The Impact of Upin and Ipin Animation on Aggressive Behavior in Children Aged 5–6 Years: A Quantitative Experimental Study

Sindy Mey Dwi Utari¹, a Nur Hidayah², Pramono³
¹,²,³ Universitas Negeri Malang, Malang, Indonesia

Abstract
The study aimed to investigate the impact of the Upin Ipin animated film on the aggressive behavior of 5-6-year-old children at TK Dharma Wanita I Blitaran. This research employed a pretest-posttest control group design, and data were collected through observation sheets and documentation. Data analysis was conducted using SPSS 24. The study revealed that the Upin Ipin animated film significantly influenced children's aggressive behavior. The research findings indicated that the experimental group experienced increased aggressive behavior. The average pretest score was 6.60, while the average posttest score was 7.90. The results of the hypothesis test using paired sample t-test showed a significant value of 0.000 < 0.05, leading to the rejection of the null hypothesis (H0) and acceptance of the alternative view (H1). The experimental group exhibited increased aggressive behavior after watching the film, as evidenced by the higher average posttest scores than the pretest scores. However, this study also acknowledges its limitations in scope, as it focused solely on 5-6-year-old children and the influence of a specific animated film. The research emphasizes the importance of parental guidance in children's media consumption. While animated films like Upin Ipin can potentially influence aggressive behavior, they can also serve as practical educational tools to promote positive social behavior and other essential skills, depending on their content and presentation. The novelty of this research lies in its focus on the influence of a specific animated film, Upin Ipin, on children's aggressive behavior.

Introduction
Children's development varies and cannot be generalized. However, their physical and psychological growth during this period is rapid (Miranti & Putri, 2021). Physical growth refers to physical development, while psychological or behavioral change relates to development. Children's behavioral development can be obtained through their experiences and observations. Khairi (2018) stated that characteristics found in young children include a unique personality, high curiosity, selfish attitudes, imagination, and being social beings. This vulnerability occurs in early childhood, from birth to eight years old (Maqhfiroh & Suryana, 2021). Therefore, guidance is needed to help children differentiate themselves (Maulana et al., 2018). Children between the ages of four and six are highly receptive to stimuli because their physical and psychological maturity allows them to respond to environmental stimuli (Arifudin et al., 2021). Hence, education is essential to optimize children's potential.

Early Childhood Education is an effort to nurture children from birth to six years old by providing educational stimuli to enhance their physical and spiritual growth, preparing them for further education (Hulyiah, 2016). It aims to shape Indonesian children with appropriate qualities according to their developmental stage and prepare them for school readiness (Zubaidah & Nasuah, 2016). Therefore, education is instrumental in guiding children to develop and direct their full potential, achieving all goals and aspirations. In the field of education, social-emotional development also influences children's behavior.
Social development is learning how to build relationships through interactions with others in the environment. Children’s social development depends on understanding and exhibiting good social behavior (Poerwati & Cahaya, 2018). The family is the primary model for enhancing children’s social development (Delyana & Mudijran, 2020). During childhood, children experiment with understanding others’ emotional reactions and begin learning to regulate their emotions (Sukatin, Qomariyyah, et al., 2020). Expressing feelings in young children tends to be uninhibited, influencing their personality and environmental adaptation. The characteristics of emotions in early childhood include rapid onset and sudden termination, appearing more intense, being temporary, frequent occurrence of emotions, clear indications from their behavior, and self-reflective reactions (Sukatin, Choffiah, et al., 2020).

With the development of communication technology, the modern era is marked by the advancement of the television industry. Television serves as a means of receiving various information, including entertainment and promotion. Hence, television can influence changes in thinking and shape new behaviors in social environments. Television has the advantage of continually renewing itself by creating new programs. Television broadcasting as an entertainment medium has increased (Safitri et al., 2022). Television programs cater to audiences of all ages, from children to adults. However, various programs may not consider their ideal values, focusing more on material gain and neglecting whether the content is educational.

Certain television shows, such as those containing violence, pornography, and excessive emotions, have received criticism. However, not all television shows harm children, as many educational programs still exist. Television shows targeted at children encompass songs, games, and adventures, particularly animated films. Animated films are predominantly favored by children, and even adults enjoy them. Children’s animated films depict their social lives and can involve school events, mischievousness, and adventures.

One of the Malaysian animated films for children is Upin and Ipin, which tells the story of two twin children living with their grandmother and older sister. Upin and Ipin animation has become one of the favorite entertainment shows for children. This animation’s cute and engaging packaging ensures it never loses its audience and remains popular. Everyone loves Upin and Ipin because they are considered to convey educational values (Yulianeta & Amandangi, 2021). Les’ Copaque produces the Upin and Ipin animated film. According to Illham et al. (2021), this animation is humorously packaged. It features different characters, with Upin and Ipin as the main characters and supporting characters such as Opah, Kak Ros, Fizi, Jarjit, Ehsan, Mail, and Mei-Mei, each with unique traits. The show is popular, especially among children, and some even imitate scenes from the film. Children tend to imitate what they watch (Rezeki, 2017), raising parents’ concerns if it starts to influence their behavior at school.

