

Systematic Review

Factors Influencing Parents' Awareness of Children' Education Investment: A Systematic Review

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Abstract: Parents' awareness of the importance of education greatly influences decision-making on educational extensions for children. Because more and more parents are aware of the importance of education in supporting the survival of children in the future, parents will be more aware of expanding education to a higher level for the benefit of the children, the environment, and the future. The objective of this study is to identify the factors that influence parents' awareness in investment decision-making for children's education. To address this issue, we use Cooper's approach combined with the prism method, which offers a methodological framework and reporting procedure for the current review. Six main factors have emerged to answer the objective of this study, namely out-of-pocket expenses, forgone earnings, returns on investment, educational design, educational process, quality of education, and competitiveness. These findings show that decision-making for education transfers is not only seen from the side of government policy but also from the family side, illustrating the need for continuous synergy between the government policy and parents' awareness of it, so that the improvement of superior human resources through education continues optimally.

Keywords: parents' awareness; cost of education; return on investment; educational planning; educational process; quality of education; investment in education



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1. Introduction

Investment in education has long been discussed in various studies [1–5], especially with interest that derives from the rate of return [6–10]. This is because the rate of return on educational investment is strongly related to the development and improvement of human resources that can promote the improvement of the country's economy [11–15], as the benefits of investing in education are not only income but also other broader benefits, such as more productive behaviour, healthy behaviour, and cultural behaviour [16,17].

However, there is still literature that suggests that investment in education should also be reviewed at the family level [3,18–21]. The rules produced by the government to encourage investment decisions in education should have a positive impact on the way parents or families think in terms of investing in children's education, which will affect the future. Therefore, there is a need for deeper study of how families can influence individual decisions to invest in education to a higher level (higher education).

Among the main factors that can influence decisions to invest in education is the parent's awareness of the importance of education, as awareness is a situation where the individual can understand all the existing rules, duties, and responsibilities and will consciously comply [22]. Parental knowledge gained from experience and relationships with education and institutions is a sociocultural form related to the educational system [23,24], so it can be said that parents' connections deriving from experience and institutions can be used as the basis of their decision to invest in education for their children.

Assuming that more and more parents are aware of the importance of education in supporting children's survival in the future, parents will be more aware of the need to invest in education to a level acceptable to the children, the environment, and the future. An

individual's ability in terms of knowledge, understanding, trust, and follow-up of tasks and responsibilities in fulfilling a good education means that awareness of the implementation of education can be distinguished into four types, namely planning awareness, process awareness, quality awareness, and competitive awareness [25].

Therefore, the research question for the current study is whether the factors, such as education cost, return on investment, education planning, process education, quality of education, and competitiveness, affect parents' awareness in the investment decision-making for children's education? To answer this problem, then, in the context of this study, we focused specifically on the influence of parental awareness on investing in children's education. This is important because the decision to invest in education must not only be seen from the interests of the government and the motivation that children must have; we also need to look from the side of parents. Parents are decision-makers in education when it comes to investing in education to a higher level. Therefore, parents' educational awareness is an awareness of their obligations for their children's education. Parental awareness of the importance of education becomes a trigger for the child when deciding whether to continue education to a higher level.

To increase the awareness of parents regarding the importance of education, knowledge regarding the factors that can influence parents' awareness of educational investments is important. Therefore, the study aims to identify and analyse the factors that influence parents' awareness in their decision to make investments in the field of education based on the results from previous researchers.

2. Materials and Methods

2.1. Procedure

We used Cooper's approach in conducting our research synthesis. We selected the meta-analysis method because it has an advantage over other meta-analysis methods, especially in identifying variables and relationships of relevance [26]. Through this method, we could identify variables such as parents' awareness and educational investments as well as their relevance to children's educational benefits in the future. Then, we combined it with prism methods that provide methodological frameworks and reporting procedures for current reviews in order to conduct searches, study selection, data extraction, and analysis [27–29].

2.2. Identifying Relevant Studies

This search was carried out systematically using the Scopus and World of Science (WoS) databases in December 2021 and May 2022 with a focus on research published from 1 January 2017 to 31 May 2022. Data collection was only based five years earlier because we required up-to-date research data and current issues so that future researchers can use the results of this study as a recent reference. These databases were selected based on a research focus consisting of factors that affect parental awareness and educational investments (see Table 1).

Table 1. Search string for Scopus and WoS.

Database	Keyword
Scopus	TITLE-ABS-KEY ("parents' awareness" OR "parents' understanding" OR "parents' acceptance") AND ("investment education" OR "investment in education" OR "education investment" OR "education as an investment")
WoS	TITLE-ABS-KEY ("parents' awareness" OR "parents' understanding" OR "parents' acceptance") AND ("investment education" OR "investment in education" OR "education investment" OR "education as an investment")

To help narrow the search process, we applied filters to articles in the database that included social sciences, educational research, articles, English language, and publishing years (2017–2021). In addition, to be included in the articles to be reviewed, the article must

concern parental awareness and educational investment. The search strategy built on this study using the PRISMA method [27–29] is described in Figure 1.

