Student Dropouts and their Economic Impact in the Post-Pandemic Era: A Systematic Literature Review

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Abstract
A systematic literature review (SLR) was conducted to investigate the factors contributing to student dropouts and their economic impact in the post-Covid-19 pandemic era. This article explores specific themes through 21 different articles. The articles have been found through two databases, namely SCOPUS and Web of Science. The Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) technique was administered as a guide for systematic reviews and data collection and subsequently used in the implementation of the study. Studies published between the years 2020 and 2024 were considered for this systematic review. The findings of the study reveal four factors contributing to student dropouts during the post-pandemic era. Meanwhile, this study also identified two themes from the economic impact of student dropouts during the post-pandemic era. Thus, several strategies have also been proposed, such as the granting of government financial aid, the establishment of guidance and counseling units, free health screening services, organizing workshops and religious societies, enhancing the role of parents, improving the relationship between instructors and students, providing incentives, organizing mentor-mentee programs, providing public transportation, and the construction of conducive dormitories and safe roads to overcome the issue of student dropouts as a result of the above factors.
Keywords: Economics, Students Dropout, Post-Pandemic, School, Education Sector, COVID-19.

Introduction
The issue of dropouts among students regardless of whether it is at the primary school level, secondary school level or even university level is not foreign to our country. According to Zakiyah Jamaludin (2011), student dropout is a term to describe a person that is unable to continue schooling or studies at the school or higher education level. This dropout occurs due to the closure of schools for a long time due to natural disasters or pandemics, conflicts or any factor that contributes to disruption in learning opportunities (Jouse and Khairul Azhar Jamaludin, 2023). In addition, dropout is also understood as a process of abandonment,

whether voluntary or involuntary at the university level that has stopped registering in two or more consecutive academic semesters (Gallegos et al., 2018).

Aina et al (2022), further described that the issue of dropouts among students is one of the biggest issues that countries around the world are trying to resolve. Not only this is a historical matter but it is also a universal phenomenon. Student dropout is a critical indicator to know the level of quality of a country's education system because this can reveal its success or failure in the direction of adaptation and transition of students in learning. This statement is supported by the study of Castro-Montoya et al (2021), whereby the country of Colombia strives to establish an efficient and comprehensive education system because they view student dropout as a loss of efficient resources. Furthermore, the presence of the Covid-19 pandemic has become another contributor to the increase in student dropouts all over the world. The impact of this pandemic has affected universal well-being in terms of mental health, income, physical health and economic conditions. Therefore, efforts to prevent the issue of student dropout become a big challenge for all educational institutions (Nurmalitasari et al., 2023a).

In the context of Malaysia, education for all is the goal of the government through the Ministry of Education Malaysia (MoE) and Ministry of Higher Education Malaysia (MoHE) to bridge the gap in education, production and skills across all sectors in Malaysia's society. The Malaysian government has also taken various initiatives to ensure that our education system is constantly developed and able to overcome changes and challenges in the 21st century regardless of gender, race, religion and background. Next, quality education under the fourth Sustainable Development Goal (SDG) also emphasizes that educational institutions focus on efforts to improve teaching and learning (T&L) to improve the quality of education (Norfarahzatul Asikin Zakari and Mohamad Zuber Abd Majid, 2022). In addition, the National Education Philosophy or also known as *Falsafah Pendidikan Kebangsaan (FPK)* has been introduced to produce a balanced and comprehensive society from the physical *(jasmani)*, emotional *(emosi)*, spiritual *(rohani)* and intellectual *(intelek)* aspects (JERI).

The Ministry of Education Malaysia (MoE), in a written parliamentary response, reported that as many as 21,316 or 0.22 percent of all students had dropped out of school since the beginning of school closures due to the Covid-19 pandemic from March 2020 to July 2021 (Lim, 2021). The Ministry of Higher Education Malaysia (MoHE) also reported ealier that a total of 17,613 university students dropped out while 5,165 students were suspended in 2022. In Sarawak, more than 50 percent of students do not have access to the internet and devices required for online learning in 2020. According to the House of Representatives Malaysia or *Dewan Rakyat Malaysia*, there are as many as 17,613 undergraduate students who did not complete their studies at the public university level in 2021, which is an increase of 4,000 students who dropped out compared to 2020. In addition, there is also discrimination between urban and rural students. Students in rural areas feel marginalized due to their difficult locality to get good internet access. According to Nur Syawal Syazwani Ibrahim and Norfatiha Othman (2022), students who live in rural areas are more likely to drop out of school because they have difficulty accessing the internet. Their locality where it is difficult to reach

the internet network is stressful and makes students less motivated to continue learning online.

Past studies have shown that dropouts among students have a negative impact on individuals, educational institutions and the sosioeconomics of the society. The study of Nurmalitasari et al (2023b), elaborates that the negative effects can be seen from three aspects in the context of the country of Indonesia. The three aspects are, i) the individual aspect where unhealthy mental health occurs, ii) the educational institutions aspect where this will cause the financial situation of the institution to decline, and iii) the socioeconomic aspect of society where university graduates will contribute a large impact to educational returns and economic growth.

As discussed above, the more student drops out in learning, the less highly educated society becomes. Therefore, the workforce that can be produced for the national economy is decreasing. A reduced workforce also results in low productivity and subsequently a decline in economic growth. Therefore, economic growth is one measure to see the success of a country which can be influenced by several factors including workforce, capitals and technological advancement (Nugroho, 2014). The workforce can influence economic growth from the aspects of quantity and quality. This can be proven through the study of Hanushek and Woessmann (2020a). Researchers found that losing a third of the academic year due to the Covid-19 pandemic would affect students' earnings by 2 - 4 percent while they are working. Their study also revealed that learning loss will result in skill loss. The subsequent loss of skills leads to a decrease in productivity. Their study further reports that the decline in productivity could result in as much as 1.5 percent lower on average to the gross domestic product (GDP).

