



The Use of Partial Least Square for Analysis of the Relationship of Family Support on Learning Outcomes and Achievements Through Learning Motivation

Septian Cahya Azhari^{1*}, Ely Satiyasih Rosali², Muhammad Adlan F³, Nita Nurmalita D⁴,
Lutfiah⁵, Riska Setiawatil H⁶, Nina
Asih Rahayu⁷, Tasya Meita⁸

^{1, 2, 4, 6}Geography Education Department, Siliwangi University

^{3, 8}English Education Department Siliwangi University

⁵Biology Education Department, Siliwangi University

⁶Department of Agrotechnology, Siliwangi University

Jalan Siliwangi No. 24, Kec. Tawang, Kota Tasikmalaya, Jawa Barat, 46115, Indonesia

* Corresponding author. Email: 192170004@student.unsil.ac.id, Telp: +6282119732572

Received: 11 January 2022; Revised: 13 February 2022; Accepted: 15 March 2022

Abstract: This study aims to analyze the relationship of family support to learning outcomes and learning achievement through learning motivation so that parents can increase their support for children in the effort to increase their learning motivation. This study uses a quantitative approach with partial least squares (SEM-PLS) analysis. The results showed that the score of the original sample of family support to learning motivation was 0.655, the score of learning motivation to learning outcomes was 0.605, and the score of learning motivation to learning achievement was 0.487. Thus, there is a positive relationship between family support and learning motivation, learning motivation and learning outcomes, and learning motivation and learning achievement. Therefore, to improve learning outcomes, learning achievement and learning motivation of children, parents must provide optimal support in the learning process to improve children's learning motivation.

Keywords: Partial least square, family support, learning motivation, learning achievement

How to Cite: Azhari, S.C., Rosali, E.S., Faishal. M.A., et.al. (2022). The Use of Partial Least Square for Analysis of the Relationship of Family Support on Learning Outcomes and Achievements Through Learning Motivation. *JPPM (Jurnal Pendidikan dan Pemberdayaan Masyarakat)*, 9(1), 26-37. doi: <https://doi.org/10.21831/jppm.v9i1.49008>



Introduction

The education system in Indonesia during the COVID-19 pandemic underwent changes, especially in the learning process (Grace Lai-Hung Wong et al., 2020); (Remuzzi & Remuzzi, 2020); (Chang et al., 2021). During the COVID-19 pandemic, learning was delivered through online learning or online-based media. The use of online learning methods has positive and negative impacts. The positive impact is that students have a lot of time to learn and practice the lessons at home, whereas the negative impact is that students are required to carry out independent learning (Muljana, Dabas, & Luo, 2021), which essentially requires parental assistance. In addition, the implementation of educational practices is directed at efforts to uphold humanistic values into a solution to this global phenomenon. Thus, humanist education becomes important, because



aims to form a human being who has a true humanitarian commitment, namely a human being who has awareness, freedom and responsibility as an individual as well as a social being (Sujarwo, Kusumawardani, Prasetyo, & Herwin, 2021).

In online learning activities, some students experience setbacks in their learning motivation, because they need time to adjust to new learning conditions (Garbe, Ogurlu, Logan, & Cook, 2020); (Rutherford, Duck, Rosenberg, & Patt, 2022). Therefore, parental support at home and optimization of learning technology has an important role. Based on the concept described by (Cheng et al., 2018), learning motivation is classified into intrinsic learning motivation orientation and extrinsic learning motivation orientation. Intrinsic learning motivation has an orientation that all learning processes are a means to develop one's potential and achieve goals. Meanwhile, external motivational orientation includes competing academically with others, gaining appreciation from teachers or the opposite sex and pursuing the target of continuing favorite schools in the future.

Among the various antecedents of student behavior, motivation is one of the most important parts in directing, playing, influencing students' choices, involvement and learning achievements in schools (Jianga, Rosenzweigb, & Gaspardc, 2018). In the field of educational psychology, the idea described by (Eccles et al., 1997), is one of the most important frameworks and is used as a reference by various experts as a way used to investigate students' learning motivation and how it relates to academic behaviors such as learning behavior and efforts to achieve learning achievement. Thus, various experts make a summary of the conclusion that when students have a strong motivational drive to learn for example to get good grades in their academics, they will study earnestly and create strategies to achieve this (Wigfield & Eccles, 2002).

Several studies have shown that there is a relationship between competency beliefs, assignment scores, and student academic achievement. However, this has not shown the specifics of whether students have been directly involved and interpreted their learning process or not. Until now, new research has examined the financial condition of families that affects students' academic performance in school. So important is student learning motivation that it is necessary to get special attention to students through the roles of parents, teachers, schools and peers.