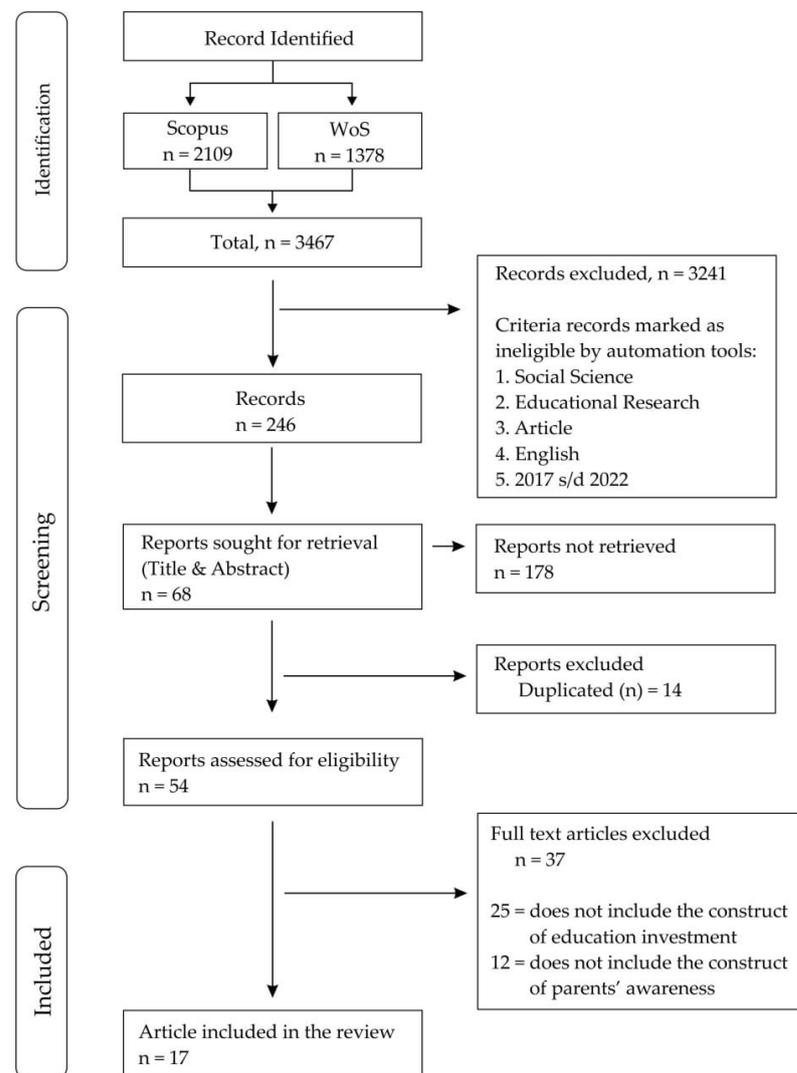


Figure 1. Study search strategy.

2.3. Selecting, Mapping Data, and Reporting Results

Based on the inclusion and exclusion criteria, the author independently filtered the articles in two steps. The first step was to filter the titles and abstracts of articles identified by applying the filters mentioned above. Articles identified in the first stage of screening that were considered relevant following a preliminary review underwent a second examination in the form of a full-text review to determine the feasibility of the article. Only articles that defined factors that can influence parents' awareness in their decision to invest in education for their children were included.

In the preliminary analysis, the first and second authors independently performed an examination procedure using a standard graph formula that included information from the article, namely the year of publication, the author(s), the country of publication, and the discussion. After that, the first and second authors conducted a review and analysis of full-text articles that qualified. The subsequent analysis involved a systematic extraction of the accompanying article to answer the research aims [30]. The result of the extraction of each article was read several times to identify patterns that appeared and whether there were similarities or differences in the focus of the study on parental consciousness and

educational investment. As a result of the search and screening process, 16 articles were selected (Table 2).

Table 2. Result of Screening Process.

Year	Author	Reference	Studies
2021	Lee and Cho	[31]	Analyses the increase in educational investment through the accreditation system owned by the educational institution, especially in terms of the costs required for education and the rate of return on education.
2021	Hargreaves	[32]	Analyses investments in education, especially public education, in pursuit of welfare and a better quality of life for everyone.
2022	Siyahhan and Ghodduzi	[33]	Develops an optimal educational investment model under uncertainty with migration options by distinguishing between local (country-specific) and global human resources, analysing the role of migration opportunities in the accumulation of human capital and allowing human capital investment in the destination country.
2021	Heckman and Letkiewicz	[2]	Analyses the impact of the cost of making decisions to pursue higher education, as well as the impact of the rate of return on investment in education in the future.
2021	Nakagawa, Oura, and Sugimoto,	[34]	Analyses how parents plan the investment of children's education in the future, starting from the moment they are born.
2021	Bokayev, Torebekova, Davletbayeva, and Zhakypova	[35]	Analyses the role of parents in improving the quality of education through distance/online learning.
2020	Bai, Sun, and Chiu	[36]	Focuses on improving the efficiency of China's higher education input–output to improve the efficiency of the transformation of higher education investment.
2020	Jagnani and Khanna	[37]	Analyses the impact of educational investment at the primary school level.
2020	Xiong and Mok	[38]	Criticizing investments in higher education will increase the competitiveness of the country in the global market, as well as bringing positive changes to individuals, families, and countries.
2020	Alonso-Carrera, Caballé, and Raurich	[39]	Builds an optimal model of educational achievement based on the interaction between wealth and effort, highlighting the role of minimum education costs, loan constraints, and employment efforts.
2019	Sellami, Verhaest, Nonneman, and Van Trier	[40]	Analyses the motives of the individual in participating in continuing education to the higher education level (investment, consumption of life, and social norms) and continuing other education after graduation.
2019	Dhanaraj, Paul, and Gade	[41]	Exploring the impact of various income and spending shocks on education investment and children's cognitive outcomes.
2018	Obasuyi, Chenayah, and Piaw	[42]	Assessing the impact of education investment on the high quantity of educational inequality in a West African country.
2018	Yasuoka	[43]	Reviews consideration of the pension incentive policy as a policy of replacing the investment subsidy and education of children in the model of quality and quantity of education.
2017	Tshabangu	[44]	Analyses the association between child poverty and educational inequality by paying attention to its debilitating effects on child development and social mobility.
2017	Chung and Lee	[45]	Analyses the inequalities in wages, productivity, and educational affordability that determine an individual's educational efforts as they compete for low employment.
2017	Adu and Denkyirah	[46]	Analyses key education policies and education investments in Ghana and their impact on economic growth.

