THE INFLUENCE OF PRODUCT QUALITY ON THE PURCHASING DECISION OF EDUCATIONAL CHILDREN BOOKS

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Parents in Indonesia is getting more concern about children's education nowadays. This encourages the development of children's book publishing which became one of supporting tools for children education. It also has encouraged many new children's book authors. Unfortunately this is not followed by an increase in the quality of authors, so the books are less sold. The aim of this study is to determine if the quality of children's books with education content have effect on consumer purchase decisions. Theoretical basis of this research is the theory of product quality and consumer purchase decisions. Results of linear regression analysis showed the quality of educational books for children have a great effect on consumer purchase decisions.

Keywords: Early Childhood Education, Quality, Books, Publishing, Purchase Decisions

INTRODUCTION

Learning is a complex process occurred to every person throughout his life. Age of 0-6 years is the most potential phase for children’s learning. At pre-school age, 80% of a child's cognitive development has been developed (Apriana, 2009). Society in Indonesia has increasingly showed great concern for the problems of education, nurturing, and protection of young children at ages 0 to 6 years with various types of services in accordance with conditions and capabilities, both in formal and non-formal education (Permendiknas 2010: 1). Currently, number of residents in East Java itself has reached 34,476,757 people (BPS 2013). While the number of children who get pre-school education has increased. Based on the existing data in 2010-2012, the number of children who have attended pre-school education were increased. In 2010, there were 23.22% of the number of children aged 3-6 years who had received pre-school education, in 2011 the number increased to 24.42%, while in 2012 the percentage increased to 26.50% of the total number of children aged 0-6 years. Parents are more aware of pre-school education, and this has encouraged them to give more attention to media used for educate their children. One of the learning media is books.
Association of Indonesian Publishers (Ikatan Penerbit Indonesia/IKAPI) recorded data from Gramedia Bookstore, which has the largest book store networks in Indonesia, which shows children's book sales during 2012 and 2013 occupied the highest rating among the other types of books. In 2012 children's book sold over 10.97 million copies with almost 7,000 more titles, and in 2013 have decreased slightly to 10.95 million copies with 4,700 titles. IKAPI presumed the increase on purchasing of children's books is the growth of a new middle class, where parents increasingly giving attention to children's education and children's reading habits. And that makes children's books into potential market and has attracted many authors, and publishing company also expected to gain great profits from it.

In related to the emergence of many children's books which have educational value, Quality and Human Resource Education Development Agency and Cultural and Educational Quality Assurance abbreviated as BPSDMPK-PMP in bahasa as a governmental institution, has provided guidelines for writing textbook for early childhood education in order to produce qualified books. In Guidelines for Writing Textbook In Increasing Competency of Early Childhood Educators stated that qualified children books are assessed through book appearance, language, book structures, comprehension guide, legibility, and writing ethics. The growing market of children's books has encouraged many publishers to publish children's book. It also encourages the emergence of many new writers of children's book. However, the emergence of new writers is not followed by an increased quality of the texts made. According to survey done toward some of the major publishers in Indonesia in 2013, such as Elex Media, BIP and Tiga Serangkai, the result obtained showed that there was a trend in the emergence of new writers who produce a lot of texts. But only 1:10 of those texts accepted by publishers included in the category of proper texts published. Thus, studies on the importance of things required by writers to develop qualified texts need to conduct.

**UNDERSTANDING OF PRODUCT QUALITY**

Indonesian government has published a qualified children's book writing guide in 2013. BPSDMPK-PMP as party who issued Guidelines for Writing Textbook In Increasing Competency the Writing Guidelines for Early Childhood educator has stated in it, that must followed rules in order to make a qualified children's book are:

1. **Book appearance**
   Book appearance can be judged by knowing whether a book attracts children’s attention to read it or not

2. **Language**
   Language on books means by this study is using standard structure and word choose, also easy to understand by childrens in certain ages.

3. **Book structures**
   Brief title, attractive layout, easy sequences, have table of contents, clear cognitive structure, summaries, and exercises to do by readers.
4. Comprehension guide
Equipped with practicing materials, give readers chance to know the progress of their learnings. Children underfive years old can not be taught in a way of older people do. And only one activity that can conquer the above 3 characteristics of children, i.e. playing. Thus, the existing of comprehension guide should be packed in playing activities that can be enjoyed by children.

5. Legibility
Comfortable to read (type and size of letters used are not too small and pleasant to read), a sequence of structured text, and easy to read. To choose a suitable form of letters needs to be done several tests, among others in field of fonts, size, thickness of fonts, colors, spacing between letters, long lines to find the right formulation for children and parents.

6. Writing ethics
Writing ethics means not doing plagiarism because it can be considered as a criminal offense for stealing other people's copyright. When quoting some texts, writers should include the source they have quoted.