To keep students enthusiastic in learning, it is important to maintain children's learning motivation. Learning motivation is an encouragement which can either be internal or external for students to do learning activities so that they can improve their abilities and skills in certain fields (Fitria & Barseli, 2021). Family support has an important role in the attainment of student learning outcomes and achievements (Hurlock, Sijabat, Soedjarwo, & Istiwidayanti, 1991); (Alhafid & Nora, 2020). Every child possesses various potentials that grow and develop based on their stimulus throughout their developmental stages (Sujarwo, S., Kusumawardani, E., & Nurmallasari, 2022). Learning outcomes are the competencies and skills possessed by students that are obtained from the learning process. The optimization of learning motivation will improve learning outcomes (Andriani, 2019). Meanwhile, learning achievement is the result of an educator's assessment of students in the learning process which is outlined in the form of scores (Charli, Ariani, & Asmara, 2019).

The achievement of student learning outcomes and achievements is influenced by internal and external factors. Internal factors are related to the students themselves, while external factors include factors of the learner's environment and the learning

method used (Prameswari, Saud, Amboro, & Wahyuningsih, 2020), including the role of family support. Analysis of family support is necessary to determine the role of parents in the education process of their children which is expected to encourage and increase children's learning motivation. This notion is supported by the results of studies conducted by (Safitri & Yuniwati, 2019) and (Ibrahim, Cahyadi, Anggriani, & Abdurrahman, 2020), which report that family support plays an important role in the attainment of student learning outcomes and achievements. Through this families and schools go hand in hand promoting culture of achievement (Suharta, R. B., Septiarti, S. W., & Kusumawardani, 2020).

Research that examines the role of parental support for learning motivation has been widely done by various scholars. Syahda, (2018) studied the relationship between family support and the independence of retarded children, whereas (Aisah, Mugiarto, & Anni, 2018) focused on internal locus of control and family support for career planning among high school students. Oktiani, (2017) did a research on teacher creativity in motivating students, and (Santo, Kimbay, & Werang, 2018) studied the influence of parental support and learning motivation on Indonesian language learning achievement. More recently, (Purwanti, Suriansyah, & Rafianti, 2022) examined parents' assistance in instilling the independence character in learning from home. Based on the previous studies, there is no research done on using path analysis with partial least squares to analyze the indirect relationship between the variables of family support, learning outcomes and achievement, with learning motivation as a mediating variable.

Method

Type of Research

Based on the research objectives, this research is classified into descriptive research, which aims to provide an objective description of certain phenomena (Sugiyono, 2017). The approach taken in this research is quantitative, specifically the quantitative relationship approach, whereas the data collection technique is by distributing questionnaires using Google Form (Creswell, 2013).

Population and Sample

The population in this study were Geography Education students, Class of 2020. A total of 56 respondents were taken as a sample using proportional random sampling.

Research Measurement

The measurement of the family support variable is based on 5 indicators. Variables of learning motivation, learning outcomes, and learning achievement all have 5 indicators, as well. The variables were measured using a Likert scale (1=strongly disagree to 5=strongly agree).

Data Analysis Technique

The data analysis technique uses Partial Least Square (PLS) to analyze complex relationships using a sample with less than 100 respondents. Partial least squares allows the study to analyze all variables in the model simultaneously, not separately. The variables in this study include family support, learning motivation, learning outcomes and learning achievement.

Research Design

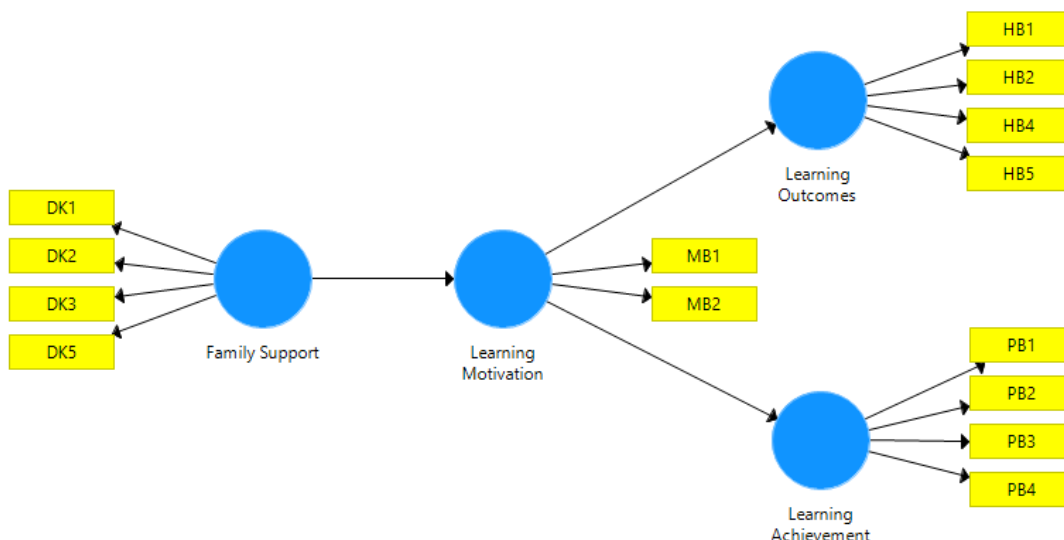


Figure 1. Research Model

The results of this study indicate a relationship between the influence of family support on learning outcomes and achievement with learning motivation as a mediating variable. This study uses two resources, namely primary data and secondary data. Primary data was obtained through questionnaires from respondents' answers, while secondary data was obtained from books and articles relevant to the research theme. Furthermore, the questionnaire data that was collected and converted into interval data was analyzed using the SmartPLS version 3.3.7 application to identify the relationship between variables. The stages in data processing include; 1) Outer Loadings, 2) Construct Reliability and Validity, 3) Discriminant Validity data using path coefficients.