In conclusion, the findings of this study are expected to overcome the issue of student dropout. Next, the findings of this study hope to identify relevant topics for future studies as well as provide more comprehensive knowledge about the factors contributing to student dropout and the economic impact in the post-Covid-19 pandemic era based on the studies that have been done. This study has two research objectives, namely i) to explore the factors contributing to student dropouts during the post-Covid-19 pandemic era and ii) to study the economic impact of student dropouts during the post-Covid-19 pandemic era.

Methodology
This study has applied a qualitative approach by using the Preffered Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) technique. This approach is suitable for producing a systematic literature review with high impact because this method involves a lot of data and the process takes a long time. In short, this approach works to transparently report on why the study was conducted, what the authors have conducted and the results of the study that they have found (Page et al., 2021a). According to Okoli (2015a), the PRISMA method provides a clear protocol to help other researchers apply the same methodology in conducting their research on a topic. In addition, Page et al (2021b), think that this systematic review plays a very big role because this method provides a synthesis of the knowledge of a field that is from the aspect of research problems, future research or explaining why a

phenomenon occurs. This systematic review has been widely used in the field of medicine and is now being extended to other fields such as education and economics (Gurevitch et al., 2018). The PRISMA method goes through four phases, namely, i) identification, ii) screening, iii) eligibility and iv) inclusion to help researchers find appropriate literature to answer their research objectives.

Phase 1: Identification
This study used two databases namely SCOPUS and Web of Science (WoS) to search for journal articles. The main keywords were identified for the article search namely 'economic', 'impact', 'dropouts' and 'student' with any synonyms, related terms and variants. The keywords serve to expand the search for journal articles related to the research topic. According to Okoli (2015b), keywords were produced based on the research objectives of the study by searching for similar terms and suggested by previous studies. In this phase, the researcher used the keywords and was assisted by the "Boolean Operator Function" in producing search strings as in Table 1. A total of 177 items were obtained from SCOPUS while a total of 157 items were obtained from WoS. The total number of items that have been obtained from both databases is 334.

Table 1.
Search strings used in both databases

SCOPUS	TITLE-ABS-KEY ((*economic AND impact*) AND (dropouts) AND (student*))
Web of Science (WoS)	TS = ((economic) AND (impact) AND (dropouts) AND (student*))

Phase 2: Screening
In the screening phase, the researcher has manually identified and removed duplicate items. A total of 12 items were identified that overlapped between the two databases. Next, the researcher used inclusion criteria and exclusion criteria as shown in Table 2 to screen the items. Items that use English language only are considered in the item selection. In addition, items related to book chapters, conference proceedings and others are also not considered in the item selection. Time periods published before 2020 are also not considered in this screening phase. Finally, subject areas related to the study topic of 'student dropout and economic impact' are only considered in the item selection. Therefore, a total of 248 items were rejected to meet the criteria that had been set. Nevertheless, the items that have been rejected will be used as supporting study to make data analysis even if they are not considered in the selection of items in this phase. Therefore, a total of 74 articles were used for the next phase.

Table 2
Inclusion and exclusion criteria

Criteria	Inclusion	Exclusion
Language	English	Non-English
Time frame	2020 - 2024	<2020
Document type	Article	Chapters in book, proceedings etc.
Field of subject	Student dropouts and economic impact	Other than Student dropouts and economic impact

Phase 3: Eligibility
In the eligibility phase, the researcher has carefully examined each article that meets the scope of the study as stated in Table 2. This step is important to ensure that the selection of the article during this phase is focused on the scope of study and can help answer the research objectives of the study later. A total of 53 articles were rejected because they were not related to the field of study.

Phase 4: Inclusion
A total of 21 articles were identified and eligible to use in this study. The flow of PRISMA has been summarized in Figure 1.
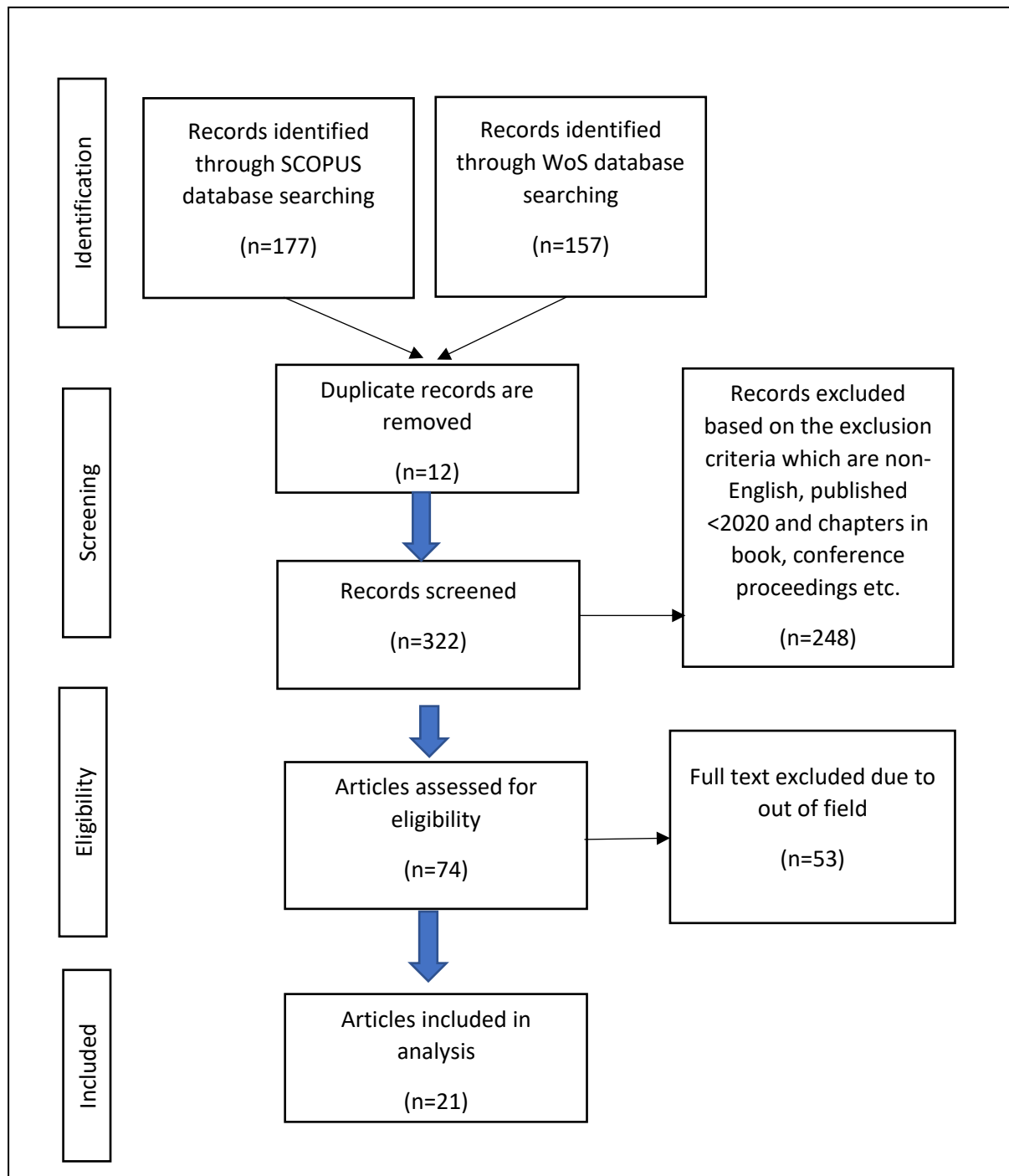
Figure 1. *PRISMA flow used in the study Process of Data Abstraction and Data Analysis*

