Analysis Of The Relationship Of Family Support On Learning Outcomes And Achievements Using Sem-Pls (Case Study Of Geography Education Students At Siliwangi University)

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Abstract: This study aims to analyze the relationship between family support on learning outcomes and achievement as well as the relationship between learning outcomes in student achievement. This study uses a quantitative approach with a multivariate type using Structural Equation Modeling-Partial Least Square (SEM-PLS) analysis. The results of the study found a relationship between family support on learning achievement based on the original sample value of 0.464, family support on learning outcomes of 0.508 and the relationship of learning outcomes on learning achievement of 0.329. Thus, to improve student learning achievement, full family support is needed which includes emotional, instrumental, assessment or reward and informational support.

Keyword : SEM-PLS, Family Support, Learning Achievement, Learning Outcomes

Introduction

In the learning process carried out by students there are various factors that influence it. The first factor is internal to students, one of which is motivation both internally and externally (Rosmalina & Zulyanty, 2019). Internal motivation is motivation that arises from within oneself. This motivation arises from self-awareness because it realizes the importance of being serious in learning and this motivation will help students understand how they carry out their learning activities (Saptono, 2016). While external motivation is influenced by the surrounding environment, one of which is family (Capotosto et al., 2017; Hopland & Nyhus, 2016). The second factor is an external factor, one of which is family support (Safitri & Yuniwati, 2019). Family support is an acceptance of what is done by family members (Arib, 2017; Fitria & Barseli, 2021), which includes emotional, instrumental, assessment or appreciation and informational support (Sholikah & Hanifah, 2021; Syahda, 2018).

Family support can be described through psychological guidance given by parents to their children to maintain their children's mental health (Taylor et al., 2020; Olatunji et al., 2020). In independent learning, the family is the main and first place that will provide children's learning guidance, this is part of instrumental family support (Wang, 2020). Another type of family support is in the form of emotional where the family becomes a place to consult children, provide advice, a place to provide motivation and so on (Sari, 2020). In addition, the influence given by parents can be in the form of educating children, conditions of tranquility in the family home, relationships between other family members and economic conditions of the family (Deni Andriani, 2020; Lestari et al., 2020; T. Handayani et al., 2020 ;Alhafid & Nora, 2020).

Student learning activities during the COVID-19 pandemic were carried out online, this made students unable to directly experience the interaction between teachers and their peers. In the long term, students will feel bored and bored in carrying out online learning (Astuti & Harun, 2020; I. Handayani & AlFarhatan Noor Asri, 2021; Hayati, 2020), so that the decrease in motivation can affect their learning outcomes and achievements. . Based on research conducted by Wijayani et al., (2017); Palittin et al., (2019) low learning motivation can affect student achievement and learning outcomes.

This study examines the direct relationship between family support on learning outcomes and achievement and the relationship between learning outcomes and student learning achievements. This research is considered important because it sees the family support variable as a core component in shaping children's enthusiasm to learn and achieve good learning outcomes and achievements. In addition, achievement and learning outcomes are two things that must be considered as factors that can be evaluated from the learning process (Stoner et al., 2014). In this study it was found that cognitive learning outcomes can improve learning achievement. Research that examines the relationship between family support learning outcomes and learning achievement has been carried out quite a lot, for example research conducted by Sulfemi, (2018) which examines the relationship between learning motivation and learning outcomes, Youngest, T. K., Vilardi, M., Akbar, P. , & Bernard, (2019) which examines the effect of learning independence on learning outcomes, and Ibrahim et al., (2020) which examines the effect of motivation and family support on learning achievement, but not many have studied the relationship between cognitive learning outcomes that can improve student learning achievement (Sulfemi, 2018).

This study analyzes the relationship of family support to learning outcomes and achievement directly by using the structural equation modeling partial least square SEM-PLS so as to produce

formative/reflective analysis results (Henseler et al., 2014; Hu L.-T. & Bentler P. M., 1999). However, in this study there are still shortcomings, namely the absence of a direct analysis of the variables that mediate the relationship between family support and learning outcomes and achievement. And also have not studied the affective and psychomotor learning outcomes. Thus, researchers can still develop this research by including more complex variables.

