

# Family 4.0: Alteration Family Life In The Industrial Revolution 4.0

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**Abstract.** The main purpose of this article is to discuss changes in family life in the era of the industrial revolution 4.0 which are reviewed from the impact of using gadgets and the internet. Based on a review of meta-analysis studies on several research results, experiences of parents and children, and interviews with experts. The results showed that families with formal working parents benefited from the era of industrial revolution 4.0 in terms of communication without limits of space and time, the ease of obtaining basic family needs (food, clothing, cosmetics, accessories, household appliances, etc.) that could be obtained quickly. But the other side has a negative impact on industry 4.0 developments, especially families with children under 10 years, some cases show that gadget addiction has experienced communication delays, physical and mental disorders. It is suggested that show how this scientific research can be used for applied purposes.

**Keywords:** family life, industry 4.0, internet of things, gadget.

## 1 Introduction

In the era of industrial revolution 4.0 there has been a transformation in family institutions which is one of the main domains of social structure[1]. The use of information communication technology has become endemic, which has changed the pattern of family interaction.[2] Patterns in the family also influence other social processes. The fact is that family life has changed in the last generation, despite the emergence of technology. The size of the house has increased by 50 percent, which means that family members can retreat to the corner of their own home, so it is unlikely that parents and children will see each other. Because everyone is so busy with work, school and extracurricular activities, there is less time for families to spend time together.[3][4]

Efforts to support and strengthen families vulnerable to crisis. The form of social interaction in the family that is influenced by the use of gadgets can change the function of the family itself. Where behavior between parents, or parents to children in their care is not intact, where communication, closeness, support, and involvement of parents are no longer felt or carried out to the maximum.[5]

Parents who use smartphone technology provide many uses, such as being able to communicate smoothly with other people, get information quickly, can help parents to get information related to their work. But many disadvantages are getting parents who do not

really understand how to use smartphone technology, such as social inequalities between parents and society and families, disrupt health, disrupt the family economy and reduce the religious value that exists in the parents themselves.[6]

Technology can have many benefits for children when used properly and under supervision, but may only use it as their children's caregivers because they have no time or interest to play with their children. I really understand the argument of using it as an educational tool, and even that rare use is only to get a break so you can do some of the things needed around the house. The problem comes with abuse and assumes that an environment full of technology will prepare children with the ability to use new technology and develop in the future.[7] [8]. The use of ICT gadgets affects the interactions and relationships between parents, children and partners that they cannot do with their responsibilities according to their social roles. Increasing feuds among family members have weakened families and marriage institutions because of the rapid use of ICT.

None of the effects of popular culture and technology on children's relationships are more real than in families. Both of these influences have contributed to the growing division between the traditional roles played by children and their parents, while at the same time, blurring the same lines between parents and children. Because of the lack of technological acumen on the part of many parents, they have no authority, at least in the eyes of their children, to regulate their use. Because of parents' anxieties or concerns about using technology, they may not want to impose themselves on the technological life of their children. Because of their children's superiority and lack of respect for parental authority on this issue, children may not listen to their parents' efforts to guide or limit their use of technology.

have given children freedom in their communication with friends and others. In the previous generation, if children wanted to connect with a friend, they had to ask permission from their parents. Thus, parents have the opportunity to monitor and act as gatekeepers for the social lives of their children.[9] Parents, in turn, see it as losing the connection to their children and the inability to maintain reasonable supervision, for the overall safety and health, the lives of their children. At the same time, there are parents who feel they don't have to bother entertaining their children, giving them more time for themselves[10].

The study in the study explained the benefits and negatives of the industrial revolution 4.0 era on the order of family life which included patterns of interaction, parenting patterns, and economics. The source of the study is screening from various data sources (interviews, observations, documents) and research articles.

## **2 Research Methods**

This study uses the Meta-Analysis design. Simple meta-analysis can be interpreted as an analysis of analysis. As a research, meta-analysis is a study of a number of research results in similar problems. The instrument in this study uses Human Instrument.

Meta-analysis introduces a series of quantitative analysis techniques that enable the synthesis of various research results. [10] The analysis in the meta-analysis is based on the availability of artifact information from each study result. After the focus of the research becomes clear, simple research instruments will be developed, which are expected to be able to complete data and compare data that has been found before. Data collection techniques will use documentation techniques. The population in this study are all written documents on the

issue of industry 4.0 influence on family life. The written documents include books, journal articles, and research reports. The research sample was taken using purposive sampling technique. This is because the data or information to be obtained from the sample is determined based on its suitability with the theme of this research. Data analysis used is quantitative data analysis with percentage and qualitative data analysis for data from the results of narrative studies of the studies encountered.

### 3 Result And Discution

#### 3.1. Research Results

The studies on the impact of industry 4.0 on family life obtained were as much as research. The studies were obtained from various sources, namely: the influence of technology on family life both positively and negatively from the eyes of parents, children, and adolescents [11][1][12][13][14][15][16][17][18][19][20][21][22][1][9][7][23][24][3][24][25][22][26][25]. In general, the data is obtained by downloading from the internet.

#### 3.2. Meta analysis of research objectives

Industry 4.0 impact studies on families use several research designs, namely: survey, phenomenology, then the design used as shown in the following table 6:

**Table 1.** Research design

Research Design	<i>frekuensi</i>	%
Survei	19	79.2
phenomenology	5	20.8
R & D	-	-
Total	24	100

#### 3.3. Meta analisis based on population

The population/sample used in industry studies 4.0 or the subjects of the research are children, adolescents, parents of three levels of school. Based on a study of 20 studies, the population/sample can be seen in the following table:

**Table 2.** Research subject

Research Subjek	<i>frekuensi</i>	%
Child	2	8.4
Teenager	5	20.8
Parents	13	54.2
Parent and Child	4	16.6
Total	24	100

#### 3.4. Meta-analysis based on methods/data collection techniques

Methods/techniques of data collection used in research on industry 4.0 consist of Test methods, Observations, Questionnaires, and interviews. Based on a study of 20 studies on the

impact of gadgets on family life, the methods/techniques of data collection used can be seen in table 3 below:

**Table 3.** Data collection

<b>Data collection</b>	<i>frekuensi</i>	<b>%</b>
Interviews and observation	5	20.8
Qoesioner	17	70.8
Mix methods	2	8.4
Jumlah	24	100

### 3.5. The data analysis technique

The data analysis technique used in studies on industry 4.0 consists of:, then the data analysis technique used can be seen in Table 4 below:

**Table 4.** Data analysis technique

<b>Data analysis technique</b>	<i>frekuensi</i>	<b>%</b>
Uji-t	3	12.4
Descriptive qualitative	5	20.8
Descriptive quantitative	17	70.8
Jumlah	24	100

From a review of the results of the study, in general there are some data that the industrial revolution era 4.0 is characterized by digitalization, internet of things, and gadget, smartphone devices, in influencing family life, both children, adolescents, and parents. Industry 4.0 has a positive impact on parents in terms of interaction and communication, economy, recreation. Positive impact on adolescents in terms of learning achievement because of the ease of getting knowledge, friendship and creativity. But it can be fatal if there is no supervision and control from the parents. The results showed several phenomena of addiction to gadgets which resulted in mental disorders. Impact of industry 4.0 for children tends to be more negative, the impact on health, verbal, physical and mental communication disorders.

## 4 Conclusion

The industrial revolution 4.0, which is characterized by the digital era and the internet of things on various communication devices, is very influential on family life, both positive and negative in terms of economy, communication, creativity, but can negatively affect children if not under the supervision of parents. Negative tendencies can be overcome through several strategies for parents in educating children wisely.

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