This section explains the process of data abstraction and data analysis used in this systematic literature review. Braun and Clarke (2006), suggested that thematic analysis should be used to explore significant topics for a study. This method also helps the researcher to find patterns in past studies that have the same characteristics or are related in the data. In addition, the researcher has analyzed the data on the articles that have been selected based on the search

criteria that have been suggested as in Table 3, namely author name, year, journal name, research title, SCOPUS or WoS database and research field. Next, this thematic analysis has been used to analyze the 21 articles that have been selected based on specific themes to answer the research objectives as in Table 4. To answer the first research objective which is, 'Exploring the factors contributing to student dropouts post-Covid-19 pandemic era', the themes that have been categorized are: i) Family socioeconomic factors, ii) Individual factors, iii) Academic factors and iv) Geographical factors. Next, to answer the second objective of the study which is, "Examining the impact of dropouts among students on the economy post-Covid-19 pandemic", the themes that have been identified are, i) The number of unemployed increases and ii) Economic costs increase. All articles have been categorized based on themes after analyzing the articles. Based on the findings of the study above, all six themes will answer the main research question, "What are the factors contributing to student dropouts and their economic impact in the post-Covid-19 pandemic era?".

Table 3
The results of journal article selection based on the proposed search criteria

No.	Authors	Year	Title	Journal	SCOPUS	WoS	Remarks
1.	Khan & Ahmed	2021	Child education in the time of pandemic: Learning loss and dropout	Children and Youth Services Review	/		Factors of student dropout and their economic impact
2.	Kreger, M., Cairoli, K. S., & Brindis, C. D.	2020	An Underpinning of School Inequities: Asthma Absences and Lost Revenue in California Schools	Journal of School Health	/		Factors of student dropout and their economic impact
3.	Ferrandiz, D. A.	2021	Analysis of university dropout in Spain: a bibliometric study.	Publicaciones		/	Factors of student dropout
4.	Bayon-Calvo, S., Corrales-Herrero, H., & Witte, K. D.	2020	Assessing regional performance against early school leaving in Spain	International Journal of Educational Research		/	Factors of student dropout
5.	Pena-Vazquez et al.	2023	Building the profile of students with the intention of dropping out of university studies	Revista Espanila de Pedagogia	/		Factors of student dropout
6.	Flees, J., & O'Shea, J.	2021	Crossing the Finish Line: Increasing Degree Completion	Journal of Postsecondary	/		Factors of student dropout

			for Students Who Have Stopped Out	Student Success			
7.	Glaesser et al.	2024	Examining the association between social context and disengagement: Individual and classroom factors in two samples of at-risk students	Social Psychology of Education	/		Factors of student dropout
8.	Heredia & Carcausto-Calla	2024	Factors Associated with Student Dropout in Latin American Universities: Scoping Review	Journal of Educational and Social Research	/		Factors of student dropout
9.	Nurmalitasari, Zaliah Awang Long & Mohammad Faizuddin Mohd Noor	2023	Factors Influencing Dropout Students in Higher Education	Education Research International	/		Factors of student dropout
10.	Samoila, M. E., & Vrabie, T	2023	First-year seminars through the lens of Vincent Tion's theories of student departure. A systematic review.	Front. Educ.		/	Factors of student dropout
11.	Koc, M., Zorbaz, O., & Demirtas-Zorbaz, S.	2020	Has the ship sailed? The causes and consequences of school dropout from an ecological viewpoint	Social Psychology of Education	/		Factors of student dropout and their economic impact
12.	Fior et al.	2022	Impact Of Self-Efficacy And Academic Performance In The Dropout Of Higher Education Students	Psicologia Escolar e Educacional	/		Factors of student dropout
13.	Santos-Villalba et al.	2023	Incident factors in Andalusian university dropout: A qualitative approach from the perspective of	Front. Educ.		/	Factors of student dropout

