

# Instrumental Rationalization or Value Rationalization: Which Has More Influence on Parents' Investment Decisions in Education

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## Abstract

This research aims to determine the role and influence of two types of action rationalization, namely instrumental action rationalization and value action rationalization, on decisions made by parents in determining their children's future through educational investment and which is the most dominant. Descriptive and comparative methods will be used in answering the research problems, so the analytical tool in this research is an instrument using a 7-point Likert scale collected through an online survey tool in the form of Jotform. The sample to be used is parents who have school-age children at the XII grade high school education level. To get good analytical results, validity and reliability tests were carried out first through a pilot test, then continued with regression tests using actual data. The results showed that instrumental action rationalization can influence parents' decision to invest in education more than value action rationalization. The implication of this research is a better understanding from parents that there is a need to rationalize their actions in investing in education. This research is also expected to be further examined in other studies to get results and similarities in the perception that these two types of social action rationalization are interrelated.

**Keywords:** Education Investment, Instrumental Rationality of Action, Parental Perception, Rationalization of Action, Value Rationality of Action.

## Introduction

Rational action is needed to support improving the quality of human resources, primarily through education. This is because reasonable steps taken by individuals are expected to have results that can be measured through the perspective of achieving planned goals and are a belief supported by existing evidence (RHidayat, 2016; Tory, 2022). So, decisions based on the results of rational thinking are expected to lead to decisions that can consider all the risks

inherent in these actions (Hernandez & Ortega, 2019). Therefore, awareness in taking action requires stimulation in the form of information from outside itself Koch (2019); Bachmann (2020) so that the information can be used to control individual behavior or actions rationally.

Rationality in action itself is a normative measure. Individuals use it to evaluate decisions and convince themselves to use these decisions to support the achievement of predetermined goals (Baron, 2007). Therefore, the ability possessed by humans to think and act rationally is the highest achievement in the decision of an action Hidayat (2016) because their ability to rationalize the actions taken is the main parameter of behavior in achieving the individual's goals. Thus, the ability to reason is needed by individuals to make the right decision Hernandez & Ortega (2019) because the decision for an action that has gone through various considerations indicates that the individual has chosen different alternative options for activities that need to be taken in achieving the goal and is based on the decision that is most relevant to achieving the goal (Stanovich, 2016; Toplak & Rizeq, 2020).

Rational choices in action also greatly influence parents' decisions to invest in education (Stocké, 2019; Steinberg & Kleinert, 2022). This means that the actions parents will take towards their decision to invest in education will be aimed at other people, especially the welfare of the children they will have in the future. The social action behavior of parents in rationally determining choices is closely related to instrumental action, value action, effective action, and traditional action (Ritzer & Stepnisky, 2021). However, of the four rational action factors above, two main types dominantly support reasonable individual action, namely instrumental action rationality and value action rationality (Ritzer, 2010).

From the explanation above, it can be seen that the problem that arises from this research is "How is the role of instrumental action rationalization and value rationalization able to influence parents' decisions in investing in education, and which one is more dominant?". Therefore, the primary purpose of this article and its novelty will be more focused on understanding the role and influence of two types of action rationalization, namely instrumental action rationalization and value action rationalization, on decisions made by parents in determining children's future through educational investment. Thus, the results of this study are expected to provide insight to several interested parties, especially parents, that in making decisions to improve the quality of human resources owned by children through education, rationality is indeed needed in the action decisions to be taken.

### **Literature Review**

Investment in education itself is one of the ways that can be used to boost a country's productivity and economic growth (Galiakberova, 2019). This is said to be so because investing, especially in education, will have a positive impact compared to investing in other fields. The benefits obtained from investing in education are not only in the form of income but will have broader benefits such as more productive behavior, healthy behavior, and cultured behavior (Mahendrawan & Rahayu, 2020). The decision to invest in education is not only seen from the government's interests and children's motivation to continue their education but also needs to be seen from the parent's point of view. Rational parental decisions are a form of decision to invest in education to a higher level (Banks et al., 2019).