3. Results

The Scopus and WoS database searches conducted between 2017 and 2022 using data search strategies through PRISMA flowcharts resulted in 3467 articles [27–29]. This was performed to collect relevant data from articles in a reliable way so that the data could be used to answer the problems arising from the study. As noted in the introduction, this problem is related to the awareness of parents in supporting children’s education through educational investment. Articles that did not meet the criteria were removed, so 246 articles were screened for qualification by looking at the title and abstract. After duplicates were removed, 54 articles could be fully reviewed for criteria of parental awareness and investment in education or related concepts. Initially, 54 articles met the inclusion criteria; however, after an in-depth review, it was agreed to leave 37 articles out of the analysis because they only mentioned educational investment or parental awareness and did not define or explain the need for investment in education for the future of the child or factors affecting parents’ conscious education of their children. Therefore, 17 articles were considered relevant, having met the objectives of the study, and were included in the final review. The greatest number of articles (six) were published in 2021, with four in 2020, two in both 2019 and 2018, three in 2017, and only one article in 2022. In addition, studies were conducted in 12 countries with a focus on educational investment and the role of parents in their children’s education (see Figure 2).

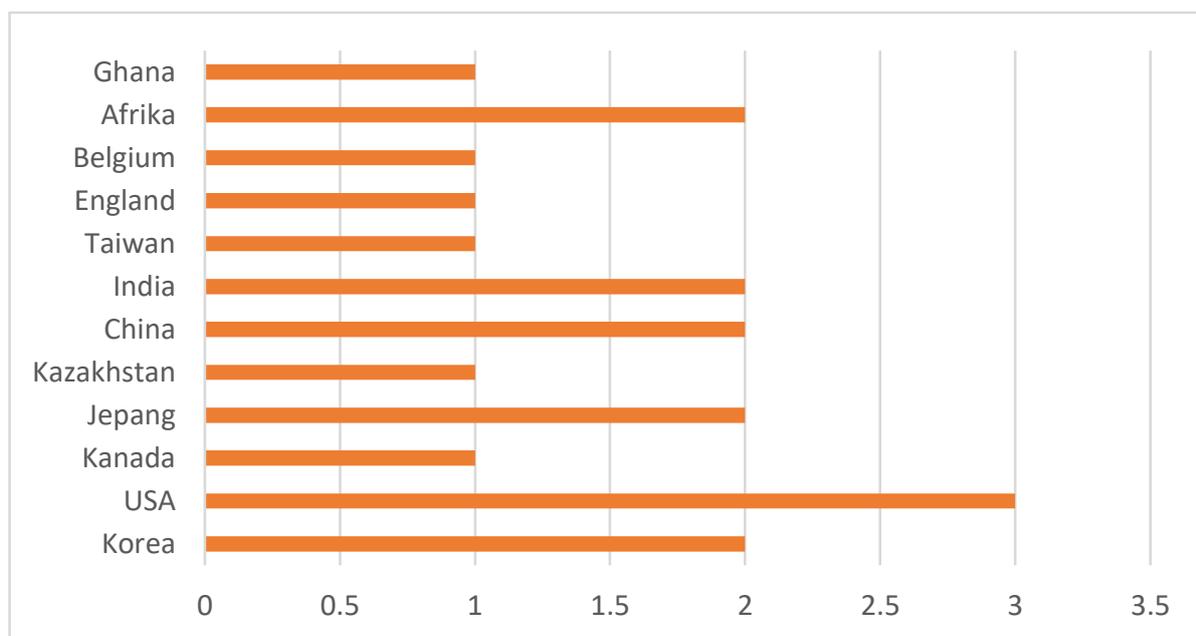


Figure 2. Distribution of research.

The six key factors that appeared in the articles that met the criteria in the final review and are considered relevant to answer the objectives of this study consist of education cost, return on investment, education planning, process education, quality of education, and competitiveness. As can be seen in Table 3, the six factors are the cost of education, which is divided into two factors, that is (1) of out-of-pocket expenses (14 studies) and (2) forgone earnings (three studies), return on investment (11 studies), education planning (nine studies), educational process (six studies), quality education (five studies) and competitiveness (six studies). The identification and classification of 17 articles into six main factors were carried out by identifying the problems and research results in answering the problems so that some of the main factors used in this study can be included in each article.

Table 3. Findings.

Author(s)	Year	Reference	Country	Factors						
				Education Costs		Return on Investment	Education Planning	Process Education	Quality of Education	Competitiveness
				Out of Pocket Expenses	Forgone Earnings					
Tshabangu	2017	[44]	Sub-Saharan Africa	•		•	•			
Chung and Lee	2017	[45]	Korea	•	•	•			•	•
Adu and Denkyirah	2017	[46]	Ghana	•		•		•		
Obasuyi, Chenayah, and Piaw	2018	[42]	West Africa	•		•				
Yasuoka	2018	[43]	Japan			•	•			
Sellami, Verhaest, Nonneman, and Van Trier	2019	[40]	Belgium	•	•	•				•
Dhanaraj, Paul, and Gade	2019	[41]	India	•			•			
Bai, Sun, and Chiu	2020	[36]	China	•		•		•	•	•
Jagnani and Khanna	2020	[37]	India	•			•			
Xiong and Mok	2020	[38]	China Taiwan			•		•		•
Alonso-Carrera, Caballé, and Raurich	2020	[39]	England	•			•		•	
Lee and Cho	2021	[31]	South Korea	•						
Hargreaves	2021	[32]	USA Canada			•	•			•
Siyahhan and Ghoddusi	2022	[33]	USA	•		•	•			
Heckman and Letkiewicz	2021	[2]	USA	•	•	•		•		
Nakagawa, Oura, and Sugimoto	2021	[34]	Japan	•			•	•	•	•
Bokayev, Torebekova, Davletbayeva, and Zhakypova	2021	[35]	Kazakhstan	•			•	•	•	
Total				14	3	11	9	6	5	6