Method
Types of research
This study uses a quantitative approach with multivariate data types. The data used in this study are primary data obtained through questionnaires and secondary data obtained from relevant articles.
Population and sample
The study population was 110 students of Geography Education Class of 2020, which were then taken using a proportional random sampling technique of 57 samples, this is in accordance with the minimum sampling principle of 30 (Sugiyono, 2017). Sampling was carried out in March 2022.
**Research measurements**
The measuring instrument of this study uses a Likert scale of 1 to 5 (1 = strongly disagree, 5 = strongly agree) which produces ordinal data and is converted to interval data.
**Data analysis technique**
Data analysis used structural equation modeling partial least square SEM-PLS this is because this analysis is appropriate for analyzing complex variables. The results of this study analyze the relationship between family support on learning outcomes and achievement.

Research design
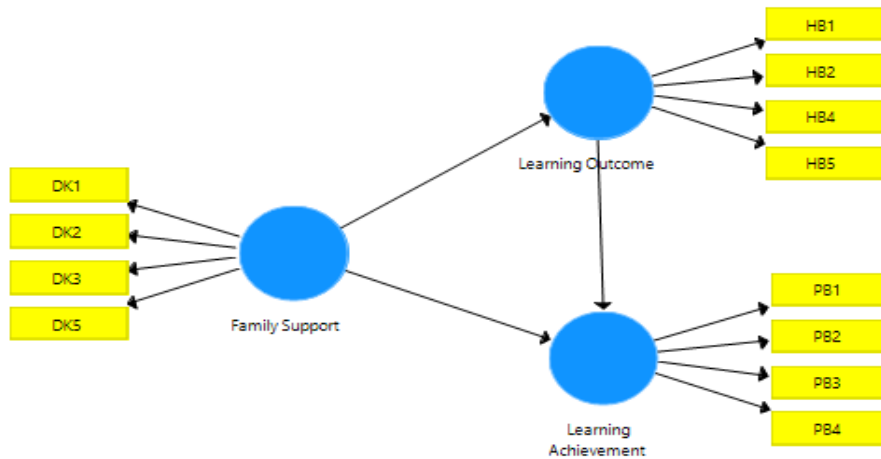
Figure 1 Research Model

Results And Discussion
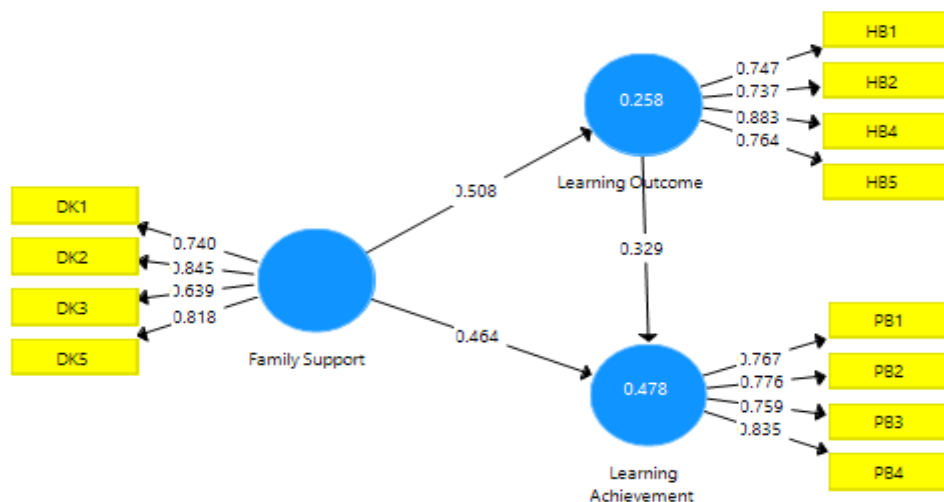
Figure 2 Research model result