			higher education students				
14.	Islam et al.	2023	Pandemic-Led Challenges for Rural Students in Bangladesh	IAFOR Journal of Education: Studies in Education	/		Factors of student dropout
15.	Xavier & Meneses	2022	Persistence and time challenges in an open online university: a case study of the experiences of first-year learners	International Journal of Educational Technology in Higher Education		/	Factors of student dropout
16.	Coussement et al.	2020	Predicting Student Dropout in Subscription-Based Online Learning Environments: The Beneficial Impact of the Logit Leaf Model	Decision Support Systems	/		Factors of student dropout
17.	Rincon, Moreno & Cala-Vitery	2021	Rural Population and COIVD-19: A Model for Assessing the Economic Effects of Drop-out in Higher Education	Front. Educ.		/	Factors of student dropout and their economic impact
18.	Rincon, Barragan, & Cala-Vitery	2021	Rurality and Dropout in Virtual Higher Education Programmes in Colombia	Sustainbality	/		Factors of student dropout
19.	Tsemato, Darza & Berhanu	2024	Student Dropout: The Case of Government Schools in South Ethiopia Region	International Journal of Religion	/		Factors of student dropout
20.	R, Roy & Das	2023	The neglect of researchers during the first COVID-19 pandemic induced national lockdown in India: inside the lives of JNU's research scholars	Higher Education		/	Factors of student dropout

21.	Martinez-Carrascal, Hlosta & Sancho-Vinuesa	2023	Using Survival Analysis to Identify Populations of Learners at Risk of Withdrawal: Conceptualization and Impact of Demographics	International Review of Research in Open and Distributed Learning	/		Factors of student dropout

Table 4.
Thematic results

No.	Author	Year	Factors Contributing to Student Dropouts in the Post-Covid-19 Pandemic Era				Economic Impact of Student Dropouts in the Post-Covid-19 Pandemic Era	
			Family sosioeconomic factors	Individual factors (Health & Personality)	Geografical factors	Academic factors	Number of unemployed increases	Economic costs increase
1.	Muhammad Jehangir Khan & Junaid Ahmed	2021	/				/	/
2.	Kreger, Cairoli, & Brindis	2020		/				/
3.	Ferrandiz, D. A.	2021		/				
4.	Bayon-Calvo, Corrales-Herrero & Witte	2020	/		/			
5.	Pena-Vazquez et al.	2023	/	/		/		
6.	Flees & O'Shea	2021	/	/		/		
7.	Glaesser et al.	2023	/		/			
8.	Heredia & Carcausto-Calla	2024	/	/		/		
9.	Nurmalitasari, Zaliah Awang Long & Mohammad Faizuddin Mohd Noor	2023	/			/		
10.	Samoila & Vrabie	2023		/		/		

No.	Author	Year						
11.	Koc, Zorbaz & Demirtas-Zorbaz	2020	/			/	/	
12.	Fior et al.	2022				/		
13.	Santos-Villalba et al.	2023	/	/				
14.	Islam et al.	2023	/		/			/
15.	Xavier & Meneses	2022		/		/		
16.	Coussement et al.	2020				/		
17.	Rincon, Moreno & Cala-Vitery	2021			/			/
18.	Rincon, Barragan & Vitery	2021	/			/		
19.	Tsemato, Darza & Berhanu	2024	/		/	/		
20.	R & Das	2023	/					
21.	Martinez-Carrascal, Hlosta & Sancho-Vinuesa	2023	/					

Results and Discussion

Explore the Factors Contributing to Student Dropouts in the Post-Covid-19 Era

    a. *Family Socioeconomic Factors*

The main factor contributing to factors of dropouts among students is family socioeconomic factors. Based on the findings of the study above, several variables have been identified as family socioeconomic factors including family or individual financial problems, demographics from the aspect of student gender and low socioeconomic level. Based on the findings of the study, the variable 'family or individual financial problems' in the family socioeconomic factor is often said to be the main contributor to the dropouts among students in the post-Covid-19 pandemic. According to the study of Santos-Villalba et al (2023a), students in Spain having to find a job to cover the cost of living or improve the economic situation in the family has caused them to drop out of education. The findings of this study have been supported by several past studies (Nurmalitasari et al., 2023c; R et al., 2023a; Khan & Ahmed, 2021a; Flees & O'Shea, 2021a; Heredia & Carcausto-Calla, 2024a; Tsemato et al., 2024a). This situation occurs may be because the burden is borne by students who study while looking for a job, causing them unable to commit to learning and subsequently abandoning learning. Families or individuals with financial problems also refer to those with a low socioeconomic level (Kreger et al., 2020a). Studies by Islam et al (2023a), and Koc et al (2020a), support the above statement but contradict the study done by (Pena-Vazquez et al., 2023a). Koc et al (2020b), argue that there are students in Turkey who withdraw from learning due to the poor conditions they are currently experiencing.

According to Martinez-Carrascal et al (2023a), research findings show that family economic conditions have a significant impact on students' decisions to remain in university. There is a direct relationship between socioeconomic inequality and education among students. The findings of this study can be supported by the study of (Islam et al., 2023b). Their results reported that as many as 32 percent of students have withdrawn from studies due to family financial problems faced due to the impact of the pandemic. Rincon et al (2021a), also explained the reasons why students drop out of learning based on their research findings that 54.3 percent of respondents are looking for work, 81.9 percent of respondents are committed to work and 10.6 percent earn less than the minimum wage in the Philippines. In India et al (2023b), found that 15.6 percent of the Scheduled Castes while 15.4 percent of the Other Backward Class agree that they were more willing to quit their studies by looking for a job to earn a living. A few students will start to reconsider the decision to quit their studies to find a job to support their family and themselves. This is because they are more willing to use that time to earn money than to study because work can guarantee income, but education does not (Santos-Villalba et al., 2023b). Not only that, students who work while studying will feel tired and less motivated to study because they do not have more time to read or complete assignments. Therefore, the discussion above clearly shows that dropout occurs due to family and individual financial factors that cause the socioeconomic level to be low. Past researchers suggest that there is a rationale for starting programs or activities that require expert assistance to contribute to household income (Santos-Villalba et al., 2023c).

