, tends to lead to considering more major options initially, making major decisions more quickly, and showing better academic outcomes afterwards.

Overall, the results of this research highlight that internal factors, namely student interest, are more important and should be prioritised over external factors, such as family influence (Fernandes, 2019; Marhamah & Zikriati, 2024). Education should accommodate the needs of students, not the expectations of parents. Students need to be provided with comprehensive insights and information about choosing cross-interest programmes, such as economics, so they can align them with their current and future capabilities.

## CONCLUSION

**Fundamental Findings:** Family does not significantly influence students' decisions to choose cross-interest economic programs at school. Conversely, students' interests positively and significantly influence their decisions to choose cross-interest economic programs. **Implications:** An approach based on individual interests and potential in the process of choosing cross-interest programmes, particularly in economics, should be prioritised over external factors such as family. Schools and guidance counsellors need to provide systematic assessments of interests and talents. This is important to support the quality of SDGs-oriented education that focuses on the genuine needs of the students themselves. **Limitations:** This research is limited to respondents from a single school, so it cannot yet be generalised even though it has produced different findings. **Future Research:** In addition to expanding the population, adding variables such as self-efficacy, career aspiration, or peer influence can provide a more comprehensive picture of students' decision-making mechanisms.

## REFERENCES

- Alfaiz, A., Hidayat, H., Yandri, H., Sari, A. T. L., Sendayu, F. S., Suarja, S., & Arjoni, A. (2021). Identification of perceived self-efficacy to predict student's awareness in career readiness. *Islamic Guidance and Counseling Journal*, 4(1), 124-132. <https://doi.org/10.25217/igcj.v4i1.933>
- Arnentis, A., Daryanes, F., Febrita, E., & Emariza, E. (2022). Analisis Motivasi Siswa Pada Program Ilmu Sosial Dalam Memilih Lintas Minat Biologi Di Sman Kubu Dan Sman Kubu Babussalam Kabupaten Rokan Hilir. *Bioilmi: Jurnal Pendidikan*, 8(1 SE-Articles), 31-39. <https://doi.org/10.19109/bioilmi.v8i1.12918>
- Chan, C.-C., Chen, S.-C., Lin, Y.-W., Liao, T.-Y., & Lin, Y.-E. (2018). Social Cognitive Perspective on Factors Influencing Taiwanese Sport Management Students' Career