Table 1 Outer Loadings

Indicator	Family Support	Learning Achievement	Learning Outcomes
DK1	0.740	-	-
DK2	0.845	-	-
DK3	0.639	-	-
DK5	0.818	-	-
HB1	-	-	0.747
HB2	-	-	0.737
HB4	-	-	0.883
HB5	-	-	0.764
PB1		0.767	-
PB2	-	0.776	-
PB3	-	0.759	-
PB4	-	0.835	-

From the results of the outer loadings, it shows that the analyzed data has a good level of relationship between indicators with a value above 0.6

Table 2 Contruct Reliability and Validity

Matrix	Cronbach's Alpha	Rho_A	Composite Reliability	Average Variance Extracted (AVE)
Family support	0.767	0.813	0.848	0.585
Learning Achievement	0.794	0.802	0.865	0.616
Learning Outcomes	0.793	0.807	0.865	0.616

From the results of construct reliability and validity, it shows that the data and indicators used have good values as indicated by Cronbach's alpha value above 0.7 and Average variance extracted (AVE) above 0.5

Table 3 Goodness of Fit

	Original Sample	Sample Mean (M)	95%	99%
Saturated model	0.110	0.086	0.107	0.115
Estimated model	0.110	0.084	0.102	0.115

The value of the Root Mean Square Residual (RMSR) is a measure of the mean absolute value of the residual covariance, the standard RMSR based on the transformation of the predicted covariance matrix into a correlation matrix. The goodness of fit model value less than 0.10 or 0.08 is considered a suitable model and is used to avoid model specification errors (Henseler et al., 2014; Hu L.-T. & Bentler P. M., 1999).

Table 4 Discriminant Validity

Variable	Family Support	Learning Outcomes	Learning Motivation
Family Support	0.765		-
Learning Achievement	0.631	0.785	-
Learning Outcomes	0.508	0.564	0.785

From the results of Discriminant Validity, it shows that each indicator has a good value.
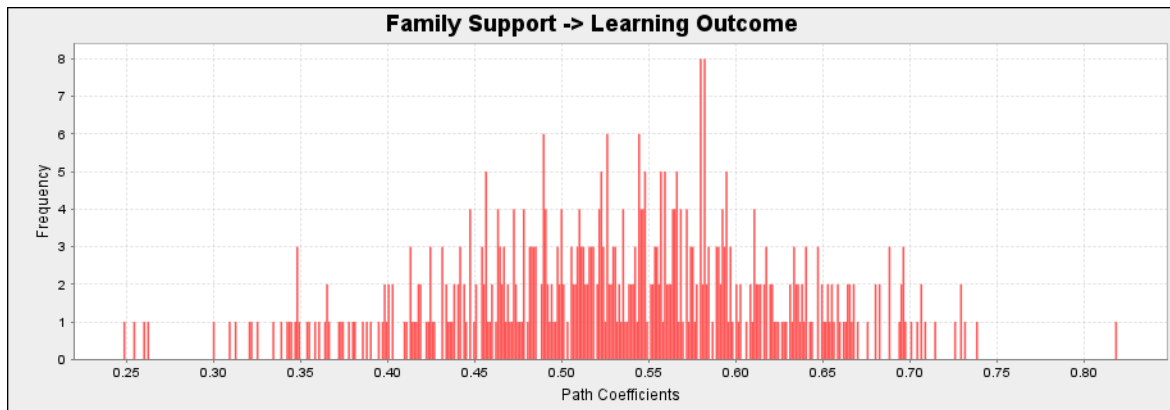
Table 5 Path Coefficients