The ability to think rationally in making decisions, especially in education investment, is something every individual should do because it will be related to future costs and expected outputs. The ability to think rationally is needed by individuals to make the right decisions based on influencing factors (Edwards, 1954; Hernandez & Ortega, 2019) because rational

people will make judgments and decisions based on the information they get and will be used in achieving specific goals. Consideration in making this decision means that individuals have chosen various alternative actions to attain the expected goals based on the ways that are considered most relevant or best (Stanovich, 2016).

The decision-making process with a rational approach is to state the purpose of the situation, identify problems, determine the type of decision, generate alternative decisions, evaluate alternative decisions, select alternatives, implement plans based on the selection of alternative decisions and steps to adjust the success of choices to decisions (Moorhead & Griffin, 2013). So that an action is called rational in determining a decision if it meets four criteria, namely: 1) The action has been based on a variety of comprehensive considerations regarding alternative choices of all existing actions; 2) The selection of alternative actions that have been determined is taken based on consideration of the consequences of the choices that will arise or the risks that accompany these alternative actions; 3) If the value of the consequences or consequences or risks of the actions taken is still a possibility or result that cannot be ascertained for its truth or success, then individuals who take alternative decisions must be able to estimate the possibility of success of the choice of action; 4) The overall decision-making process based on rational thinking describes all forms of thorough consideration, both of the elements of uncertainty and the elements of ambiguity in making decisions on actions taken in connection with achieving the goals expected through these actions (Hastie & Dawes, 2010).

Rational choices in educational investments by parents include social action, meaning that these actions will be directed at other people, including children. With social action behavior in rational choice, four types of social action can be observed: instrumental action, value action, influence action, and traditional action (Weber, 1978; Ritzer, 2010). Of the four assumed types of action according to Max Weber's theory, two main types will accurately support individual rationality in determining their actions, namely instrumental action rationality and value action rationality (Ritzer, 2010).

#### *Rationality of Instrumental Action*

This action rationality is closely related to logical and directed thinking in achieving the desired goals (Brunero, 2020). This means that individuals will consciously and rationally choose and take specific actions considered the most effective way to achieve the desired goals. This is because when individuals refer to the rationality of instrumental action, they will consider the options available and evaluate each option's risks before determining the best course of action to support their goals' outcomes (Ritzer, 2011). So, the considerations that individuals can use in making decisions using instrumental action rationality are more emphasized on cost and benefit analysis and the final results to be obtained (Hernandez & Ortega, 2019). The purpose of instrumental rational action is related to the efforts made to achieve the expected goals, meaning that the action is based on careful planning prepared by the individual and considering factors that can affect it (Kelle & Lüdemann, 2019).

#### *Rationality of Value Action*

In the rationality of value actions, more emphasis is placed on the decisions that individuals will be based not only on logical thinking in achieving predetermined goals but also strongly influenced by the social values they strongly believe in (Cushman, 2020). Rational actions based on values will involve considerations of morality, ethics, equality, freedom, and other

social values that are considered essential (Cenci & Cawthorne, 2020). This means that the selection of actions based on value rationality seeks to overcome various problems or conflicts that may arise and maintain consistency in the context of actions to achieve predetermined goals. So, this type of rational action refers to actions taken by individuals based on beliefs in specific values (Ajzen & Kruglanski, 2019). Because in these actions, individuals already have beliefs and awareness about the values or methods they will use in achieving the desired or expected goals (Cushman, 2020).

## Methodology

### *Research Design*

The method used to schedule the problems in this study uses descriptive and comparative methods. This method was chosen because this research focuses on exploring and understanding the extent of the role and differences caused by instrumental action rationalization variables and value action rationalization variables on parents' decisions in determining children's education investment. The problem design can be seen in Figure 1.