- Intentions. *Journal of Career Development*, 45(3), 239–252. <https://doi.org/10.1177/0894845316681643>
- Chen, Y.-H., Tau, A., Zastavker, Y. V., Stolk, J. D., Dillon, A., & Gross, M. D. (2016). Understanding students' perception of academic and professional relevance in STEM courses. *Proceedings - Frontiers in Education Conference, FIE, 2016-November*. <https://doi.org/10.1109/FIE.2016.7757462>
- Dehbozorgi, N., & Parizi, R. M. (2023). Enhancing Competency-Based Learning and Employability through a Course Recommender AI-Assisted System. *SIGITE 2023 - Proceedings of the 24th Annual Conference on Information Technology Education*, 207–208. <https://doi.org/10.1145/3585059.3611435>
- Dube, N., Nyambo, S., Kanjiri, N. K., & Ruzungunde, V. S. (2022). First-year Students' University and Programme Selection at a South African University: Choice or Compulsion? *International Journal of African Higher Education*, 9(2), 80–101. <https://doi.org/10.6017/ijahe.v9i2.15373>
- Fadlan, A. (2022). Pengaruh latar belakang ekonomi keluarga dan biaya pendidikan terhadap motivasi belajar peserta didik di sma negeri 1 linggabayu. *Jurnal Pamator: Jurnal Ilmiah Universitas*. <https://journal.trunojoyo.ac.id/pamator/article/view/14064>
- Fernandes, R. (2019). Relevansi Kurikulum 2013 dengan kebutuhan Peserta didik di Era Revolusi 4.0. *SOCIUS*, 6, 70. <https://doi.org/10.24036/scs.v6i2.157>
- Fuentes-Penna, A., Cárdenas, R. G., & Rascón, A. C. (2025). Quality education and inclusive education. In *Machine and Deep Learning Solutions for Achieving the Sustainable Development Goals* (pp. 63–78). IGI Global. <https://doi.org/10.4018/979-8-3693-8161-8.ch004>
- Ginanjar, A. E., & Prakoso, A. F. (2024). Tren Penelitian Pendidikan Ekonomi Keluarga di Indonesia: Sebuah Analisis Bibliometrik. *Belantika Pendidikan*, 7(1). <https://doi.org/https://doi.org/10.47213/bp.v7i1.358>
- Jung, C.-S., & Oh, H.-K. (2018). Relationships between family support, career decision-making self-efficacy and career decision-making types in nursing students. *Asia Life Sciences*, 1, 179–187. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85059328586&partnerID=40&md5=9ca73b643ef530bbf886453c15b5246e>
- Kim, S.-Y., Ahn, T., & Fouad, N. (2016). Family Influence on Korean Students' Career Decisions: A Social Cognitive Perspective. *Journal of Career Assessment*, 24(3), 513–526. <https://doi.org/10.1177/1069072715599403>
- Koris, R., Palmer, Z., & Oswal, S. (2021). Empowering cross-disciplinary learning through online collaboration among students and faculty from business english, website building, and accessible design fields. *Journal of University Teaching and Learning Practice*, 18(7), 112–134. <https://doi.org/10.53761/1.18.7.08>
- Kortin, D. M., Hasan, M., Dinar, M., & Ahmad, M. I. S. (2020). Determinan Yang Mempengaruhi Keputusan Memilih Program Lintas Minat Ekonomi. *Jurnal Ekonomi Pendidikan Dan Kewirausahaan*, 8(1 SE-Articles), 67–78. <https://doi.org/10.26740/jepk.v8n1.p67-78>
- Lent, R. W., & Brown, S. D. (2019). Social cognitive career theory at 25: Empirical status of the interest, choice, and performance models. *Journal of Vocational Behavior*, 115. <https://doi.org/10.1016/j.jvb.2019.06.004>
- Liu, J., Fang, Y., Feng, H., Huang, B., Chang, Y., & Si, J. (2025). Associations between parent-child relationships and adolescents' career exploration: a longitudinal mediation study. *Current Psychology*, 44(11), 10392–10402. <https://doi.org/10.1007/s12144-025-07886-w>
- Marchant, M., & Eliason, E. (2024). Evaluating the inclusion of data literacy in

- undergraduate economics curriculum at research-intensive universities. *Journal of Education for Business*, 99(6), 390–399. <https://doi.org/10.1080/08832323.2024.2417285>
- Marckwardt, A. S., Kühne, S., Behme, J. F., Bleszynski, C. M., Bullerdieck, P., Dang, T. M., Ghazi, M., & Oberschmidt, D. (2022). Broadening personal competence profiles through transdisciplinary project modules. In J. H.-M., S. S., L. A., & N. B.V. (Eds.), *SEFI 2022 - 50th Annual Conference of the European Society for Engineering Education, Proceedings* (pp. 1349–1357). European Society for Engineering Education (SEFI). <https://doi.org/10.5821/conference-9788412322262.1401>
- Marhamah, M., & Zikriati, Z. (2024). Mengenal Kebutuhan Peserta Didik Diera Kurikulum Merdeka. *Wathan: Jurnal Ilmu Sosial Dan Humaniora*, 1(1), 89–106. <https://doi.org/10.71153/wathan.v1i1.32>
- Müller, F. H., & Louw, J. (2004). Learning environment, motivation and interest: Perspectives on self-determination theory. *South African Journal of Psychology*, 34(2), 169–190. <https://doi.org/10.1177/008124630403400201>
- Nair, K. R., & Kareem, J. (2025). The Influence Of Stem Attitude, 21st Century Skills, And Technology Use On Student Outcomes: A Mediation Model Analysis. *Journal of Information Technology Education: Research*, 24. <https://doi.org/10.28945/5621>
- Nguyen, T. L., Nguyen, H. T., Nguyen, N. H., Nguyen, D. L., Nguyen, T. T. D., & Le, D. L. (2023). Factors affecting students' career choice in economics majors in the COVID-19 post-pandemic period: A case study of a private university in Vietnam. *Journal of Innovation and Knowledge*, 8(2). <https://doi.org/10.1016/j.jik.2023.100338>
- Pembargi, J. A., Ramdani, D. S., Syifa, A., Audil, R., & Fitriyani, N. (2024). Analysis of factors that influence the interest in learning mathematics students of FMIPA university of Mataram in the era of the COVID-19 pandemic. In S. M., A. V.L., A. M.F., H. M.N., W. null, W. N.T., M. S., & N. R.A. (Eds.), *AIP Conference Proceedings* (Vol. 3095, Issue 1). American Institute of Physics. <https://doi.org/10.1063/5.0204964>
- Quadria, T. H., & Jahan, I. (2025). Enhancing Financial Knowledge Through High School Education: The Effect of Mandated Economics and Personal Finance Courses. *Journal of Consumer Affairs*, 59(3). <https://doi.org/10.1111/joca.70019>
- Ros, A. M., Brewer, S. K., Raviv, T., & Santiago, C. D. C. (2019). How Do Parent Psychopathology and Family Income Impact Treatment Gains in a School-Based Intervention for Trauma? *School Mental Health*, 11(4), 777–789. <https://doi.org/10.1007/s12310-019-09324-2>
- Salvador, R., Barros, M. V., Barreto, B., Pontes, J., Yoshino, R. T., Piekarski, C. M., & de Francisco, A. C. (2023). Challenges and opportunities for problem-based learning in higher education: Lessons from a cross-program Industry 4.0 case. *Industry and Higher Education*, 37(1), 3–21. <https://doi.org/10.1177/09504222221100343>
- Sylaska, K., & Mayer, J. D. (2024). Major Choices: Students' Personal Intelligence, Considerations When Choosing a Major, and Academic Success. *Journal of Intelligence*, 12(11). <https://doi.org/10.3390/jintelligence12110115>
- Tapung, M. (2025). Evaluating the Key Success Factors of “Merdeka” Curriculum: Evidence from East Nusa Tenggara, Indonesia. *Journal of Curriculum and Teaching*, 14(2), 88–97. <https://doi.org/10.5430/jct.v14n2p88>
- Thoman, D. B., Sansone, C., Fraughton, T., & Pasupathi, M. (2012). How students socially evaluate interest: Peer responsiveness influences evaluation and maintenance of interest. *Contemporary Educational Psychology*, 37(4), 254–265. <https://doi.org/10.1016/j.cedpsych.2012.04.001>
- Trinova, Z., Astuti, R., Perdana, I., Rahman, Y., Jhony, C., Haris, I., & Arifin, A. (2022).