3.1. Factor 1: Education Costs

A total of 14 articles were identified as showing the very dominant role that the cost factor of education has in influencing parents' awareness in decision-making on investing in education [2,31,33–37,39–42,44–46]. Two factors primarily affect the cost of education and can affect parents' awareness when investing in education: out-of-pocket expenses (14 articles) and forgone earnings (three articles). These two factors in the cost of education influence parents' awareness of their decision to invest in education without using other factors as mediators. This is because these two factors are basic concepts that parents must understand when funding education.

The introductory study found that previous researchers had defined the cost of education through two factors. Firstly, the cost of education is seen only in terms of the total direct expenditure used to fund education [2,31,33–37,39–42,44–46]. Secondly, the cost of education is not only seen as costs directly incurred but also as lost opportunities in earning income as a result of not taking education and entering the labour market [2,40,45].

Moreover, the definition of the importance of the cost of education in influencing the consciousness of parents is different among the observed researchers. Six studies state that the government has a fairly dominant role in determining the cost of education, in particular in obtaining optimal human resource development through education [31,33,36,42,44,46]. Seven other studies stated that individuals' actions play a role in determining the cost of ed-

education for many reasons, namely the existence of excessive costs that affect the deferment of payment of education costs [2]; easy access to job search and career development [34,40,41]; the costs incurred to obtain satisfaction in the educational process [35,39]; and there is no guarantee of increased productivity or higher outcomes when working when compared to the level of education that has been undertaken to support the work [45]. Meanwhile, findings are related to the cost of education from the perspective of educational institutions, where educational institutions play a very dominant role in facilitating the development of education in infrastructure with private capital [37].

3.2. Factor 2: Return on Investment

A total of 11 articles were identified as showing that the rate of return factor also plays a role in influencing parents' awareness of their decision to invest in education [2,32,33,36,38,40,42–46]. This rate of return relates to parents' awareness of their decision to invest in education without using other factors as intermediaries. The rate of return here is closely related to the current value and lifetime income that will be obtained through education.

The results of the identification study showed that past researchers had defined the rate of return on investment as influencing parents' awareness of different concepts. Three studies showed that the return on investment in education is closely related to the increase in income when people work at a certain level of education [32,38,40]. Meanwhile, eight other studies stated that the return on investment in education not only aims to increase income but also considers the process in the form of a comparison between the costs incurred and the benefits to be obtained [2,33,36,42–46].

3.3. Factor 3: Education Planning

A total of nine articles were identified as showing that educational planning factors have a dominant role in influencing parental awareness in the decision to invest in education [32–35,37,39,41,43,44]. Planning factors in education include parents' awareness of their decision to invest in education without using other factors as mediators. Planning factors can help parents determine the targets they want to achieve in meeting their children's educational needs by paying attention to the social and educational environment.

Three elements influence this planning factor to provide different definitions in the studies observed. Firstly, educational planning is influenced by the setting of targets to achieve educational needs [32–34,37,41,44]. Secondly, the need for education to support the future is part of educational planning [33–35,37,39,41,43,44]. Thirdly, in planning educational investments, parents also need to understand the benefits of their children's level of education in supporting their social lives [32,35,39,44].

Moreover, the definition of planning factors influencing parents' consciousness is conceived differently among the observed researchers. Four studies state that parental awareness in deciding to invest in education is related to how educational investments can be conducted together with other economic development activities and is based on economic considerations, costs, and the social benefits that will be obtained in the future [32,33,41,44]. Three other studies stated that awareness of education presents several alternative decisions supporting future activities that focus on achieving goals with optimal effort and have taken into account various factors in the economic, social, and cultural spheres [34,39,43]. Meanwhile, two studies state that parents' awareness of the importance of education is emphasized in understanding the rational application of the educational development process to implement an effective and efficient education that will result in educational goals that correspond to the needs and characteristics of students and society [35,37].

3.4. Factor 4: The Educational Process

A total of six articles were identified as showing that process factors in education have a role in influencing parents' awareness of their decision to invest in education [2,34–36,38,46]. The process of education is studied in terms of parents' awareness of their decision to invest

in education without using other factors as a mediator. This is because parents should understand that obtaining the maximum educational output takes a long time.

The definition of factors of the educational process influencing parents' awareness is conceived differently among the observed researchers. Three researchers contend that the educational process's production of reliable output is inseparable from government intervention in producing optimal output, especially when determining the curriculum to be used by the institution, the provision of subsidies for the cost of education, and the role of educational output in economic growth, all of which can influence parents' awareness when deciding to invest in education for their children [35,36,46]. This is in contrast to three other researchers [2,34,38] who noted that the process in education is not only focused on the role of government but on how the process goes, since it is a continuous and endless activity, and the purpose of the process in education can improve human quality through expectations.