PURCHASE DECISION UNDERSTANDING
Children's books are things needed by children, but purchase decisions are made by their parents, especially mothers. Based on research by Hermawan Kartajaya, it states that mother is the most decisive figure in the decision of household expenditure, including expenses for the needs and education of their children (Kartajaya, H. 2005: xvii). Kotler emphasized the importance of the purchase process before the purchase until after the purchase. Consumers will pass through five stages to achieve purchase decisions they made. Purchase decisions by mothers as decision makers are conducted after undergoing five stages of thought, they are (Kotler 2012: 152):

1. Introducing the Problem
The problems including ones arisen due to internal and external stimuli. Purchase process actually has been started when buyer recognizes a problem or need. Internal stimuli are basic needs arise from within such as hunger, thirst and other needs. While external stimuli are caused due to external urge.

2. Searching for Information
Consumers who have needs will be urged to seek more information about products which are able to fulfill their needs. Consumers will find information stored in their memory (internal search) or to collect information from the surrounding environment (external search).

3. Alternatives Evaluation
Emerging alternatives are evaluated and selected to meet the needs of consumers. To select an alternative, consumers will use several different evaluation criteria, such as form, excess and so on. This evaluation is usually influenced by opinions and inputs of others as well as the existence of internal factors.
4. Purchasing Decisions
Purchase decisions are made after a variety of considerations. With so many input obtained by consumers, after evaluating several alternative choices consumers will ultimately make a purchase decision.

5. Post-Purchase Behavior
After purchasing a product, consumers will experience a certain level of satisfaction or dissatisfaction. This experience triggers someone's opinion on a particular product.

In children’s books purchasing, parents recognize the need of early education for children in order to the childrendevvelopments are able to compete with their peers. After searching for information, parents make some alternatives for qualified children books. Next, parents conduct evaluation directly by comparing between alternatives existed. Books are evaluated to determine which option is more suitable for children, because the need of each child is different. In this evaluation stage, factor of children oftenly have a big effect.

Research Framework Concept
The research on the effect of product quality on consumer purchase decisions of children's books using explanation quantitative research method. Quantitative research is a numeric data or scoring data from the questionnaire which is then analyzed to find the desired scientific information. While the explanation is intended to describe a generalization of sample to the population or to explain the relationship, differences or the effect of one variable on another variable. By using the theory of causality, product quality is divided into several factors, so that those factors can be considered as factors that have causative relationship. The researcher limited the sampling with certain considerations. Selected respondents were those who are expected to answer all questions asked because have a criteria i.e. have children aged 0-6 years and have made purchase on children's books.
Hypotheses
In order to get a clear direction and guidance to conduct research and answer the research questions that have been formulated in this study, the proposed hypotheses are as follows:
H1: There is significant effect of Book Appearance (X1) on variable of purchase decision of Children's Book with Educational Contents (Y).
H2: There is significant effect of Language (X2) on variable of purchase decision of Children's Book with Educational Contents (Y).
H3: There is a significant effect of Book Structures (X2) on variable of purchase decision of Children's Book with Educational Contents (Y).
H4: There is significant effect of Comprehension Guide (X4) on variable of purchase decision of Children's Book with Educational Contents (Y).
H5: There is significant effect of Legibility (X5) on variable of purchase decision of Children's Book with Educational Contents (Y).
H6: There is a significant effect of Writing Ethics (X6) on variable of purchase decision of Children's Book with Educational Contents (Y).

Research Methods
In conducting research on the effect of product quality on consumer purchase decisions of children's books, the method used is explanation quantitative research methods. Quantitative research is numerical or scoring results data obtained from questionnaire then analyzed to find the desired scientific information. While the explanation is intended to describe a sample generalization of population or to explain the relationship, differences or the effects of one variable on another variable. Product quality is divided into several factors using the theory of causality, so those factors can be considered as factors that have a causality relationship. The researcher limits the sampling with certain considerations. Selected respondents are those who are expected to answer all questions asked because they have criteria, i.e. have children aged 0-6 years and have made a purchase of children's books.
The population used by researcher in this study are members of The Urban Mama's website during November 2013, data showed that the number of young mothers in the community population were to 49,967 people up to October 22,
2013. From the population the sample would be drawn an unused estimation of community overall opinion on purchasing decisions of children's books by consumers. Samples, according to Bailey cited by Prasad (2010: 119), is a part of the observed population. Sampling technique used by the author is purposive sampling technique. Purposive sampling technique is a sampling determination with the limitation of a certain requirements. In this study, the author limits based on some requirements:
- mothers aged 21-50 years who have children aged 0-6 years
- Purchase reading books for their children

Determination of the respondents' number in this study were taken using Slovin formula, which is one of the techniques of sample size determination for social research (Sarjono and Julianita, 2011).