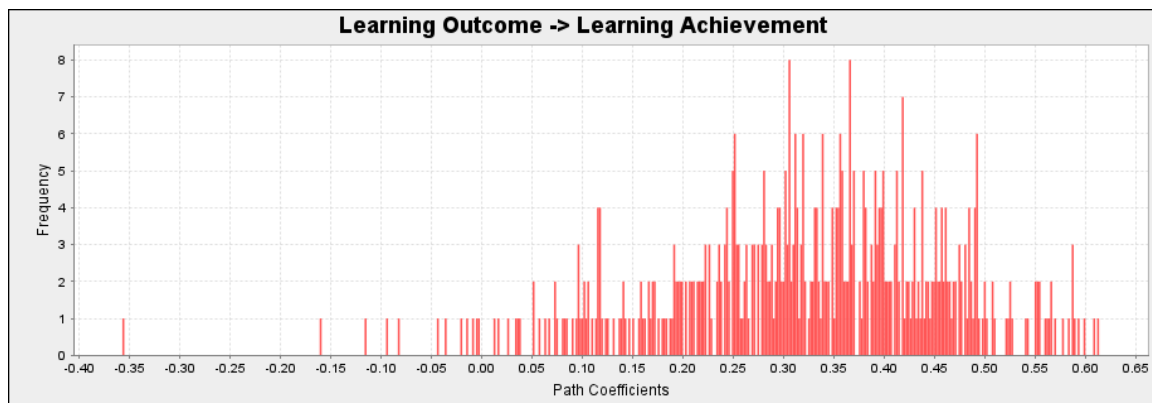| Variable	Original sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistic (|O/STDEV|)	P Values
Family Support -> Learning Achievement	0.464	0.476	0.103	4.506	0.000
Family Support -> Learning Outcomes	0.508	0.531	0.092	5.545	0.000
Learning Outcome->Learning Achievement	0.329	0.321	0.140	2.243	0.020

Based on the results of the path coefficients shown by the P Values of each variable, each variable has a very good level of relationship with each value below 0.05.
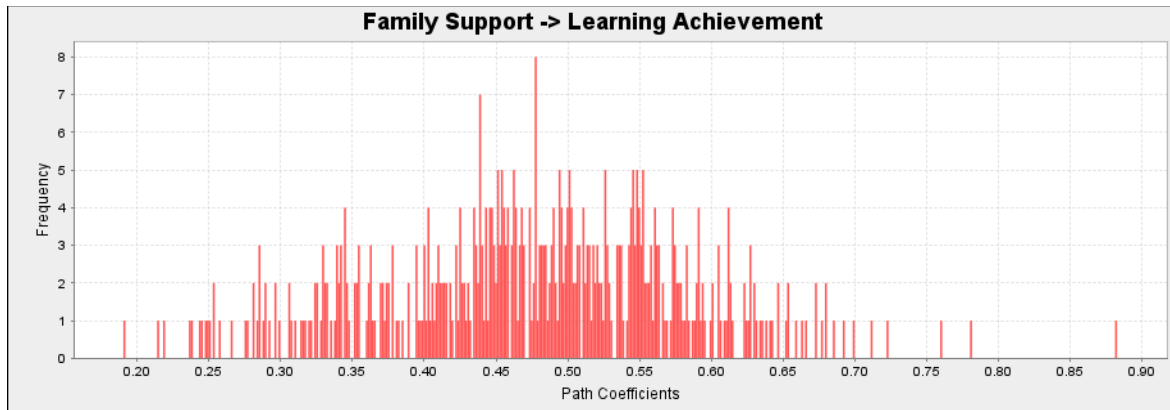
Figure 3 Path Coefficients Family Support -> Learning Achievement

Figure 4 Path Coefficients Family Support -> Learning Outcome

Figure 5 Path Coefficients Learning Outcome -> Learning Achievement

Family support has an influence on children's learning achievement, it can be seen in table 5 which is shown by the original sample value of 0.464, sample mean 0.476, standard deviation (STDEV) 0.103, T statistic 4.506 and P Value 0.000. This is in accordance with research conducted by Pratiwi, (2017) which shows that family support has an influence on children's learning achievement because through parental support children will have good mental and motivation (Wanda R, 2019; Palittin et al., 2019; Malwa, 2018; Annauval & Ghofur, 2021; Bing & Chang, 2019).