3.5. Factor 5: Quality of Education

A total of five articles were identified as showing that quality factors in education have a role in influencing parents' awareness of their decision to invest in education [34–36,39,45]. The quality factor in education relates to parents' awareness of their decision to invest in education without using other factors as intermediaries; since parents should be aware that in obtaining quality educational output and being ready to compete in the world of work, they must consider not only the cost of education, careful planning, and the process during education, but must also understand the quality of the educational institutions that provide educational services and understand the absorption of the graduate workforce.

Two elements that parents must understand are the quality of the educational institution [35] and employment [34–36,39,45] that provide a common understanding in the results of the observed research. Understandably, five researchers defined that the quality of education is related to the implementation of education, including input, process, and output. The goal is to produce results in the form of a professional workforce that is suitable for the needs of the field of work by using appropriate approaches that can encourage motivation and interest in learning during the learning process.

3.6. Factor 6: Competitiveness

A total of six articles were identified as suggesting that competition factors in education have a role in influencing parents' awareness of their decision to invest in education [32,34,36,38,40,45]. Competitiveness or competitive factors in education relate to parents' awareness of their decision to invest in education without using other factors as intermediaries, since the ability of parents to understand children's thinking skills is indispensable. This is especially supportive of the move by parents to coordinate with children in choosing the best educational institution according to the child's potential, so that after graduation the child can compete well in their environment.

The definition of competitive factors in education affects the consciousness of parents and is conceived differently by the observed researchers. Five researchers defined the competition factor as part of a parent's understanding of children's talents and interests according to their field [32,34,36,40,45]. This means that parents should be able to understand that the determination of the field that the child will pursue should not be forced but should be adapted to the potential of the child so that they can compete optimally in their field of interest. Xiong and Mok [38] give a different meaning to the benefits that will be derived from understanding the importance of the concept of competition in education, contending that to face competition in the future, in addition to paying attention to the talents and interests that will unlock the potential of the child, there should be a suitable educational institution to support them.

Based on the description of the above findings, parents' awareness is essential in children's education to support their future and this is influenced by some factors, for instance, (1) parents' external factors such as the cost of education that has been set by

the government because the parents will think about their children's current education cost (factor 1) and compare it with the benefits that the children will gain upon obtaining an education (factor 2), parents' internal factors in which parents will plan the extent of the level of education that the children will take part in by considering the future income and the social benefits to be obtained (factor 3) as well as by seeing how well the educational process is carried out (factor 4), the quality produced (factor 5) in relation to the educational output expected by the parents, and the children's potential talent and interest in a particular field whilst facilitating appropriate education so that they can have high competitiveness in the future (factor 6).

4. Discussion

Based on the systematic literature survey conducted, it was found that several factors can influence parents' awareness when deciding to invest in education for children, especially to support their survival and future. Of the six main factors used as indicators in influencing parents' awareness in deciding to invest in education, the six factors found in 17 articles show that parents understand the importance of children's education for the future, which drives them to carefully plan the education of the children even though they need to sacrifice in terms of cost, take into account the rate of return on the costs already incurred, and ultimately understand the talents and interests that will accurately promote the children's potential, the educational process that the children must take, and the quality of the educational institution chosen to support the development of the children.

Factors that can influence the decision of parents to invest in education can be direct and indirect. In this regard, these factors could be external or internal from parents. Indirect factors or external factors from parents come from the role of the government that stimulates the achievement of increased human resources consisting of the cost of education (out-of-pocket expenses and forgone earnings) and return on educational investment. Direct factors or internal factors from parents consist of planning, process, quality, and competitiveness.

Decisions based on the cost of education suggest that there should be an equal understanding of the cost of education among consumers (individuals, families, and society), the government, and educational institutions. This is because the main purpose of determining the cost of education is to ensure the continuity of the educational process itself without looking into the possibility of other influential factors. This is in line with the opinion of Suhardan [47], who stated that the cost of education is the cost that an individual, family, society, or educational institution has to bear to achieve the desired education. However, some studies found that a consumer's decision to pay for education was greatly influenced by many factors. A very dominant factor is their satisfaction with the educational process after spending a certain amount of money [35,39], as well as easy access to job searches and career development [34,40,41]. That is, parents will voluntarily incur a certain amount of educational cost if they consider that they will get the expected rate of return in the future.

It is known that the rate of return for several costs that have been incurred remains a key factor that can influence parents' awareness in determining their children's education. This is because educational investments will provide a higher rate of return than other types of investments and provide better value in increasing individual productivity in the future [9]. Undoubtedly, by sending children to school with a certain level of education or investing in education, parents hope that the education received will be able to increase their income in the future. This follows Becker's [16] statement that with education it is expected that there will be an improvement in overall quality of life. In addition, opinion states that parents should be able to compare the costs and time invested in improving education with what they will get in the future [48]. This is because the education that individuals receive is expected to provide a boost, playing a very important role in the process of economic growth and income distribution [49–53].

Once parents have been able to understand the concept of what must be spent on education and the rate of return on educational investments, they can take the next step to strengthen the decision by planning investments in their children's education. At this stage

of planning, parents should be able to predict the needs during the educational process so that, from the very beginning, they are thoroughly prepared for the costs incurred and the targets that need to be met when the educational process has been implemented. Several studies have revealed that educational planning by parents is sometimes not compatible with the initial planning due to other expenses such as loan constraints [39], changes in children's talent and interests [34], or the existence of unplanned subsidies for the cost of education from the government [33].

This explains how parents' planning greatly influences the determination of the targets to be achieved by meeting their children's educational needs, taking into account the social and educational environment, the current educational needs, and the benefits of the level of education received when the child has graduated from community life [25] because of the increasingly complex structure of society, such as population problems, labour, limited employment opportunities, and diminishing resources [54,55]. In summary, the planning process will involve children and parents so that the children and parents realise that implementing the education plan that has been mutually agreed upon will be affected not only by the level of education that the child's school is pursuing but also by the benefits that will be obtained.