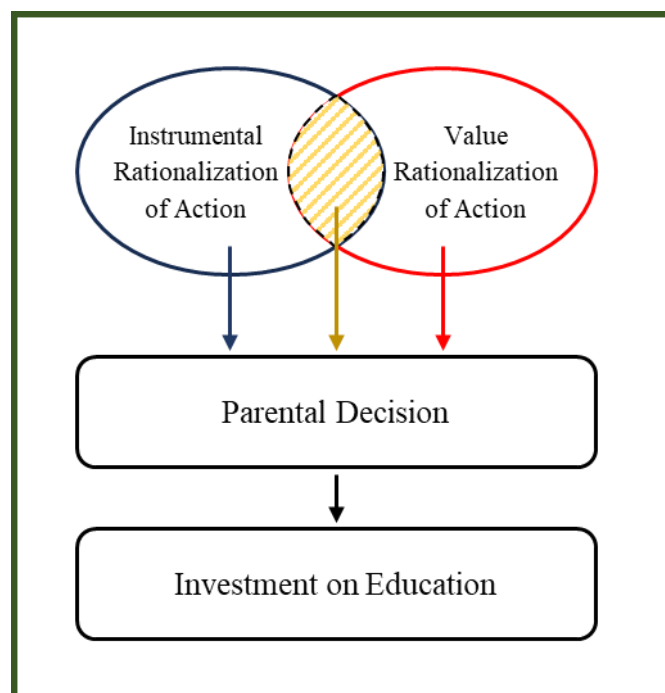


Figure 1: Problem Design

### *Sample*

The population and sample in this study were all parents of students in class XII, Malang, East Java, Indonesia. The sampling technique in this study used random sampling, with the number of samples obtained being 346, using Cochran's (1977) sample calculation. However, the number of samples obtained after the questionnaire was distributed was 423 respondents. The focus of the population and sample is only in the Malang area, East Java, Indonesia, and parents with school-age children at grade XII education level.

### *Data Collection*

Data was collected using an online survey tool, Jotform. This was done because online survey tools have advantages in terms of shorter data collection time and quickly reaching

respondents, in addition to lower costs because there is no need to duplicate questionnaires and the results are faster to interpret (Schonlau et al. 2002; Sue & Ritter 2007) because the results of filling out the instrument through online survey tools can be directly converted into Excel (XLS), PDF, SPSS, or Powerpoint / PT formats (Jotform, 2022).

### *Data Analysis*

This study uses regression analysis and t-test analysis to answer research problems. The Sig is the basis for decision-making to answer research problems in exploring and understanding the extent of the role of instrumental action rationalization variables and value action rationalization variables on parents' decisions in determining children's education investment. Value on the  $t_{count}$  and  $F_{count} < 0.05$  (Sugiyono, 2019). Meanwhile, the basis for decision-making to answer research problems in exploring and also understanding the extent of the difference caused by the instrumental action rationalization variable and the value action rationalization variable on parents' decisions in determining children's education investment is to look at the beta coefficient and compare the  $t_{count}$  values between variables (Sugiyono, 2019).

However, before analyzing the data to answer the problem, this study conducted a prerequisite test of regression analysis, namely the normality test with the basis for decision-making is the skewness value  $\pm 3$  and the kurtosis value  $< 8$  (Kline, 2016), while the multicollinearity test with the basis for decision making is the VIF value  $< 10$ , the heteroscedasticity test with the basis for decision making is the distribution of points above and below or around zero (0). The linearity test with the basis for decision-making is the  $dL > 0.05$  value (Ghozali, 2018).

### **Results**

The results of the classical assumption test, a prerequisite test before testing the regression model using the normality, multicollinearity, linearity, and heteroscedasticity tests, show that the four tests have met the essential decision-making criteria. This can be seen from the normality test results, which show the skewness value is at  $\pm 3$  and the kurtosis value is at  $< 8$  (Table 1).

Table 1

*Normality Test Summary*

	<b>Skewness Value</b> <b>Decision Basis: <math>\pm 3</math></b>	<b>Kurtosis Value</b> <b>Decision Basis: <math>&lt; 8</math></b>	<b>Decision</b>
Instrumental1	.219	-.333	Normal
Instrumental2	.228	-.343	Normal
Instrumental3	.235	-.382	Normal
Instrumental4	.208	-.409	Normal
Instrumental5	.226	-.356	Normal
Value1	.229	-.364	Normal
Value2	.099	-.310	Normal
Value3	.262	-.327	Normal
Value4	.190	-.346	Normal
Value5	.167	-.410	Normal
Cst1	.102	-.318	Normal
Cst2	-.017	-.231	Normal
Cst3	.086	-.307	Normal
Cst4	-.101	-.177	Normal
Cst5	.063	-.290	Normal
Cst6	.107	-.313	Normal
Cst7	-.025	-.230	Normal
Cst8	.118	-.318	Normal
Cst9	.252	-.372	Normal
Cst10	.087	-.323	Normal
Roi1	.051	-.275	Normal
Roi2	.031	-.273	Normal
Roi3	-.041	-.254	Normal
Roi4	-.108	-.169	Normal
Roi5	.113	-.297	Normal
Roi6	.003	-.241	Normal
Roi7	.006	-.242	Normal
Roi8	.104	-.319	Normal