Results and Discussion

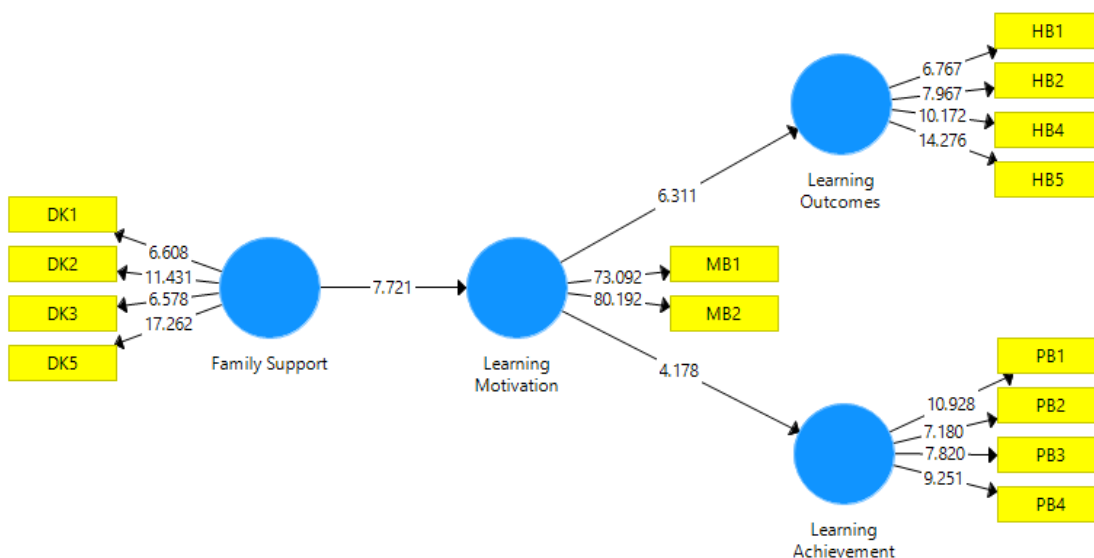


Figure 2. Research Model Results

To see the effect of the relationship between each variable, Bootstrapping with path coefficients is used. The effect is indicated by the p value of 95% or less than 0.05

as a condition for the hypothesis to be accepted. Figure 2 shows the research model as a result of data processing using the PLS Algorithm. The relationship between variables is shown as family support affects learning outcomes and achievement with learning motivation as a mediating variable.

In the step to test the feasibility of the research model, data processing uses the PLS Algorithm which generates outputs in the form of outer loadings, construct reliability and validity, and discriminant validity.

Outer Loadings

Table 1. Outer Loadings

Variable	Family Support	Learning Outcomes	Learning Motivation	Learning Achievement
DK1	0.715	-	-	-
DK2	0.808	-	-	-
DK3	0.684	-	-	-
DK5	0.841	-	-	-
HB1	-	0.717	-	-
HB2	-	0.738	-	-
HB4	-	0.871	-	-
HB5	-	0.789	-	-
MB1	-	-	0.979	-
MB2	-	-	0.979	-
PB1	-	-	-	0.789
PB2	-	-	-	0.782
PB3	-	-	-	0.724
PB4	-	-	-	0.845

Based on Table 1, the processed data generate good data with an indicator value of more than 0.6, meaning that the data on discriminant validity can be accepted.

Construct Reliability and Validity

Table 2. Construct Reliability and Validity

Matrix	Cronbach's Alpha	Rho_A	Composite Reliability	Average Variance Extracted (AVE)
Family Support	0.767	0.803	0.848	0.585
Learning Outcomes	0.793	0.820	0.861	0.610
Learning Motivation	0.957	0.957	0.979	0.958
Learning Achievement	0.794	0.804	0.866	0.618

Based on Table 2, the results of construct reliability and validity show good data and only display relevant relationships between variables.