In addition to planning factors, the findings reveal that other factors influence parents' awareness of the importance of children's education, namely quality factors, process factors, and competition factors. Quality awareness is emphasised more in parents' understanding of quality awareness related to the quality of output of educational institutions. This is in accordance with the opinion of Qomar [25], who argues that parents should see how the chosen educational institution can produce qualified graduates and be able to improve their welfare and support the development and economy of the state. Awareness of the importance of the quality of the output will be associated with dynamic conditions related to services, human resources, processes, and environments that can meet the needs or expectations of current and future situations [56,57]. As is known, the results of the study also revealed that the quality of educational institutions, especially those that have had recognition from educational assessment agencies or accreditation institutions, will trigger parents' decisions in choosing these educational institutions as a place for their children's education [31]. That is, until the stage of awareness of the quality offered by educational institutions, parents have had an awareness that good output will be supported by the quality of educational institutions.

However, there are studies that reveal that it is not only the quality of educational institutions that is able to influence parents' decisions in making educational investments but also the influence of the environment offered by these educational institutions [39,41]. These findings reveal that the environment of the educational institution greatly influences how parents will determine their goals in investing in the field of education. Therefore, obtaining optimal educational results is a relatively long process, but before instilling it in their children, parents need to understand in advance that ultimately obtaining maximum results from education is a long process so that their children voluntarily take up the educational process to obtain optimal results according to the field and their own competence [25].

When parents understand the importance of quality and process in education, they also need to be aware of the competitiveness in the field of education, especially when it comes to the rate of return related to work after completing a certain level of education. A competitive individual has a willing and courageous attitude to compete with others and their environment because they face situations requiring effort and action to achieve their goal by defeating the person or organisation [58,59]. To minimise unhealthy competitive behaviour, parents are also expected to understand the child's thinking ability and communicate to coordinate the selection of an educational institution that suits the child's abilities.

Formation of awareness of the importance of education arising from the family environment is a positive value supporting government policy in terms of education, since parents will be aware from the beginning of the importance of education for their children's

future, with implications for the children's actions, reactions, interactions, and responses to educational activities. Therefore, parents can still maintain the idea that children's education is very important as the main goal of household spending because this will have a fairly good effect on the sustainability of the welfare of children and families in the future. In addition, educational investments will always yield benefits even though the expected rate of return can take longer.

No research has explicitly stated that parents' awareness is one of the factors that can influence their decisions in making investments; therefore, the limitations of this study are contingent on the time taken to accurately examine the research results with variables that can be addressed. Given the importance of parents' awareness of education in making investment decisions, the combination of parental awareness and educational investment will undoubtedly contribute to the literature related to making decisions on investment in children's education.

Therefore, we hope that this study will foster the interest of other researchers and reveal other factors that can influence the awareness of parents to invest in the field of education, as many other factors can also be raised in research on human resource development through education.

5. Conclusions

This study has systematically identified factors that influence parents' awareness in their investment decision-making for children's education. In addition, we have reviewed the past six years [from 2017 to 2022] of literature on parents' awareness of investment in children's education. The articles were analysed using Cooper's approach combined with the prism method. As a result, six factors are identified as pertaining to the cost of education: out-of-pocket expenses, forgone earnings, return on investment in education, planning, process, quality, and competitiveness. The 17 articles using these six factors found many factors that influence the achievement of increased human resources. Over the years, researchers have identified dominant factors in the field of educational investment, especially government policy in terms of increasing human resources through education, to strengthen the country's economy. Another finding of the study is that the implementation of educational investment decisions is seen not only from the government policy side but also from the family side. This illustrates that there needs to be a continuous synergy between government policy and parental awareness so that the improvement of superior human resources through education can be smooth. Further studies are highly recommended, especially taking into account many other factors that may affect the implementation of educational investment.

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References

1. Dincă, G. Investments in Education. *Bull. Transilv. Univ. Brasov. Econ. Sci. Ser. V* **2019**, *12*, 79–86. [[CrossRef](#)]
2. Heckman, S.J.; Letkiewicz, J.C. Navigating Risky Higher Education Investments: Implications for Practitioners and Consumers. *J. Financ. Couns. Plan.* **2021**, *32*, 131–145. [[CrossRef](#)]
3. Rasyid, H. Membangun Generasi Melalui Pendidikan Sebagai Investasi Masa Depan. *J. Pendidik. Anak* **2015**, *4*, 565–581. [[CrossRef](#)]