Furthermore, family support has an influence on student learning outcomes. Based on table 5 shows the results of the Path coefficients from the original sample of 0.508, sample mean 0.531,

standard deviation 0.092, T statistic 5.545 and P value 0.000. This is in accordance with the results of research conducted by Lestari et al., (2020) which states that family support affects learning outcomes through the intervening variable of learning intensity of 0.006 and there are other internal factors (Caspersen & Smeby, 2018; Erikson & Erikson, 2019; Irawan et al., 2017; Noda et al., 2021; Powell & Saint-Germain, 2016). In addition, in this study found a relationship between learning outcomes can have an influence on student achievement. This can be seen in table 5 which is shown by the original sample value of 0.329, sample mean 0.321, standard deviation (STDEV) 0.140, T statistic 2.23, and P value of 0.05.

Conclusion

Family support has a positive influence on achievement and learning outcomes, besides that good cognitive learning outcomes will have a positive influence on the achievement of student learning achievements. Thus, parents are expected to be able to provide full support which includes emotional, instrumental, assessment or reward and informational support so that they can indirectly improve their learning outcomes and achievements.

References

1. 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. https://doi.org/10.24036/sikola.v1i4.53
2. Annauval, A. R., & Ghofur, M. A. (2021). Lingkungan Keluarga dan Motivasi Belajar terhadap Hasil Belajar Mata Pelajaran Ekonomi pada Pembelajaran Daring. Jurnal Ilmu Pendidikan, 3(5), 2114–2122.
3. Arib, A. W. (2017). Do Family Backgrounds Control Students' Motivation and Achievement in Learning a Foreign Language? The Case of One Islamic Senior High School in Jambi. Ta'dib, 22(1), 1–38.
4. Astuti, I. Y., & Harun, H. (2020). Tantangan Guru dan Orang Tua dalam Kegiatan Belajar Dari Rumah Anak Usia Dini pada Masa Pandemi Covid-19. Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini, 5(2), 1454–1463. https://doi.org/10.31004/obsesi.v5i2.808
5. Bing, R., & Chang, Y.-C. (2019). Students' Family Support, Peer Relationships, and Learning Motivation and Teachers Fairness Have an Influence on the Victims of Bullying in Middle School of Hong Kong. International Journal of Educational Methodology, 5(1), 97–107. https://doi.org/10.12973/ijem.5.1.111
6. Bungsu, T. K., Vilardi, M., Akbar, P., & Bernard, M. (2019). Pengaruh Kemandirian Belajar Terhadap Hasil Belajar Matematika Di Smkn 1 Cihampelas. Journal on Education, 1(2), 382-389., 01(02), 382–389.
7. Capotosto, L., Kim, J. S., Burkhauser, M. A., Oh Park, S., Mulimbi, B., Donaldson, M., & Kingston, H. C. (2017). Family Support of Third-Grade Reading Skills, Motivation, and Habits. AERA Open, 3(3), 233285841771445. https://doi.org/10.1177/2332858417714457
8. Caspersen, J., & Smeby, J. C. (2018). The relationship among learning outcome measures used in higher education. Quality in Higher Education, 24(2), 117–135. https://doi.org/10.1080/13538322.2018.1484411
9. Deni Andriani. (2020). Pengaruh Fasilitas Belajar dan Motivasi Belajar Terhadap Hasil Belajar Siswa Pada Mata Pelajaran Ekonomi. Jurnal Pendidikan Ekonomi (JUPE), 7(3), 71–75. https://doi.org/10.26740/jupe.v7n3.p71-75
10. Erikson, M. G., & Erikson, M. (2019). Learning outcomes and critical thinking–good intentions in conflict. Studies in Higher Education, 44(12), 2293–2303. https://doi.org/10.1080/03075079.2018.1486813
11. Fitria, L., & Barseli, M. (2021). Kontribusi dukungan keluarga terhadap motivasi belajar anak broken home. JPGI (Jurnal Penelitian Guru Indonesia), 6(1), 6. https://doi.org/10.29210/02697jpgi0005
12. Handayani, I., & AlFarhatan Noor Asri, A. M. (2021). Peran Guru dan Orang Tua dalam Mengatasi Kesulitan Belajar Matematika Anak Slow Learner di Masa Pandemi Covid-19. Jurnal Pedagogi Dan Pembelajaran, 4(2), 202. https://doi.org/10.23887/jp2.v4i2.36014
13. Handayani, T., Khasanah, H. N., & Yoshinta, R. (2020). Pendampingan Belajar Di Rumah Bagi Siswa Sekolah Dasar Terdampak Covid-19. ABDIPRAJA (Jurnal Pengabdian Kepada Masyarakat), 1(1), 107. https://doi.org/10.31002/abdipraja.v1i1.3209
14. Hayati, A. S. (2020). Peran Orang Tua dalam Meningkatkan Motivasi Belajar Anak Dengan Sistem Daring pada Masa Pandemi di Desa Depokrejo. Tasyri', 27(2), 23–32.
15. Henseler, J., Dijkstra, T. K., Sarstedt, M., Ringle, C. M., Diamantopoulos, A., Straub, D. W., Ketchen, D. J., Hair, J. F., Hult, G. T. M., & Calantone, R. J. (2014). Common Beliefs and Reality