Discriminant Validity

Table 3. Discriminant Validity

Variable	Family Support	Learning Outcomes	Learning Motivation	Learning Achievement
Family Support	0.765			
Learning Outcomes	0.518	0.781		
Learning Motivation	0.655	0.605	0.979	
Learning Achievement	0.610	0.558	0.487	0.786

Path Coefficients

Table 4. Path Coefficients

Variable	Original sample (O)	Sample Mean (M)	Standard Deviation	T Statistic (O/STDEV)	P Values
----------	---------------------	-----------------	--------------------	-------------------------	----------

	<i>(STDEV)</i>				
Family Support -> Learning Motivation	0.655	0.663	0.085	7.705	0.000
Learning Motivation -> Learning Outcomes	0.605	0.623	0.092	6.586	0.000
Learning Motivation -> Learning Achievement	0.487	0.499	0.111	4.371	0.000

Table 4 shows the results of drawing conclusions and proving the hypothesis, as seen from the path coefficients. Testing using bootstrapping aims to minimize abnormal data in the test.

The relationship of family support to learning motivation

Table 4 shows the path coefficient values for the effect of learning motivation on learning outcomes as seen from the original sample value of 0.655, sample mean of 0.66, standard deviation (STDEV) of 0.85, T statistic of 7.75, and p value of 0.000. Research (Martin & Bolliger, 2018); (Ragusa & Crampton, 2018) shows that the role of family support and educators in terms of communication gives students positive energy in their learning motivation. Moreover, a number of studies (Garbe et al., 2020); (Smith et al., 2021); (Rutherford et al., 2022) report that students' learning motivation is prone to decline, especially during online learning because they have to adapt to new learning system conditions. Therefore, the role of parents to continuously monitor and maintain their children's learning motivation is very important; one of which is by applying effective learning methods (Han, Yin, & Boylan, 2016); (Margarett & Lee, 2015); (Sawalha et al., 2017). In addition, (Hopland & Nyhus, 2016) found that the available learning facilities are also able to influence students' learning motivation.

From the formation of motivation from the external environment of the family, it will influence other aspects such as students will know the direction of learning. This opinion is also explained by social cognitive theorists who state that motivations will set goals for themselves and direct their behavior (Henry, 2010). Thus motivation will affect the student's choice, for example, the student will spend his time playing games all day together with his friends or will focus and set self-regulation to achieve his dream of continuing his studies to his favorite university. Nevertheless, students deserve to gain broader experience in their youth. They can play and have fun with their friends but need control from their parents until they have responsibility for their duties as students.

The next influence is on the efforts and struggles of students in learning. Motivation can raise the spirit of student awareness in carrying out learning activities. Students who conduct learning with enthusiasm will be able to see the final process and results compared to students who do learning lazily (Pintrich, Marx, & Boyle, 1993). Students who do learning earnestly will gain experience from diverse learning processes, whereas students who play around they will probably get enough grades just for the passing grades of the subjects or worse than that.

Students are likely to perform a task with a high initiative or initiation if they have a strong motivational impulse. We can pay attention to this when students are given assignments that require critical thinking skills. Some students who have self-initiation may hold back and continue to try to complete the task and some students who lack initiation may give up or despair. For example, in the practice of math problems, the student who has the initiation will continue to try to solve even if he does not know

whether the result is correct or not compared to the student who is desperate they will cheat on the results that have been completed by his friend.

Students' cognitive processes are also influenced by students' internal and external motivations. In classroom learning, for example, students who have motivation will carry out meaningful learning activities. They will try to truly understand the material perfectly and if they find it difficult they will not be embarrassed to ask the teacher or friend who has mastered the material. In addition, they try to understand the material with the aim that it can be applied to everyday life. For example, learning mathematics, they will try to apply it in managing the daily pocket money expenditure so that the rest they can save for urgent needs.

The relationship between learning motivation and learning outcomes

Table 4 shows the path coefficients for the relationship between family support and learning motivation as seen from the original sample value of 0.605, sample mean of 0.623, standard deviation (STDEV) of 0.92, T statistic of 6.586, and p value of 0.000. When students have high learning motivation, they will be very enthusiastic in the learning process in class, so they will find it easier to understand the learning material and improve their skills and competencies. This notion is in accordance with a study conducted by (Wekerle, Daumiller, & Kollar, 2022) on how interactive learning arises to improve student learning motivation which can lead to improved learning outcomes.

Learning performance is a manifestation of high student learning motivation. Because of other influences such as behaviors that are directed at goals, effort and energy, initiatives and activities, perseverance and persistence, cognitive processing and consequential impacts so that motivation can improve student performance in learning. In addition, the study (Konold, Cornell, Jia, & Malone, 2018) found that high interest in schools is a core part of measuring student involvement in their learning activities. Factors that spearhead student engagement to obtain great learning outcomes include on the learning culture and the quality of the learning experience provided through the subject as it offers a diversity of learning opportunities that increase student engagement.

Reinke, (2019) added that students' perceptions of the learning environment in the classroom have been shown to influence their behavior and learning outcomes. In addition, other supporting factors such as the school climate that can awaken creativity, collaboration, active learning and integrative thinking can make students have involvement in the learning process (Hudson & Carrasco, 2015); (Konold et al., 2018). Courtner, (2014) has an additional opinion that faculty-student interaction, a supportive campus environment is an indicator for measuring how far students' involvement in the learning process is, but excessive workload and assignments will limit students in their involvement in classroom management.