While the multicollinearity test results show an R-Square (R<sup>2</sup>) value of 0.73 [0.73 < 0.90], and the linearity test value also indicates that the data has a dL value of 0.079 [0.079 > 0.05] (Table 2).

Table 2

*Summary of Multicollinearity and Linearity Tests*

Model	Multicollinearity Basis for Decision: VIF < 10	Linearity Decision Basis: Sig. dL > 0.05	Decision
ActRat_Instrumental	1.262		No multicollinearity was detected.
ActRat_Value	1.262		No multicollinearity was detected.
Investasi Education * ActRat_Instrumental		0.412	A linear relationship was detected.
Investasi Education * ActRat_Value		0.791	A linear relationship was detected.

In addition, from the classical assumption test, it is also known that the data does not have symptoms of heteroscedasticity (Figure 2). This is because the data pattern spreads above and below or around zero and does not show a certain pattern.

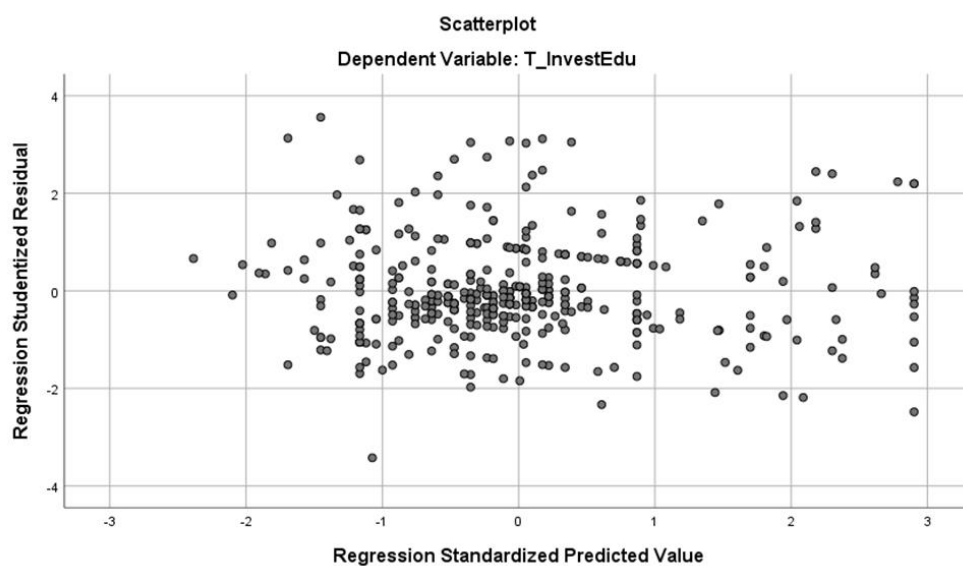


Figure 2: Heteroscedasticity Test Results

From the results of the four classical assumption tests, it can be interpreted that the data collected through 28 instrument items show normally distributed data, no multicollinearity is detected, a linear relationship is detected between the instrumental action rationalization variable, the value action rationalization variable and the educational investment variable. In addition, all the data collected also shows that the data does not have symptoms of heteroscedasticity, so it can be concluded that the data can be used as an analytical tool to answer research problems.



After verifying that the prerequisite tests have been met, the data that has been tested can be used to test the problems and objectives of the study using multiple linear regression analysis tools. From the regression analysis results, it is known that the instrumental rationalization variable and the value rationalization variable can provide a strong enough influence on the education investment variable because the results of the analysis test show that the R-Square value is 0.783 or 78.3% (Table 3). This means that simultaneously, these two independent variables can contribute exceptionally well to parents' decisions in determining children's education investment. At the same time, the remaining 21.7% can come from other variables outside the variables currently being studied.