From a demographic perspective, gender also plays a large role in influencing student dropout. The study of Koc et al (2020c), shows that student dropout is more significant among female students than male students. The findings of this study can be supported by the study of R et al (2023c), whereby as many as 13.6 percent of female students in India will consider the decision to stop studying because of 'being forced by the family to marry' compared to 8.3 percent of male students in India. The chi-square value (3.478) is significant at the P value (0.062). A study by Glaesser et al (2023a), also support the above statement. Previous researchers have stated that there is a large difference between male and female students in terms of dropout, which may be due to the perception of both genders. This is because women's responsibilities are often associated with taking care of children and cooking in the kitchen while men's roles are the head of the family where they must work and earn a living for their families. This difference in perception is what causes the dropout rate in female students to increase. Nevertheless, the study of Martinez-Carrascal et al (2023b), reveals a different study finding that gender does not have a significant effect on students' decision to drop out due to other factors such as program selection. Therefore, it can be concluded that the role of gender also contributes to student dropout.

b. Individual Factors

One of the factors of dropouts among students is individual factor. Individual factors refer to the situation or problems faced by the student himself. There are two variables that are closely related to individual factors, which are the physical and mental health factors of students and the motivational attitude or dedication of students. Banaag et al (2024a), described individual factors are complex things that can contribute to student dropout behavior. The physical and mental health factor of students is one of the variables that is

emphasized a lot in the findings of the study above. If students neglect their physical and mental health, then this will affect the success of learning and academic performance of the students themselves. A study done by Kreger et al (2020b), examined the relationship between student absenteeism and asthma health problems. The findings of the study revealed that 29.7 percent of students dropped out of school for several days due to asthma in the United States. The findings of the study are supported by the Flees and O'Shea (2021b), study where 12 percent of students who experience medical challenges had stop studying to treat their health. The post-pandemic situation has caused the students involved to reconsider if quitting their studies is the best decision with the current life situation. A study conducted by Saez et al (2021), supports the discussion above by debating that the health condition of a person who is not healthy will result in an increased student dropout rate. Therefore, there is a negative relationship between health factors and the intention to drop out among students. Students must have good physical health to get a perfect education for personal development.

In addition, students who experience poor mental health such as stress, burnout and anxiety are often the reason for dropping out of studies in Spain. A study by Xavier and Meneses (2022a), states that the pandemic has caused nine respondents to experience feelings of anxiety and stress while shouldering responsibilities as a student and committing to other responsibilities. In the United States, 12 percent of student's experience unhealthy mental health that makes them stop studying. The discussion above clearly shows that students who are depressed or have the potential to increase the risk of dropping out among students. As a result of that, students who struggle in dealing with stress and depression are more difficult to face academic demands, further causing them to be unable to commit to learning and finally stop learning especially when the world is uncertain (Banaag et al., 2024b).

The variables of motivational attitude and dedication also affect student dropout. The motivational attitude and dedication are related to the learning performance of a student. According to Jerie and Zamri (2011), the concept of attitude has an abstract nature that can only be seen and felt if we do something. Pena-Vazques et al (2023b), support the above opinion by stating that students who are not motivated in learning or do not see the importance of succeeding academically are more at risk of dropping out in learning. In addition, students who do not have dedication in their studies will be at risk of dropping out as well (Samoila and Vrabie, 2023). Therefore, if the student has a positive attitude such as being motivated and dedicated, then the student will realize the importance of learning for personal development in the future. A study conducted by Xavier and Meneses (2022b), found that most respondents stated that those who are highly motivated and dedicated in learning will result in them continuing to study regardless of whether it is at university or at home. The findings of this study are supported by Ferrandiz (2021), and Flees and O'Shea (2021c) where the level of student motivation will affect the student's desire to learn. However, if the student is lazy and has no desire to develop self-knowledge, then this will interfere with the learning process and subsequently cause them to drop out of learning (Norfarahzatul Asikin Zakari et al., 2022).

c. Academic Factors

Academic factors are one of the factors that can influence student dropout in learning regardless of whether it is at the school or university level. Variables that have a significant relationship with student dropout in learning are academic achievement, interest in the program studied and the relationship between students and instructors or lecturers. These variables play an important role in influencing students' decision to stay or stop learning. Academic achievement can affect student dropout in learning. The study conducted by Nurmalitasari et al (2023d), found that academic achievement or Cumulative Grade Point Average (CGPA) will influence the student to stay or drop out. This is because academic achievement is a measure of academic ability. If the student gets an unsatisfactory result, this indicates that the student failed to understand the teaching content or complete the assignment well. The findings of this study are supported by several articles above such as Fior et al (2022), Heredia and Carcausto-Calla (2024b), Coussement et al (2020), Koc et al. (2020d) as well as (Pena-Vazquez et al., 2023c). In addition, students who have an interest in the chosen program will make them more enthusiastic to study and therefore less at risk of dropping out. According to Pena-Vazquez et al. (2023d), students who choose a program or major they are interested in cause them to continue to work in learning. The findings of this study are in line with the study conducted by Esteban et al (2017), where students will have the motivation to achieve good results if the program meets their expectations and the program is an option they are interested in from the beginning. The discussion above is also in line with some past studies (Nurmalitasari et al., 2023e; Pena-Vazquez et al., 2023e).