Ladd & Dinella, (2009) found that students who showed behavioral involvement in learning and had high affectiveness made it possible to have higher academic achievement. In addition, further studies have shown that peer engagement has the potential to influence student academic learning outcomes. Interestingly some literature has found that the quality of relationships with peers has an important role to support the improvement of student learning outcomes, it shows that peers are important to support the student's academic process, foster a sense of belonging as well as a means for group discussions (Courtner, 2014); (Hudson & Carrasco, 2015). Different opinions that view the function of the curriculum must be able to represent the interests

and goals of students then students will be involved and enthusiastic in the learning process (Wang & Eccles, 2013).

In fact, the institution has the function of providing supportive services as a means for students to carry out optimal learning activities. This means that the agency acts as a facilitator for all students' academic service needs. This has been proven by the results of research from (Mäenpää, Järvenoja, Peltonen, & Pyhältö, 2019); (Nilsson & Stomberg, 2008) who mentions that institutions have a significant influence on student learning motivation through the provision of supportive learning facilities. In addition the results of the study by (Nilsson & Stomberg, 2008) explain that extrinsic motivation has a higher dominance to be used as a benchmark for students' motivational scores compared to intrinsic factors such as attitudes.

The relationship between learning motivation and learning achievement

Table 4 shows the path coefficient values for the relationship between learning motivation and learning achievement as seen from the original sample value of 4.478, sample mean of 0.499, standard deviation (STDEV) of 0.111, T statistic of 4.371, and p value of 0.000. High learning motivation will affect enthusiasm for learning and finishing assignments on time. Students who have high learning motivation will have good time management in managing learning activities and assignments (Muljana et al., 2021), whereas students who lack motivation tend not to manage their study time or do their work. Consequently, the quality of their final grades may be at risk (Yamakawa, Delgado, Díaz, Garayar, & Laguna, 2013); (Zebari, Allo, Mohammedzadeh, & Behbood, 2018).

Achievement can be defined as improving the skills and understanding of students, through achievement, an assessment of students can be carried out through the cognitive domain (Madigan & Curran, 2021). The achievement of student learning achievement can be identified through two measuring instruments, namely, the success achieved and the actual achievement. The success achieved leads to the student's view of something that has been achieved by them, while the actual achievement leads to the student's cognitive test scores (R. Wu & Yu, 2022).

The results of this study still support some previous studies such as (Brugginka, Meijera, Goeiab, & M.Kootb, 2014); (Konold et al., 2018); (Oga-Baldwin & Nakata, 2017). Among the factors that have a significant influence on academic achievement are cognitive, affective and behavioral involvement of students (Al-Bahadli, 2020). Students' academic achievement is closely related to the length of time that students dedicate to independent learning and utilizing the various learning resources available (Reinke, 2019). Based on the data that has been analyzed, it shows that there is a significant correlation between learning motivation and learning achievement, so maintaining student learning motivation is very important to be carried out by the family environment, school and student play environment.

Looking at the results of the study by (H. Wu, Li, Zheng, & Guo, 2020) shows that intrinsic motivation is related to academic performance while extrinsic motivation is related to learning involvement but not related to student academic achievement. The strategy that can be done to improve academic achievement and student involvement in the learning process is to make self-regulation (Reinke, 2019), therefore (H. Wu et al., 2020) gives the idea that to improve higher academic performance, student motivation to learn must be encouraged by all student social environments.

Thus, it shows that students who have high learning motivation will be enthusiastic in all learning activities and able to establish self-regulated learning.

Motivation is a series of efforts to create certain conditions to stimulate someone to do something (Fauziah, Izzaty, & Kusumawardani, 2022). The other phenomenon, the importance of play in early childhood has been demonstrated, as some schools use it to increase students' motivation to learn (Fauziah, Kusumawardani, et al., 2022). Some of the results of studies that have been carried out by (Cazan, 2015); (Wang & Eccles, 2013); (H. Wu et al., 2020) who emphasize the role of learning motivation as an important factor to improve student learning achievement. Looking at the results of other studies, it shows that self-efficacy is one of the factors that have a great influence on students in achieving their academic achievements (Jianga et al., 2018) and this is an important addition to this study.

Conclusion

This study tries to determine the role of family support on learning outcomes and achievement through learning motivation among Geography Education Students at Siliwangi University. Family support has an effect on learning motivation which leads to improved learning outcomes and achievement. Low family support makes students' learning motivation decrease. Therefore, in practice, parents must provide support to their children to stay motivated and assist them in learning so that children are able to improve their learning outcomes and achievements. In addition, schools have a role and responsibility to provide the best service to students in fulfilling student learning facilities. Then, students also have an active role in choosing study friends as a form of collaboration and forming a support system. This study still has limitations as the scope of variables is still simple. Using an in-depth analysis technique or SEM analysis can improve and deepen the results of this study.