Table 3  
*Summary of Regression Test Results*

Description	Basis for Decision-Making	Results	Decision
<b>R-Square (R<sup>2</sup>)</b>	-	0.783	The contribution given by the independent variable to the dependent variable is quite good.
<b>Uji F</b>	Sig. F <sub>count</sub> < 0.05	0.003	Independent variables simultaneously influence the dependent variable.
<b>Uji t</b>	Sig. t <sub>count</sub> < 0.05	Instrumental: 0.032  Value: 0.011	Instrumental rationalization variables influence the education investment variable.  The value rationalization variable influences the education investment variable.

In Table 3, it is also seen that instrumental action rationalization has a more excellent significant value than value action rationalization, which is 0.032 for instrumental action rationalization and 0.011 for value action rationalization. However, both types of action rationalization have a significant value below 0.05. This means that when viewed partially, these two types of action rationalization influence parents' decisions to invest in education. Still, instrumental action rationalization can significantly influence parents' decisions more than value action rationalization.

### Discussion

The results of the above research show that the rational thinking of parents influences their awareness that investing in children's education provides high risk and instability in the rate of return on their investment. This means that the results of education investment or the rate of return they will get are not always in the form of a sum of money and interest adjusted to the amount of money they have invested at the beginning, but the returns they can receive from the results of this investment can be in the form of funds derived from children's income when they have got a job or not money such as developing their potential. This is following



the results of research which states that investment in education provides a higher rate of return than other types of investment because education investment can offer better value in increasing individual productivity in the future (Becker, 1993; McConnell et al., 2016; Psacharopoulos & Patrinos, 2018; Wati & Sahid, 2022).

In addition, it is also known that the results show that instrumental and value actions influence parents' decisions to invest in education. This is following the results of the study, which states that in thinking about an educational concept, it is necessary to think about how the concept of education can have a purpose to be used as a tool in transferring social values, knowledge, and cultural heritage to future generations (Zuccoli & Korstanje, 2023). This means that in the context of this research, the decisions that parents make in investing, especially in the field of education, should be based on rationality that not only thinks about how children get future welfare through education but parents also need to think about how education can support the development of children's potential through the development of their personality.

This study also shows that instrumental action rationalization has a more significant influence than value action rationalization. This indicates that rationalizing parents' actions emphasizes the costs and benefits they will obtain in the future (Krou et al., 2019). This means that the effectiveness of achieving goals can influence parents' decisions to invest in education than the value system parents adopt. The tendency to take action based on the rationalization of activity in this study is also supported by the results of research, which reveal that value rational action is not chosen independently by the actor (individual) based on calculations in achieving goals because the authorization of the value system influences the purpose of value rationalization action though both instrumental and value rationalization actions are known to be part of socially rational action (Takayama, 2019; Krou et al., 2019).

Although, when viewed from the study's results, instrumental rational action can influence parents' decisions in choosing educational investments, it is still necessary to have balanced rational thinking between instrumental action and value action. This is because actions based on instrumental rationalization thinking that demand efficiency in achieving goals can be balanced with rationalization of value actions that invite us to see the framework of our goals more broadly and based on applicable norms (Veen & Cianciolo, 2020). This is also following the results of research which states that the decision to take an action by an individual is not a single process but is a process that is strongly influenced by several factors, both those that come from within themselves and those that come from outside themselves (Cushman, 2020).

## **Conclusion**

The results show that instrumental action rationalization and value action rationalization can influence parents' decisions to invest in education. However, parents' decisions are more dominantly influenced by instrumental rationalization in their actions. However, it cannot be ignored that parents' actions are also affected by value rationalization, although it is not a dominant factor. Therefore, the implications of the results of this study expect parents to be able to combine these two types of rational actions because then they will have a variety of choices of considerations for the actions they will take for their children's future welfare. The hope is that by combining these two choices of action rationalization, it will be able to help parents make decisions that follow their economic situation, the need to increase the potential of children, and also strengthen the character that exists in the family so that it will

provide higher value to children in supporting their future in the future. Therefore, further research is still needed to explore the use of both types of action rationalization (instrumental action rationalization and value action rationalization) together in the decision to invest in education when viewed from the parent's perspective.

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