About PLS: Comments on Rönkkö and Evermann (2013). Organizational Research Methods, 17(2), 182–209. https://doi.org/10.1177/1094428114526928

16. Hopland, A. O., & Nyhus, O. H. (2016). Learning environment and student effort Article information. International Journal of Educational Management, 30(2), 2–22.

17. Hu L.-T., & Bentler P. M. (1999). 103. Cutoff criteria for fit indexes in covariance structure analysis: conventional criteria versus new alternatives. Structural Equation Modeling, 6(July 2012), 1–55. https://doi.org/10.1080/10705519909540118

18. Ibrahim, D. I., Cahyadi, I., Anggriani, R., & Abdurrahim, A. (2020). Pengaruh Motivasi dan Dukungan Keluarga terhadap Prestasi Belajar Mahasiswa Selama Penggunaan. Target: Jurnal Manajemen Dan Bisinis, 2(2), 265–278. https://doi.org/https://doi.org/10.30812/target.v2i2.1016yanag

19. Irawan, V. T., Sutadji, E., & Widiyanti. (2017). Blended learning based on schoology: Effort of improvement learning outcome and practicum chance in vocational high school. Cogent Education, 4(1). https://doi.org/10.1080/2331186X.2017.1282031

20. Lestari, A., Ma'wiyah, N., & Ihsan, M. (2020). Kontribusi Dukungan Keluarga dan Teman Bergaul Terhadap Indeks Prestasi Kumulatif Mahasiswa Dengan Memperhatikan Intensitas Belajar. Al-Khwarizmi: Jurnal Pendidikan Matematika Dan Ilmu Pengetahuan Alam, 8(1), 51–60. https://doi.org/10.24256/jpmipa.v8i1.1318

21. Malwa, R. U. (2018). Dukungan Sosial Orangtua Dengan Motivasi Belajar Siswa Putra Tahfidz Al-Qur'an. Psikis: Jurnal Psikologi Islami, 3(2), 137. https://doi.org/10.19109/psikis.v3i2.1758

22. Noda, A., Kim, S., Yung Chi Hou, A., Lu, I. J. G., & Chou, H. C. (2021). The relationships between internal quality assurance and learning outcome assessments: challenges confronting universities in Japan and Taiwan. Quality in Higher Education, 27(1), 59–76. https://doi.org/10.1080/13538322.2020.1838406

23. Olatunji, O. A., Idemudia, E. S., & Olawa, B. D. (2020). Family support, self-efficacy and suicidal ideation at emerging adulthood: a mediation analysis. International Journal of Adolescence and Youth, 25(1), 920–931. https://doi.org/10.1080/02673843.2020.1779762