Acknowledgments

The author would like to thank the reviewers and all lecturers of the geography education study program at Siliwangi University for providing moral support in this research.

References

- Aisah, S., Mugiarto, H., & Anni, C. T. (2018). Internal Locus of Control dan Dukungan Keluarga terhadap Perencanaan Karir Siswa Kelas X SMA Negeri 1 Majenang. *Indonesian Journal of Guidance and Counseling: Theory and Application*, 7(3), 22–29.
- Al-Bahadli, K. H. (2020). The Correlation Between Iraqi EFL College Students Engagement and Their Academic Achievement. *International Journal of Research in Social Sciences and Humanities*, 10(2), 231–240.
- Alhafid, A. F., & Nora, D. (2020). Kontribusi Dukungan Sosial Orang Tua dan Peran Teman Sebaya Terhadap Hasil Belajar Sosiologi Siswa kelas X dan XI di SMA Negeri 2 Bengkulu Selatan. *Jurnal Sikola: Jurnal Kajian Pendidikan Dan Pembelajaran*, 1(4), 284–300.
- Andriani, R. R. (2019). Motivasi Belajar Sebagai Determinan Hasil Belajar Siswa (Learning Motivation as Determinant Student Learning Outcomes). *Jurnal Pendidikan Manajemen Perkantoran*, 4(1), 206–212.
- Brugginka, M., Meijera, W., Goeiab, S. L., & M. Kootb, H. (2014). Teachers' Perceptions of Additional Support Needs of Students in Mainstream Primary Education. *Learning and Individual Differences*, 30, 163–169.
- Cazan, A.-M. (2015). Learning Motivation, Engagement and Burnout Among University

- Students. *Procedia-Social and Behavioral Sciences*, 1971, 413–417.
- Chang, T.-Y., Hong, G., Paganelli, C., Phantumvanit, P., Chang, W.-J., Shieh, Y.-S., & Ming-Lun Hsu. (2021). Innovation of Dental Education During COVID-19 Pandemic. *Journal of Dental Sciences*, 16(1), 15–20.
- Charli, L., Ariani, T., & Asmara, L. (2019). Hubungan Minat Belajar Terhadap Prestasi Belajar Fisika. *SPEJ (Science and Physic Education Journal)*, 2(2), 52–60.
- Cheng, P., Tan, L., Ning, P., Li, L., Gao, Y., Wu, Y., ... Hu, G. (2018). Comparative Effectiveness of Published Interventions for Elderly Fall Prevention: A Systematic Review and Network Meta-analysis. *International Journal of Environmental Research and Public Health*, 15(3).
- Courtner, A. (2014). Impact of Student Engagement on Academic Performance and Quality of Relationships of Traditional and Nontraditional Students. *International Journal of Education*, 6(2).
- Creswell, J. W. (2013). *Research Design Pendekatan Kualitatif, Kuantitatif, dan Mixed*. Yogyakarta: Pustaka Pelajar.
- Eccles, J. S., Midgley, C., Wigfield, A., Buchanan, C. M., Reuman, D., Flanagan, C., & Mac Iver, D. (1997). Development During Adolescence: The Impact of Stage-Environment Fit on Young Adolescents' Experiences in Schools and in Families (1993). *The Evolution of Psychology: Fifty Years of the American Psychologist*, 475–501.
- Fauziah, P. Y., Izzaty, R. E., & Kusumawardani, E. (2022). Child Nurture and Learning Assistance for Children in The Family During the Covid -19 Pandemic. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 6(3), 2258–2265. <https://doi.org/10.31004/obsesi.v6i3.1809>
- Fauziah, P. Y., Kusumawardani, E., Nopembri, S., Mulyawan, R., Susilowati, I. H., Nugraha, S., ... Hasiholan, B. P. (2022). Play – Sleep Nexus in Indonesian Preschool Children before and during the COVID-19 Pandemic. *International Journal of Environmental Research and Public Health*, 19(17), 10695.
- Fitria, L., & Barseli, M. (2021). Kontribusi Dukungan Keluarga Terhadap Motivasi Belajar Anak Broken Home. *JPGI: Jurnal Penelitian Guru Indonesia*, 6(1), 6–9.
- Garbe, A., Ogurlu, U., Logan, N., & Cook, P. (2020). COVID-19 and Remote Learning: Experiences of Parents with Children During the Pandemic. *American Journal of Qualitative Research*, 4(3), 45–65.
- Grace Lai-Hung Wong, Wong, V. W.-S., Thompson, A., Jia, J., Hou, J., Lesmana, C. R. A., ... Chan, H. L.-Y. (2020). Management of Patients With Liver Derangement During the Covid-19 Pandemic: An Asia-Pacific Position Statement. *The Lancet Gastroenterology & Hepatology*, 5(8), 776–787.
- Han, J., Yin, H., & Boylan, M. (2016). Teacher Motivation: Definition, Research Development and Implications for Teachers. *Cogent Education*, 3(1), 1–18.
- Henry, L. A. (2010). Unpacking Social Inequalities: How a Lack of Technology Integration may Impede the Development of Multiliteracies among Middle School Students in the United States. *Technoliteracy, Discourse, and Social Practice: Frameworks and Applications in the Digital Age*, 9(4), 55–79.
- Hopland, A. O., & Nyhus, O. H. (2016). Learning Environment and Student Effort. *International Journal of Education Management*, 30(2), 2–22.
- Hudson, K., & Carrasco, R. (2015). Researching Nursing Students' Engagement: Successful Findings for Nursing. *International Journal of Nursing & Clinical*