- Influence of Interest and Discipline on Student Learning Outcomes. *Journal of Higher Education Theory and Practice*, 22(18), 58-72. <https://doi.org/10.33423/jhetp.v22i18.5699>
- Ulwan, N., Mandasari, Y., Rochanawati, I., & Gusnita, W. (2025). Pengaruh Pendidikan Keluarga Dan Asal Sekolah Terhadap Pemilihan Program Studi Dan Motivasi Belajar Sebagai Variabel Intervening. *Edukasi: Jurnal Pendidikan*, 22(2 SE-Research Article (Artikel Penelitian)), 317-331. <https://doi.org/10.31571/edukasi.v22i2.7700>
- Vautero, J., Silva, A. D., & do Céu Taveira, M. (2021). Family influence on undergraduates' career choice implementation. *International Journal for Educational and Vocational Guidance*, 21(3), 551-570. <https://doi.org/10.1007/s10775-020-09453-0>
- Vereijken, M. W. C., Akkerman, S. F., te Pas, S. F., van der Tuin, I., & Kluijtmans, M. (2023). 'Undisciplining' higher education without losing disciplines: furthering transformative potential for students. *Higher Education Research and Development*, 42(7), 1762-1775. <https://doi.org/10.1080/07294360.2022.2156482>
- Wang, Y., Liu, Z., & Tu, C. (2025). Advancing Sustainable Development Goal 4 Through a Scholarship of Teaching and Learning: The Development and Validation of a Student-Centered Educational Quality Scale in Developing Countries. *Sustainability (Switzerland)*, 17(10). <https://doi.org/10.3390/su17104369>
- Widiawati, K. A., Sudiana, K., & Wiratini, M. (2019). Pengelolaan Pembelajaran Kimia Peminatan Dan Lintas Minat Di Tingkat Sma. *Jurnal Pendidikan Kimia Indonesia*, 3(1 SE-Articles), 24-31. <https://doi.org/10.23887/jpk.v3i1.20945>
- Worthington, A., & Higgs, H. (2004). Factors explaining the choice of an economics major: The role of student characteristics, personality and perceptions of the profession. *International Journal of Social Economics*, 31(5-6), 593-613. <https://doi.org/10.1108/03068290410529416>

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