24. Palittin, I. D., Wolo, W., & Purwanty, R. (2019). Hubungan Motivasi Belajar Dengan Hasil Belajar Fisika. MAGISTRA: Jurnal Keguruan Dan Ilmu Pendidikan, 6(2), 101–109. https://doi.org/10.35724/magistra.v6i2.1801

25. Powell, D. C., & Saint-Germain, M. (2016). Student Learning Outcome Assessment in NASPAA Programs: A Review of Validity and Reliability. Journal of Public Affairs Education, 22(4), 507–514. https://doi.org/10.1080/15236803.2016.12002263

26. Pratiwi, N. K. (2017). Pengaruh Tingkat Pendidikan, Perhatian Orang Tua, Dan Minat Belajar Siswa Terhadap Prestasi Belajar Bahasa Indonesia Siswa Smk Kesehatan Di Kota Tangerang. Pujangga, 1(2), 31. https://doi.org/10.47313/pujangga.v1i2.320

27. Rosmalina, D., & Zulyanty, M. (2019). Dukungan Orang Tua Terhadap Motivasi Belajar Siswa Kelas Unggul Desy Rosmalinda 1 dan Marni Zulyanty 2 1,2). Jurnal Gentala Pendidikan Dasar, 4(I), 64–75.

28. 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. https://doi.org/10.33143/jhtm.v2i2.248

29. Saptono, Y. J. (2016). Motivasi dan Keberhasilan Belajar Siswa. Volume I | Nomor 1 | Maret, 1(1), 189–212. http://christianeducation.id/e-journal/index.php/regulafidei/article/view/9

30. Sari, T. T. (2020). Self-Efficacy dan Dukungan Keluarga Dalam Keberhasilan Belajar Dari Rumah di Masa Pandemi Covid-19. Education Journal : Journal Educational Research and Development, 4(2), 127–136. https://doi.org/10.31537/ej.v4i2.346

31. Sholikah, M., & Hanifah, U. (2021). Peran Orang Tua dalam Membantu Belajar Anak di Masa Pandemi Covid-19. PEMBELAJAR: Jurnal Ilmu Pendidikan, Keguruan, Dan Pembelajaran, 5(1), 5. https://doi.org/10.26858/pembelajar.v5i1.14694

32. Stoner, K. R., Tarrant, M. A., Perry, L., Stoner, L., Wearing, S., & Lyons, K. (2014). Global Citizenship as a Learning Outcome of Educational Travel. Journal of Teaching in Travel and Tourism, 14(2), 149–163. https://doi.org/10.1080/15313220.2014.907956

33. Sulfemi, W. B. (2018). Hubungan Motivasi Belajar Dengan Hasil Belajar Ips Di Smp Kabupaten Bogor. Edutecno, 18(106), 1–12. https://doi.org/10.31227/osf.io/eqczf

34. Syahda, S. (2018). Hubungan Dukungan Keluarga Terhadap Kemandirian Anak Retardasi Mental Di Sdlb Bangkinang Tahun 2016. Jurnal Basicedu, 2(1), 43–48. https://doi.org/10.31004/basicedu.v2i1.25

35. Taylor, Z. E., Ruiz, Y., Nair, N., & Mishra, A. A. (2020). Family support and mental health of Latinx children in migrant farmworker families. Applied Developmental Science, 0(0), 1–18. https://doi.org/10.1080/10888691.2020.1800466

36. Wanda R, I. (2019). Hubungan Minat Belajar terhadap Prestasi Belajar Fisika. Science and Physics Education Journal (SPEJ), 2(2), 52–60. https://doi.org/10.31539/spej.v2i2.727

37. Wang, X. (2020). Capital, habitus, and education in contemporary China: Understanding motivations of middle-class families in pursuing studying abroad in the United States. Educational Philosophy and Theory, 52(12), 1314–1328. https://doi.org/10.1080/00131857.2020.1767074

38. Wijayani, I., Haenilah, E. Y., & Sugiman. (2017). Hubungan Motivasi Belajar Dengan Prestasi Belajar Siswa Kelas V. Jurnal Pedagogi, 6(6), 3–7.