- Practices*, 2(1), 1–5.
- Hurlock, E. B., Sijabat, R. M., Soedjarwo, & Istiwidayanti. (1991). *Psikologi perkembangan : Suatu pendekatan sepanjang rentang kehidupan*. Jakarta: Erlangga.
- Ibrahim, I. D. K., Cahyadi, I., Anggriani, R., & Abdurrahman, A. (2020). NPengaruh Motivasi dan Dukungan Keluarga terhadap Prestasi Belajar Mahasiswa Selama Penggunaan E-Learning Masa Pandemi Covid 19 (Studi Kasus pada Mahasiswa Fakultas Ekonomi dan Bisnis Universitas Bumigora). *Target: Jurnal Manajemen Bisnis*, 2(2), 265–278.
- Jianga, Y., Rosenzweig, E. Q., & Gaspardc, H. (2018). An Expectancy-Value-Cost Approach in Predicting Adolescent Students' Academic Motivation and Achievement. *Contemporary Educational Psychology*, 54, 139–152.
- Konold, T., Cornell, D., Jia, Y., & Malone, M. (2018). School Climate, Student Engagement, and Academic Achievement: A Latent Variable, Multilevel Multi-informant Examination. *Sage Journals: Aera Open*, 4(4).
- Ladd, G. W., & Dinella, L. M. (2009). Continuity and Change in Early School Engagement: Predictive of Children's Achievement Trajectories From First to Eighth Grade? *Journal of Educational Psychology*, 101(1), 190–206.
- Madigan, D. J., & Curran, T. (2021). Does Burnout Affect Academic Achievement? A Meta-Analysis Of Over 100,000 Students. *Educational Psychology Review*, 33(2), 387–405.
- Mäenpää, K., Järvenoja, H., Peltonen, J., & Pyhältö, K. (2019). Progress of Nursing Students' Motivation Regulation Profiles and Affiliations With Engagement, Burnout and Academic Performance. *International Journal of Teaching and Learning in Higher Education*, 31(3), 461–475.
- Margarett, J. A., & Lee, K. ho. (2015). Adult Education and Lifelong Learning: The US Experience and Beyond. In *International Encyclopedia of the Social & Behavioral Sciences (Second Edition)*. Elsevier.
- Martin, F., & Bolliger, D. U. (2018). Engagement Matters: Student Perceptions on The Importance of Engagement Strategies in the Online Learning Environment. *Online Learning*, 22(1), 205–222.
- Muljana, P. S., Dabas, C. S., & Luo, T. (2021). Examining The Relationships Among Self-Regulated Learning, Homework Timeliness, and Course Achievement: A Context of Female Students Learning Quantitative Topics. *Journal of Research on Technology in Education*, 1–20.
- Nilsson, K. EL, & Stomberg, M. I. W. (2008). Nursing Students Motivation Toward Their Studies-a Survey Study. *BMC Nursing*, 7(6), 1–7.
- Oga-Baldwin, W. Q., & Nakata, Y. (2017). Engagement, Gender, and Motivation: A Predictive Model For Japanese Young Language Learners. *System*, 65, 151–163.
- Oktiani, I. (2017). Kreativitas Guru Dalam Meningkatkan Motivasi Belajar Peserta Didik. *JK: Jurnal Kependidikan*, 5(2), 216–232.
- Pintrich, P. R., Marx, R. W., & Boyle, R. A. (1993). Beyond Cold Conceptual Change: The Role of Motivational Beliefs and Classroom Contextual Factors in The Process of Conceptual Change. *Review of Educational Research*, 63(2), 167–199.
- Prameswari, N. S., Saud, M., Amboro, J. L., & Wahyuningsih, N. (2020). The Motivation of Learning Art & Culture Among Students in Indonesia. *Cogent Education*, 7(1), 1–20.
- Purwanti, R., Suriansyah, A., & Rafianti, W. R. (2022). Parents' Assistance In Instilling