4. Jin, J. Exploration on Diversification Path of Higher Education Investment. *Acad. J. Humanit. Soc. Sci.* **2020**, *3*, 51–54. [[CrossRef](#)]
5. Van Hien, P. Public Investment in Education and Training in Vietnam. *Int. Educ. Stud.* **2018**, *11*, 106. [[CrossRef](#)]
6. Amalia, N.; Sugiharti, L. Perkembangan Tingkat Pengembalian Investasi Pendidikan Menengah Di Indonesia Tahun 2015 Dan 2018. *J. Ekon. Dan Pembang. Indones.* **2020**, *20*, 231–252. [[CrossRef](#)]
7. Ioana, P.L.; Andrei, A.; Lucian, B.R. Return on Investment in Education. Case Study on Education in Romania. *Stud. Univ. Vasile Goldis Arad–Econ. Ser.* **2016**, *26*, 26–39. [[CrossRef](#)]
8. Nazar, R.; Chaundhry, I.S. The Return on Investment for Education in Pakistan. *Pak. J. Commer. Soscial Sci.* **2017**, *11*, 1069–1083. [[CrossRef](#)]
9. Psacharopoulos, G.; Patrinos, H.A. Returns to Investment in Education: A Decennial Review of the Global Literature. *Educ. Econ.* **2018**, *26*, 445–458. [[CrossRef](#)]
10. Purnastuti, L.; Salim, R.; Joarder, M.A.M. The Returns to Education in Indonesia: Post Reform Estimates. *J. Dev. Areas* **2015**, *49*, 183–204. [[CrossRef](#)]
11. Baharin, R.; Syah Aji, R.H.; Yussof, I.; Saukani, N.M. Impact of Human Resource Investment on Labor Productivity in Indonesia. *Iran. J. Manag. Stud.* **2020**, *13*, 139–164. [[CrossRef](#)]
12. Duflo, E. Schooling and Labor Market Consequences of School Construction in Indonesia: Evidence from an Unusual Policy Experiment. *Am. Econ. Rev.* **2001**, *91*, 795–813. [[CrossRef](#)]
13. Kurniati, E.; Jufrizal, J.; Fauzan, A. The Relation Between Economics with Education in Indonesia and Its Impact on Economical Building. In Proceedings of the 5th Asia-Pacific Conference on Economic Research and Management Innovation (ERMI 2021), Online, 31 January 2021; Volume 167, pp. 65–71. [[CrossRef](#)]
14. Mendy, D.; Widodo, T. Do Education Levels Matter on Indonesian Economic Growth? *Econ. Sociol.* **2018**, *11*, 133–146. [[CrossRef](#)] [[PubMed](#)]
15. Woo, Y.; Kim, E.; Lim, J. The Impact of Education and R & D Investment on Regional Economic Growth. *Sustainability* **2017**, *9*, 676. [[CrossRef](#)]
16. Becker, G.S. *Human Capital. A Theoretical and Empirical Analysis, with Spesial Reference to Education*, 3rd ed.; The University of Chicago Press, Ltd.: Chicago, IL, USA; London, UK, 1993.
17. Mahendrawan, E.; Rahayu, R.S. Analisis Pentingnya Investasi Pendidikan. *J. Ilm. Hum.* **2020**, *3*, 24–31.
18. Domino, P. Investasi Dalam Bidang Pendidikan Anak Untuk Meningkatkan Kualitas Kehidupan Keluarga. *J. Inov. Pendidik. Dasar* **2018**, *2*, 77–85. [[CrossRef](#)]
19. Papalia, D.E.; Olds, S.W.; Feldman, R.D. *Human Development*, 11th ed.; McGraw-Hill Education: New York, NY, USA, 2009.
20. Sun, X.; Huang, A. Analysis of Chinese Family Education Investment and Its Demographic Variables. *Open J. Soc. Sci.* **2019**, *7*, 15–35. [[CrossRef](#)]
21. Yu, L.; Wenjing, Z. Study on the Influencing Factors of Family Education Investment Difference. *Adv. Soc. Sci. Educ. Humanit. Res.* **2021**, *573*, 94–98. [[CrossRef](#)]
22. Hasibuan, M.S. *Manajemen Sumber Daya Manusia. Edisi Revisi*; PT. Bumi Aksara: Jakarta, Indonesia, 2017.
23. Kumi-Yeboah, A.; Tsevi, L.; Addai-Mununkum, R. Parental Aspirations and Investments in the Educational Achievements of African Immigrant Students. *Multicult. Learn. Teach.* **2017**, *13*, 1–19. [[CrossRef](#)]
24. Robbins, D. *Bourdieu and Culture*; Sage Publications Ltd.: London, UK, 2000. [[CrossRef](#)]
25. Qomar, M. *Kesadaran Pendidikan: Suatu Penentu Keberhasilan Pendidikan*; Ar-Ruzz Media: Jogjakarta, Indonesia, 2012.
26. Cooper, H. *Research Synthesis and Meta-Analysis*, 5th ed.; Sage: Los Angeles, CA, USA, 2017.
27. Moher, D.; Liberati, A.; Tetzlaff, J.; Altman, D.G.; PRISMA, G. Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. *J. Clin. Epidemiol.* **2009**, *62*, 1006–1012. [[CrossRef](#)]
28. Tiebel, M.; Mölder, A.; Plieninger, T. Conservation Perspectives of Small-Scale Private Forest Owners in Europe: A Systematic Review. *Ambio* **2022**, *51*, 836–848. [[CrossRef](#)] [[PubMed](#)]
29. Zainal, M.A.; Matore, M.E.E.M. Factors Influencing Teachers’ Innovative Behaviour: A Systematic Review. *Creat. Educ.* **2019**, *10*, 2869–2886. [[CrossRef](#)]
30. Arksey, H.; O’Malley, L. Scoping Studies: Towards a Methodological Framework. *Int. J. Soc. Res. Methodol. Theory Pract.* **2005**, *8*, 19–32. [[CrossRef](#)]
31. Lee, D.D.H.; Cho, S.J. Predicting the Outcomes of the Korean National Accreditation System for Higher Education Institutions: A Method Using Disclosure Data for Outsiders. *Asia Pac. Educ. Rev.* **2021**, *22*, 715–728. [[CrossRef](#)]
32. Hargreaves, A. Austerity and Inequality; or Prosperity for All? Educational Policy Directions beyond the Pandemic. *Educ. Res. Policy Pract.* **2021**, *20*, 3–10. [[CrossRef](#)]
33. Siyahhan, B.; Ghoddusi, H. Optimal Investment in Human Capital under Migration Uncertainty. *Rev. Int. Econ.* **2022**, *30*, 422–449. [[CrossRef](#)]
34. Nakagawa, M.; Oura, A.; Sugimoto, Y. Under- and over-Investment in Education: The Role of Locked-in Fertility. *J. Popul. Econ.* **2021**, *35*, 755–784. [[CrossRef](#)]
35. Bokayev, B.; Torebekova, Z.; Davletbayeva, Z.; Zhakypova, F. Distance Learning in Kazakhstan: Estimating Parents’ Satisfaction of Educational Quality during the Coronavirus. *Technol. Pedagog. Educ.* **2021**, *30*, 27–39. [[CrossRef](#)]
36. Bai, X.; Sun, X.; Chiu, Y.H. Does China’s Higher Education Investment Play a Role in Industrial Growth? *Technol. Soc.* **2020**, *63*, 101332. [[CrossRef](#)]