In addition, the relationship between students and instructors also plays an important role in student dropout. This situation shows whether the instructor plays their role as an educator by ensuring students understand the learning content, helping students with learning problems and being able to deliver lessons well. According to a study conducted by Pena-Varquez et al (2023f), in Spain have revealed that the instructor's involvement in students' academic learning will influence students' decisions to either continue or drop out. This is likely to happen because of the change in learning mode from online to face-to-face. During the pandemic, all classes or teaching are done online where it is difficult for instructors to monitor the academic performance of students and students neglect about the success of the teaching. Therefore, when classes are conducted face-to-face post-pandemic, the students struggle in learning due to the need for guidance and monitoring of their instructors. Hence, the instructor should play their role as an educator by teaching well and effectively.

d. Geographical Factors

Geographical factors are also a critical contributor to student dropout in learning. According to Khurram et al (2023), the geographical factor refers to the distance between students' homes and educational institutions regardless of school or university level and the characteristics of their residence. According to a study conducted by Islam et al. (2023c), as many as 43 percent of students in Bangladesh think that living outside the city makes it difficult for them to attend classes and subsequently decide to drop out. This is because students who live in rural areas mostly live in poverty and do not have the ability to send their children to school because it involves huge costs. Some of the above studies also support this statement (Glaesser et al., 2023b; Rincon et al., 2021; Tsemato et al., 2024b). A study

conducted by Bayon-Calvo et al. (2020) in Navarra, Spain revealed that PISA results in this district were good for science subjects, but one of the lowest.

The location of residence is important in influencing students to get a perfect education because due to several issues such as transportation problems, the cost of education and the safety of children there is a great encouragement for them to continue studying or leave education completely. The discussion above is also in line with the study conducted by Juneja (2001), where he emphasized that if the location of the house is placed far from the school, then this will cause an increase in student dropout rates, especially among female students because of the possibility of bullying issues or abuse.

Investigate the Economic Impact of Student Dropouts in the Post-Covid-19 Pandemic Era

   a. Number of Unemployed Increases

Student dropout in learning especially in the post-Covid-19 pandemic has many negative impacts on the economy of a country. Education is an important key to the formation of highly educated human capital that can contribute to economic growth in the future. The role of education is to make children have the potential to improve the ability, creativity and skills needed to meet the demands of the current labor market (Latif et al., 2015a). Next, human capital is important to face rapid global change. Therefore, if student dropout in learning still occurs, this shows that literacy among children is deteriorating and creating an environment that is not innovative. Based on a study by Khan and Ahmed (2021b), children who drop out of school are the cause of parental job loss or reduced earning capacity in Pakistan. When parents do not have a job, then they will contribute to increasing the number of unemployed in the country. This incident often happens to low-income families.

A study conducted by Koc et al (2020e), is in line with the discussion above. The findings of the study show that almost all female respondents agree that they do not have a job and cannot enter the labor market because they have dropped out of school. They also expressed dissatisfaction with their current living conditions and believed that their lives would have been better if they had not stopped studying earlier. A study by Hanushek and Woessmann (2020b) found that losing a third of the academic year due to the pandemic would affect students' income by 2-4 percent while they are working. Their study also revealed that learning loss will result in skill loss. The subsequent loss of skills leads to a decrease in productivity. In estimates, productivity declines could result in as much as two percent lower on average to Gross Domestic Product (GDP). Therefore, people without education find it difficult to get a job and are more likely to be unemployed or rely solely on government assistance. According to Latif et al. (2015b), such students are often mistreated and ignored at home. Therefore, investment in human capital is an effort that should be intensified to reduce unemployment in the country.

   b. Economic Costs Increase

Human capital is an important asset of a country. This is because every student who has graduated, then works in the labor market will contribute to the country's productivity. If more and more students want to stop learning, the greater the economic cost that the government must bear. In a study conducted by Rincon et al (2021b), found that some of the

students who dropped out were unable to repay their tuition loans. Therefore, the government is responsible for bearing the cost of the study if it happens at a public university. A study done by Kreger et al (2020c), is also consistent with the findings of the study. Their study found that the United States government lost as much as 26 mil USD due to the absence of students for five days or more in one year. Not only that, students who drop out of learning have a high potential to get stuck in unhealthy social activities. When students do not care about their studies, they are easily influenced by crime. In addition, their health is not maintained compared to others due to the lower level of income.

Therefore, the government needs to allocate larger funds to deal with the issue of crime compared to the education sector. The average loss of annual income per student is 140 USD in the optimistic scenario, while it is 328 USD in the pessimistic scenario (Khan and Ahmed, 2021c). The study of Islam et al (2023d), also found that 38 percent of students agreed that the school had borne the cost of studies and almost 32 percent of students agreed that the government had taken the initiative to help students who dropped out in learning to settle their education debt easily. Therefore, it is clearly seen that student dropout will cause economic costs to increase.

Conclusion and Recommendations
As a conclusion, student dropout in learning is not something new to our country. As discussed above, there are several factors that have contributed to student dropout such as family or individual socioeconomic factors, individual factors, academic factors and geographic factors. This systematic literature review is important for stakeholders such as educators, schools, ministries of education, economic researchers and education policy makers. Hence, the authories must be aware and find a solution to every factor of student dropout. Not only that, studies have emphasized that student dropouts also have a negative impact on the national economy from the aspect of increasing number of unemployed and increasing economic costs.

To deal with the issue of student dropout in learning, holistic approaches are needed. To address student dropouts caused by family socioeconomic factors, the government should provide financial aid to help students from low-income families to get a perfect education. The government should support students by providing learning materials such as school bags, books, stationery and school clothes to encourage them to continue learning. When children have access to a perfect education, hence their socioeconomic level will also increase.

Individual factors consisting of aspects of physical and mental health of students as well as motivational attitude and dedication should be applied onto them to deal with dropout in learning. In terms of the physical and mental health factors of students, this can be overcome by establishing Guidance and Counseling Units in educational institutions such as schools and universities to guide students with mental health problems. However, critical cases that cannot be resolved should be referred to a psychiatrist at a government hospital immediately. Health screening services should be provided free of charge to every student at any government clinic or hospital. This approach helps students, especially from poor families to get proper treatment and have a healthy body to continue studying.