Slovin formula:

\[ n = \frac{N}{(1 + Ne^2)} \]

After the calculation using Slovin formula respondents generated were 100 people who would be sample of the study (figures rounded for ease of calculation). Data obtained was in the form of Likert scale ordinal data with range of 1-5. Scale 1 means strongly disagree, 2 means disagree, 3 means agree, 4 means quite agree and 5 means strongly agree completely. Next, the stage of factor data processing was performed using SPSS software version 17.0.

RESULTS AND DISCUSSION
Multiple Linear Regression Analysis
Based on the research that has been done the obtained results are as follow:

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>-3.222</td>
<td>.830</td>
<td>-</td>
</tr>
<tr>
<td>X1</td>
<td>.164</td>
<td>.055</td>
<td>.243</td>
</tr>
<tr>
<td>X2</td>
<td>.267</td>
<td>.047</td>
<td>.433</td>
</tr>
<tr>
<td>X3</td>
<td>.127</td>
<td>.047</td>
<td>.205</td>
</tr>
<tr>
<td>X4</td>
<td>.024</td>
<td>.052</td>
<td>.034</td>
</tr>
<tr>
<td>X5</td>
<td>.021</td>
<td>.049</td>
<td>.033</td>
</tr>
<tr>
<td>X6</td>
<td>.134</td>
<td>.051</td>
<td>.108</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Y
Based on Table 1, on the value of their multiple regression of each variable above, the multiple linear regression in this study is as follows:

\[ \hat{Y} = -3.222 + 0.164X_1 + 0.267X_2 + 0.127X_3 + 0.024X_4 + 0.021X_5 + 0.134X_6 \]

Linear regression shows the regression coefficients of the book appearance \((X_1)\), language \((X_2)\), the book structures \((X_3)\), comprehension guide \((X_4)\), legibility \((X_5)\), and the writing ethics \((X_6)\) as the independent variable are in positive means that independent variables has the effect on dependent variables, or in other words, good quality product of educational books for children is followed by the purchase decision of children's books with educational contents.

From the linear regression above, the explanations are as follows:

- The the regression coefficients value of quality book consists of variables of book appearance \((X_1)\), language \((X_2)\), book structures \((X_3)\), comprehension guide \((X_4)\), legibility \((X_5)\), and writing ethics \((X_6)\) were all have positive on regression coefficient value which represents the linear relationship between the book quality and purchase decision, means that if the quality of children's books with educational contents increase, the Purchase Decisions also will increase.

- The regression coefficient value of variable of book appearance \((X_1)\) is 0.164. Represents linear relationship between book appearance \((X_1)\) and the Purchase Decision, means that if the appearance quality of children's books with educational content increase, the Purchase Decisions will increase by 0.164 unit, assuming the other variable of product quality are constant.

- The regression coefficient value of variable of language \((X_2)\) is 0.267. Represents linear relationship between language \((X_2)\) and the Purchase Decision, means that if the language quality of children's books with educational content increase, the Purchase Decisions will increase by 0.267 units, assuming the other variables of product quality are constant.

- The regression coefficient value of variable of book structures \((X_3)\) is 0.127. Represents linear relationship between the book structures \((X_3)\) and the Purchase Decision, means that if the book structures quality of children's books with educational content increase, the Purchase Decisions will increase by 0.127 units, assuming the other variables of Product quality are constant.

- The regression coefficient value of variable of comprehension guide \((X_4)\) is 0.024. Represents linear relationship between the comprehension guide \((X_4)\) and the Purchase Decision, means that if the comprehension guide quality of children's books with educational content increase, the Purchase Decisions will increase by 0.024 units, assuming the other variables of Product quality are constant.

- The regression coefficient value of variable of legibility \((X_5)\) is 0.021. Represents linear relationship between the legibility \((X_5)\) and the Purchase Decision, means that if the legibility quality of children's books with educational content increase, the Purchase Decisions will increase by 0.021 units, assuming the other variables of Product quality are constant.
The regression coefficient value of variable of the writing ethics (X3) is 0.134. Represents linear relationship between the writing ethics (X3) and the Purchase Decision, means that if the writing ethics quality of children's books with educational content increase, the Purchase Decisions will increase by 0.134 units, assuming the other variables of Product quality are constant.