37. Jagnani, M.; Khanna, G. The Effects of Elite Public Colleges on Primary and Secondary Schooling Markets in India. *J. Dev. Econ.* **2020**, *146*, 102512. [[CrossRef](#)]
38. Xiong, W.; Mok, K. Critical Reflections on Mainland China and Taiwan Overseas Returnees' Job Searches and Career Development Experiences in the Rising Trend of Anti-Globalisation. *High Educ. Policy* **2020**, *33*, 413–436. [[CrossRef](#)]
39. Alonso-Carrera, J.; Caballé, J.; Raurich, X. Intergenerational Mobility in Education and Occupation. *Macroecon. Dyn.* **2020**, *24*, 291–326. [[CrossRef](#)]
40. Sellami, S.; Verhaest, D.; Nonneman, W.; Van Trier, W. Education as Investment, Consumption or Adapting to Social Norm: Implications for Educational Mismatch among Graduates. *Educ. Econ.* **2019**, *28*, 26–45. [[CrossRef](#)]
41. Dhanaraj, S.; Paul, C.M.; Gade, S. Household Income Dynamics and Investment in Children: Evidence from India. *Educ. Econ.* **2019**, *27*, 507–520. [[CrossRef](#)]
42. Obasuyi, F.O.T.; Chenayah, S.; Piaw, C.Y. Education Inequality in West African Countries: Does Investment in Education Matter? *Malays. Online J. Educ.* **2018**, *6*, 15–36. [[CrossRef](#)]
43. Yasuoka, M. Fertility and Education Investment Incentive with a Pay-as-You-Go Pension. *Eurasian Econ. Rev.* **2018**, *8*, 37–50. [[CrossRef](#)]
44. Tshabangu, I. The Intersectionality of Educational Inequalities and Child Poverty in Africa: A Deconstruction. *Educ. Res. Policy Pract.* **2017**, *17*, 69–82. [[CrossRef](#)]
45. Chung, K.; Lee, D. Inefficient Competition in Shadow-Education Investment. *J. Econ. Behav. Organ.* **2017**, *139*, 152–165. [[CrossRef](#)]
46. Adu, D.T.; Denkyirah, E.K. Education and Economic Growth: A Co-Integration Approach. *Int. J. Educ. Econ. Dev.* **2017**, *8*, 228–249. [[CrossRef](#)]
47. Suhardan, D. *Ekonomi Dan Pembiayaan Pendidikan*; Cetakan ke.; CV Alfabeta: Bandung, Indonesia, 2014.
48. Borjas, G. *Labor Economics*, 7th ed.; McGraw-Hill Education: New York, NY, USA, 2015.
49. Barro, R.J.; Sala-i-Martin, X. *Economic Growth*, 2nd ed.; The MIT Press: London, UK, 2015. [[CrossRef](#)]
50. Benos, N. Human Capital Accumulation, Policy and Growth. *Econ. Bus. Rev.* **2005**, *7*, 351–379.
51. Lucas, R.E. On The Mechanics of Economic Development. *J. Monet. Econ.* **1988**, *22*, 3–42. [[CrossRef](#)]
52. Ranis, G.; Stewart, F.; Ramirez, A. Economic Growth and Human Development. *World Dev.* **2000**, *28*, 197–219. [[CrossRef](#)]
53. Sala-i-Martin, X.; Doppelhofer, G.; Miller, R.I. Determinants of Long-Term Growth: A Bayesian Averaging of Classical Estimates (BACE) Approach. *Am. Econ. Rev.* **2004**, *94*, 813–835. [[CrossRef](#)]
54. Banghart, F.W.; Trull, A. *Educational Planning*; The Macmillan Company: New York, NY, USA, 1973; p. 608.
55. Somantri, M. *Perencanaan Pendidikan*; IPB Press: Bogor, Indonesia, 2014.
56. Goetsch, D.L.; Davis, S.M. *Introduction to Total Quality: Quality, Productivity, Competitiveness*; Macmillan College Publishing Co.: New York, NY, USA, 1994.
57. Wicaksono, B.A.; Sunarko, B. Analysis of The Effect of The Implementation of TQM on Quality Costs. *J. Res. Manag.* **2019**, *2*, 8–15. [[CrossRef](#)]
58. Bernstein, D.A.; Roy, E.; Wickens, C.; Srull, T. *Psychology*; Houghton Mifflin: Boston, MA, USA, 1988.
59. Saputra, B.D. Pengembangan Manajemen Budaya Berprestasi Dan Kompetisi Untuk Meningkatkan Kualitas Pendidikan. *Sosiohumaniora J. Ilm. Ilmu Sos. Dan Hum.* **2019**, *5*, 69–81. [[CrossRef](#)]