To form a motivational attitude and dedication in students, workshops or support groups should be organized periodically as an alternative support mechanism for students. An important initiative to aid students from an academic aspect where it will reduce the burden and pressure of students in learning. In addition, various student programs such as motivational talks can be collaborated with religious associations such as the Muslim Student Association or the Christian Student Society. This collaboration aims to approach the hearts of the students who participate to feel calm in living this challenging life. In relation to that, parents also play an important role by setting a good example for their children. For instance, parents should apply interests in their children to get a perfect education so they will not drop out. Parents should encourage their children to always attend lectures or university activities. To overcome student dropout due to academic factors, the relationship between instructors and students should be improved to show higher commitment and support. A high level of satisfaction and a good relationship between students and instructors motivates students to work hard and achieve better results. Moreover, if they get a program or major, they are interested in, then there is a possibility that the student dropout rate will decrease. Incentives such as dean's awards, outstanding achievement medals or merit should be awarded to students as a sign of appreciation and further attract students to study hard. In addition, the university should empower the mentor-mentee program as a more aggressive approach highlighted among lecturers who act as mentors. In short, mentors become mothers or fathers who take care of their student's affairs at the university from the academic, mental health aspects and provide additional support.

Finally, to overcome student dropout due to geographic factors, the government should provide public transportation such as school buses or school vans to rural students so that they can attend classes without restrictions. In addition, the construction of a comfortable and conducive dormitory for boarding students is important to ensure that they get basic needs such as bed, study room and canteen so that their learning process is not interrupted. The construction of safe roads in rural areas should be increased to facilitate students' access to school without having to go through dangerous journeys. Therefore, student dropout can be overcome for the sake of the future development of our country's education.

The research novelty contributes to the economic education field by analyzing the multifaceted factors of student dropouts and its economic impact in the context of post-pandemic era. For instance, the research highlights the importance of student dropouts not only towards the short-term but long-term economic strain. By addressing the issue, economic perspective reinforces and targeted government interventions are much needed to improve the overall country's human capital, which leads to a more proactive workforce and lower economic costs. In addition, this research novelty provides a wide understanding on the varied factors of student dropouts, including the family socioeconomic, individual, academic and geographical influences and its economic impact such as the number of unemployed and economic cost. Hence, this theoretical contribution serves as a foundation in further understanding the underlying dropout issue and its comprehensive educational strategies to prevent this issue to prolong in the future. For the practical aspect of this study, policymakers are able utilize the outcome of the study to provide more actionable insights to address the issue of dropouts. For example, policymakers can use these findings as a

foundation to propose evidence-based policies aiming to reduce student dropouts and improve overall economic growth. Hence, this research offers significant contributions and provide a deeper understanding of the issue to provide a more inclusive and equitable quality education to achieve the fourth Sustainable Development Goal.

References

Aina, C., Baici, E., Casalone, G., & Pastore, F. (2022). The determinants of university dropout: A review of the socio-economic literature. Socio-Economic Planning Sciences, 79:e 101102. https://doi.org/10.1016/j.seps.2021.101102

Banaag, R. A., Sumodevilla, J. L. C., & Potane, J. D. (2024). Factors Affecting Student Drop-Out Behavior: A Systematic Review. International Journal of Educational Management and Innovation, 5(1), 53-70. https://doi.org/10.12928/ijemi.v5i1.9396

Bayon-Calvo, S., Corrales-Herrero, H., & Witte, K. D. (2020). Assessing regional performance against early school leaving in Spain. International Journal of Educational Research, 99:e101515. https://doi.org/10.1016/j.ijer.2019.101515

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. Qualitative Research in Psychology, 3, 77-101. http://dx.doi.org/10.1191/1478088706qp063oa

Castro-Montoya, B. A., Lopera-Gomez, M. A. F., Manrique-Hernandez, R. D., Gonzales-Gomez, D. (2021). A competing dropout and graduation risk survival analysis of undergraduate students at a private university in Medellin (Columbia). University education, 14(1), 81-98. http://dx.doi.org/10.4067/S0718-50062021000100081

Coussement, K., Phan, M., Caigny, A. D., Benoit, D. R., & Raes, A. (2020). Predicting student dropout in subscription-based online learning environments: The beneficial impact of the logit leaf model. Decision Support Systems, 135:e113325. https://doi.org/10.1016/j.dss.2020.113325

Esteban, M., Bernardo, A., Tuero, E., Cervero, A., Casanova, J. (2017). Variables that influence academic performance and university persistence. European Journal of Education and Psychology, 10(2), 75-81. https://psycnet.apa.org/doi/10.1016/j.ejeps.2017.07.003

Ferrandiz, D. A. (2021). Analysis of university dropout in Spain: a bibliometric study. Publicaciones, 51(2), 265-285. https://doi.org/10.30827/publicaciones.v51i2.23843

Fior, C. A., Polydoro, S. A. J., Pelisson, A. M. S., Dantas, A., Martins, M. J., Almeida, L. D. S. (2022). Impact of Self-Efficacy And Academic Performance In The Dropout Of Higher Education Students. Psicologia Escolar e Educacional, 26:e235218. http://dx.doi.org/10.1590/2175-35392022235218T

Flees, J., & O'Shea, J. (2021). Crossing the Finish Line: Increasing Degree Completion for Students Who Have Stopped Out. Journal of Postsecondary Student Success, 1(1), 136-147. doi: 10.33099/fsop_jpss129109

Gallegos, J. A., Campos, N. A., Canales, K. A., & Gonzales, E. N. (2018). Determining Factors of University Dropout: A Case of the Faculty of Economy and Administration Sciences of the Catholic University of the Most Holy Conception (Chile). Formacion universitaria, 11(3), 11-18. http://dx.doi.org/10.4067/S0718-50062018000300011

Glaesser, D., Holl, C., Malinka, J., McCullagh, L., Meissner, L., Harth. N. S., Machunsky, M., & Mitte, K. (2023). Examining the association between social context and disengagement: Individual and classroom factors in two samples of at-risk students. Social Psychology of Education, 27, 115-150. https://doi.org/10.1007/s11218-023-09829-4

Gurevitch, J., Koricheva, J., Nakagawa, S., & Stewart, G. (2018). Meta-analysis and the science of research systhesis. Nature, 555, 175-182. http://dx.doi.org/10.1038/nature25753

Hanushek, E. A., & Woessmann, L. (2020). The Economic Impacts of Learning Losses. Retrieved from https://hanushek.stanford.edu/sites/default/files/publications/The%20Economic%20Impacts%20of%20Learning%20Losses_final_v1.pdf (7 Sep, 2024)

Heredia, R. C. R., & Carcausto-Calla, W. (2024). Factors Associated with Student Dropout in Latin American Universities: Scoping Review. Journal of Educational and Social Research, 14(2), 62-72. http://dx.doi.org/10.36941/jesr-2024-0026

Islam, M. M., Shaheen, S. M., Roy, R. K., Islam, M., & Hossain, M. D. (2023). Pandemic-Led Challenges for Rural Students in Bangladesh. IAFOR Journal of Education: Studies in Education, 11(3), 113-136.