**Coefficient of Determination (R²)**

Based on the linear regression computing, it is known the value of the effect of product quality variable, the values can be seen on table below:

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.950a</td>
<td>.903</td>
<td>896</td>
<td>1.15131</td>
<td>2.052</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), X6, X3, X5, X4, X2, X1  
b. Dependent Variable: Y

Based on Table 6 on the values of overall effects of the study variables, it is noted that the value of R square of 0.903, this means that all the independent variables (product quality) which consists of book appearance, language, the book structures, comprehension guide, legibility, and writing ethics has the effect of 0.903 or 90.3% on the purchase decisions of children's books with educational contents and the rest (9.7%) is the influence of other variables beyond the variables in this study, or can be said that purchase decisions of children's book with educational contents are effected by the product quality of 90.3% and the remaining 9.7% is effected by other factors beyond the variables in this study.

**Discussion**

*Description of Respondents Research*

The method used to collect data in this study was using the online questionnaire. The questions in the questionnaire was enclosed, using a Likert scale assessment. In response to questions on a Likert scale, respondents chose the level of agreement to a statement by choosing one of the answer options which were available. The answer options are as follows: strongly disagree - do not agree - neutral - agree - very agree (Kuncoro 2009: 179). In this study, the population of respondents were members of The Urban Mama.com website with a population of young mothers in the community amounted to 49,967 people up to October 22, 2013, the number of respondents were 100 people. Based on table 5.2 on respondents ages, it can be seen that the members of The Urban Mama dominated by women aged between 30-39 years which amounted up to 40%. It can be concluded that the average age of the The Urban Mama members were between 30-39 years.
Hypotheses Testing Results

Before testing the hypothesis, first of all the instrument (questionnaire) consisting of validity and reliability were measured. The validity measuring as the research instrument for variables that effect the purchase decision on children's books with education contents by consumer is measured by using SPSS which consists of several sub-variables, including the book appearance (X1), the language (X2), the book structures (X3), comprehension guide (X4), legibility (X5), and the writing ethics (X6) that will affect the purchase decisions of children's books with educational content (Y). In validity testing, it is known that the value on all indicators (question items) generate a significance value which less than 0.05, so that all of the questions items that create the study variables can be stated as valid. As for measuring the reliability, Cronbach’s alpha values was used in this study. If the Cronbach’s alpha values greater than 0.6, and the value of Cronbach’s alpha for each question are less than Cronbach’s alpha, the questionnaire is reliable. And based on test results, it Cronbach’s alpha value obtained was greater than 0.6, in addition the value of Cronbach’s alpha on each indicator (question items) does not greater than the value of Cronbach’s alpha for each variable. Based on these results, we conclude that all research variables can be declared as reliable.

To understand the significant effect of independent variables on the dependent variable, it was determined through hypothesis testing. Based on the research, known that the Sig. F value is equal to 0.000. Thus it can be seen the value of significance (0.000) which was smaller than \( \alpha (0.05) \), it means that the variable of quality products consisting of book appearance (X1), the use of language (X2), the book structures (X3), comprehensive guide (X4), legibility (X5), and the writing ethics (X6) have a significant effect on purchasing decisions of children's books with educational content simultaneously (Y).

Partial effect of each variable on variable of purchase decision can be tested by using the t test. Sig. t value of each independent variable in this study had a sig t > 0.05 so the independent variables have significant effects on the dependent variables (Sugiyono 2009: 75). Thus, it can be concluded that the quality of the product partially effects significantly on purchase decisions of children's books with educational content.

Value of the effects of all variables in this study, known the value of R square of 0.903, means that all the independent variables (product quality) which consists of the book appearance, language, the book structure, comprehensive guide, legibility, and writing ethics have the effect of 0.903 or 90.3% of the purchase decisions of children's books with educational content and the rest (9.7%) is the effect of other variables beyond the variables in this study.
Conclusions and Suggestions

Based on the research results, it was found that the value of R square was 0.903, means that all the independent variables (product quality) which consists of the book appearance, language, the book structure, comprehensive guide, legibility, and writing ethics have the effect of 0.903 or 90.3% of the purchase decisions of children's books with educational content and the rest (9.7%) is the effect of other variables beyond the variables in this study. Based on descriptive analysis results, it can be known the value of Sig. t of each variable of X1, X2, X3, X6. It was found that the Sig t <0.05, the independent variables have a significant effect on the dependent variable partially. Meanwhile, X4, and X5 have no significant effect on the dependent variable partially. According to the author’s observation, comprehension guide and legibility is not the main thing that is sought after by parents as consumers. And improvement in this aspect will not have a big effect on the purchasing power.

Based on the results of the study, it could also draw some suggestions, that in writing a book needslot of steps and work programs. Writers can not only give attention to what is demanded by publishers, but should give more attention to what is demanded by market in order to produce good quality book. This study showed that book quality has 90.3% of effect on purchase decision. It makes book quality is worthy enough to be studied deeply by publishers and authors before publishing children's books with educational content. Therefore writer and entrepreneurs who wish to be successes in the book publishing industry need to pay more attention and keep themselves update to the market demanded.

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