- Independence Character in Learning from Home During The Covid-19 Pandemic. *JPPM (Jurnal Pendidikan Dan Pemberdayaan Masyarakat)*, 8(2), 203–211. <https://doi.org/10.21831/jppm.v8i2.41865>
- Ragusa, A. T., & Crampton, A. (2018). Sense of Connection, Identity and Academic Success in Distance Education: Sociologically Exploring Online Learning Environments. *Rural Society*, 27(2), 125–142.
- Reinke, N. B. (2019). Promoting Student Engagement and Academic Achievement in First-Year Anatomy and Physiology Courses. *Advances in Physiology Education*, 43(4), 443–450.
- Remuzzi, A., & Remuzzi, G. (2020). Covid-19 and Italy: What Next? *The Lancet*, 395(10231), 1225–1228.
- Rutherford, T., Duck, K., Rosenberg, J. M., & Patt, R. (2022). Leveraging Mathematics Software Data to Understand Student Learning and Motivation During the COVID-19 Pandemic. *Journal of Research on Technology in Education*, 54(sup1), S94–S131.
- Safitri, F., & Yuniwati, C. (2019). Pengaruh Motivasi dan Dukungan Keluarga terhadap Prestasi Belajar Mahasiswa Tingkat II Prodi D-III Kebidanan Universitas Ubudiyah Indonesia. *Journal of Healthcare Technology and Medicine*, 2(2), 154–161.
- Santo, Z., Kimbay, M. M., & Werang, B. R. (2018). Pengaruh Dukungan Orang Tua dan Motivasi Belajar Terhadap Prestasi Belajar Bahasa Indonesia Siswa SD YPPK Maria Fatimah Merauke. *Magistra: Jurnal Keguruan Dan Ilmu Pendidikan*, 5(2), 053–063.
- Sawalha, K., Ali, M. Al, Sawalha, A., Ko, H., Abdelli, I., Shawish, S. El, & Hussien, A. (2017). Factors Influencing Academic Motivation Among UOS Medical Students. *Journal of Health Science*, 5, 177–180.
- Smith, J., Guimond, F.-A., Bergeron, J., St-Amand, J., Fitzpatrick, C., & Gagnon, M. (2021). Changes in Students' Achievement Motivation in The Context of the Covid-19 Pandemic: A Function of Extraversion/Introversion? *Education Sciences*, 11(1), 1–8.
- Sugiyono. (2017). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung: CV Alfabeta.
- Suharta, R. B., Septiarti, S. W., & Kusumawardani, E. (2020). School and Family Partnership : Informal Learning Context to Build Children Character. *Jurnal Ilmiah Visi*, 15(2), 189–198.
- Sujarwo, S., Kusumawardani, E., & Nurmalasari, Y. (2022). Does the motivation and parents involvement affected by distance learning media during Pandemic Covid 19 ? *Cakrawala Pendidikan*, 41(2), 481–493. <https://doi.org/https://doi.org/10.21831/cp.v41i2.46265>
- Sujarwo, S., Kusumawardani, E., Prasetyo, I., & Herwin, H. (2021). Parent involvement in adolescents' education: A case study of partnership models. *Cypriot Journal of Educational Sciences*. <https://doi.org/10.18844/cjes.v16i4.6013>
- Syahda, S. (2018). Hubungan Dukungan Keluarga Terhadap Kemandirian Anak Retardasi Mental di SDLB Bangkinang Tahun 2016. *Jurnal Basicedu*, 2(1), 43–48.
- Wang, M.-T., & Eccles, J. S. (2013). School Context, Achievement Motivation, and Academic Engagement: A Longitudinal Study of School Engagement Using a Multidimensional Perspective. *Learning and Instruction*, 28, 12–23.
- Wekerle, C., Daumiller, M., & Kollar, I. (2022). Using Digital Technology to Promote Higher Education Learning: The Importance of Different Learning Activities and Their Relations to Learning Outcomes. *Journal of Research on Technology in Education*, 54(1), 1–17.

- Wigfield, A., & Eccles, J. S. (2002). The Development of Competence Beliefs, Expectancies for Success, and Achievement Values From Childhood Through Adolescence. *Development of Achievement Motivation*, 91-120.
- Wu, H., Li, S., Zheng, J., & Guo, J. (2020). Medical Students' Motivation and Academic Performance: the Mediating Roles of Self-Efficacy and Learning Engagement. *Medical Education Online*, 25(1).
- Wu, R., & Yu, Z. (2022). Exploring the Effects of Achievement Emotions on Online Learning Outcomes: A Systematic Review. *Frontiers in Psychology*, 13.
- Yamakawa, P., Delgado, C., Díaz, E., Garayar, E., & Laguna, H. (2013). Factors Influencing The Use Of Mobile Technologies in A University Environment: A Case From Latin America. *International Journal of Information and Communication Technology Education (IJICTE)*, 9(2), 24-38.
- Zebari, S. M., Allo, S. A. A., Mohammedzadeh, H., & Behbood. (2018). Multiple Intelligences - Based Planning of EFL Classes. *Advances in Language and Literary Studies*, 9(2), 98. <https://doi.org/10.7575/aiac.all.v.9n.2p.98>