Juneja, N. (2001). Primary education for all in the City of Mumbai, India: the challenge set by local actors. International Institute for Education Planning UNESCO. Retrieved from https://unesdoc.unesco.org/ark:/48223/pf0000124839/PDF/124839eng.pdf.multi

Khan, M. J., & Ahmed, J. (2021). Child education in the time of pandemic: Learning loss and dropout. Children and Youth Services Review, 127:e106065. https://doi.org/10.1016/j.childyouth.2021.106065

Khurram, F., Hossain, M, O., Korobi, F. T. J., Khan. M., Talukder, M. U., Nath, C .D., & Talukder, A. (2023). Understanding School Dropout and Its Impact on the Community in the Khulna Region of Bangladesh. Open Journal of Social Sciences, 11(11), 582-596. http://dx.doi.org/10.4236/jss.2023.1111038

Koc, M., Zorbaz, O., & Demirtas-Zorbaz, S. (2020). Has the ship sailed? The causes and consequences of school dropout from an ecological viewpoint. Social Psychology of Education, 23(3). https://doi.org/10.1007/s11218-020-09568-w

Kreger, M., Cairoli, K. S., & Brindis, C. D. (2020). An Underpinning of School Inequities: Asthma Absences and Lost Revenue in California Schools. Journal of School Health, 90, 200-211. https://doi.org/10.1111/josh.12869

Latif, A., Choudhary, Al., & Hammayun, A. A. (2015). Economic Effects of Student Dropouts: A Comparative Study. Journal of Global Economics, 3(2), 1-4. doi: 10.4172/2375-4389.1000137

Lim, I. (2021, December 5). Education Ministry: 21,316 students quit school during Covid-19 months of March 2020 to July 2021. Malay Mail. Retrieved from https://www.malaymail.com/news/malaysia/2021/12/05/education-ministry-21316-students-quit-school-during-covid-19-months-of-mar/2026057%3e

Martinez-Carrascal, J. A., Hlosta, M., & Sancho-Vinuesa, T. (2023). Using Survival Analysis to Identify Populations of Learners at Risk of Withdrawal: Conceptualization and Impact of Demographics. International Review of Research in Open and Distributed Learning, 24(1), 1-21.

Nugroho, S. B. M. (2014). Pengaruh Pendidikan Terhadap Pertumbuhan Ekonomi. Media Ekonomi dan Manajemen, 29(2), 195-202. http://dx.doi.org/10.24856/mem.v29i2.229

Nurmalitasari., Long, Z. A., & Noor, M. F. (2023). Factors Influencing Dropout Students in Higher Education. Education Research International, 2, 1-13. http://dx.doi.org/10.1155/2023/7704142

Okoli, C. (2015). A Guide to Conducting a Standalone Systematic Literature Review. Communications of the Association for Information Systems, 37, 879-910. http://dx.doi.org/10.17705/1CAIS.03743

Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffman, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hrobjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., McGuinness, L. A., Stewart, L. A., Thomas, J., Tricco, A. C., Welch, V. A., Whilting, P., & Moher, D. (2021). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. Systematic Reviews, 10, 89. https://doi.org/10.1136/bmj.n71

Pena-Vazquez, P., Morales, O. G., & Alvarez-Perez, P. R., &Lopez-Aguilar, D. (2023). Building the profile of students with the intention of dropping out of university studies. Revista Espanila de Pedagogia, 81(285), 291-315.

Rincon, A. G., Barragan, S., & Cala-Vitery, F. (2021). Rurality and Dropout in Virtual Higher Education Programmes in Colombia. Sustainability, 13:e4953. https://doi.org/10.3390/su13094953

Rincon, A. G., Moreno, S. B., & Cala-Vitery, F. (2021). Rural Population and COIVD-19: A Model for Assessing the Economic Effects of Drop-out in Higher Education. Front. Educ, 6:e812114. https://doi.org/10.3389/feduc.2021.812114

Samoila, M. E., & Vrabie, T. (2023). First-year seminars through the lens of Vincent Tion's theories of student departure. A systematic review. Front. Educ, 8:e1205667. doi: 10.3389/feduc.2023.1205667

Santos-Villalba, M. J., Fernandez, M. J. A. D., Rueda, M. M., & Cerero, J. F. (2023). Incident factors in Andalusian university dropout: A qualitative approach from the perspective of higher education students. Front. Educ, 7:e1083773. https://doi.org/10.3389/feduc.2022.1083773

Tsemato, B., Darza, D., & Berhanu, A. (2024). Student Dropout: The Case of Government Schools in South Ethiopia Region. International Journal of Religion, 5(6), 427-437. https://doi.org/10.61707/aq4eby38

Xavier, M., & Meneses, J. (2021). Persistence and time challenges in an open online university: a case study of the experiences of first-year learners. International Journal of Educational Technology in Higher Education, 19(31). https://doi.org/10.1186/s41239-022-00338-6

Jamaludin, Z. (2011). Kemiskinan dan Keciciran dalam Pendidikan. Jurnal Kebajikan Masyarakat, 37, 6-16.