Young children tend to enjoy animated films because of their appealing characteristics. These films, commonly found on television programs, often feature prominent characters that captivate the young audience. The characters not only leave a lasting impression but also help to shape personalities, thereby influencing the mindset of their viewers. Such influence extends beyond children’s imagination, reaching their behavior as well. According to Crain, as cited in Tarsono (2010), behavior is shaped not only by personal role models but also by mass media, which includes television. Current television programming can foster aggressive behavior in children if not appropriately supervised. ‘Aggressive behavior’ refers to conduct perceived as attacking or threatening. It encompasses intentional threats toward others, conveyed verbally or through physical or non-verbal actions (Yanizon & Sesriani, 2019). Aggressive behavior is unacceptable and involves deliberate attacks to harm others (Tola, 2018). Aggressive behavior tends to be more prominent during the developmental stage of children aged three to six years old. Aggressive behavior hinders future development in children. Aggressive behavior, whether performed by an individual or a group, goes against the norms of society (Meydiningrum & Darminto, 2020).

Aggressive behavior is a form of emotional outburst in children due to frustration. According to Buss and Perry, as cited in Ferdiansa. S (2020), there are four types of aggression:
physical aggression, verbal aggression, anger, and hostility. Physical attack refers to behavior that physically harms and poses a danger to others (Paswaniati et al., 2021). Verbal aggression involves hurting others through words and using negative language (Sari et al., 2020). Anger is an expression of deep disappointment, and indirect aggression serves as a manifestation of feelings of hatred toward others. Hostility involves aggressive behavior aimed at resisting injustice and a desire to cause harm. Children who frequently observe aggressive behavior from their parents, such as being hit, slapped, or yelled at, may imitate it in the present and future (Mussulfah et al., 2021). The emergence of aggressive behavior in children is caused by internal genetic factors and external factors such as parental sensitivity to the child's needs within the family. The school environment is another factor, including lack of teacher attention, punishment, criticism, and being frequently reprimanded by teachers (Pangarsa, 2018). Cultural influence is a third factor that affects children's thoughts, often seen through levels of violence portrayed in social media (Karmin et al., 2018). Fourth, the recurrence of unpleasant situations and conditions triggers aggression in children (Akbar et al., 2021). Fifth, children imitate what they see and hear from their environment. Lastly, the climate tends to exhibit aggressive behavior, influencing children to imitate what they see and hear (Ladya Putri Syafi'i & Hadi, 2021).

Preliminary observations have identified aggressive behavior among some children during learning activities. These behaviors include teasing classmates and becoming overly engrossed in play to the point of disregarding time. Such behavior could stem from inadequate supervision while the children watch animated films on television. To understand this further, the researcher aims to investigate the extent to which viewing Upin and Ipin animated films might influence children's aggressive behavior.

Existing literature provides a foundation for understanding the impact of children's animations, such as Upin and Ipin, on the behavior patterns of young children. For example, Ilham et al. (2021) provide valuable insights into the social behavior patterns depicted in the Upin and Ipin cartoon, such as cooperation, kindness, attentiveness, and fairness (Ilham et al., 2021). Based on this research, these behaviors may benefit children's social development. Furthermore, Blumberg et al. (2008) and Sallehuddin & Omar (2011) studied the impact of violence in cartoons on children's behavior, suggesting that children's understanding of television content and their moral reasoning abilities can mediate the influence of violent representations (Blumberg et al., 2008) (Sallehuddin & Omar, 2011). However, existing research is limited in terms of scope and methodology.

Despite these contributions, there are still areas of controversy and gaps in knowledge. Firstly, there is a debate regarding the impact of cartoons, particularly those containing violence, on children's behavior. Some studies, such as Blumberg et al. (2008) and Sharina and Izmar (2011), argue that young children may not be prone to imitating violent actions they see on television. However, these studies primarily focus on theoretical propositions and literature reviews, leaving room for further empirical research (Blumberg et al., 2008) (Sallehuddin & Omar, 2011). Additionally, existing research mainly examines cartoons containing violence. It pays less attention to the potential impact of non-violent but potentially aggressive behavior depicted in popular children's cartoons like Upin and Ipin.

Moreover, most existing studies employ qualitative approaches, leaving a gap in quantitative assessment. Given these limitations, this dissertation focuses on conducting quantitative experimental research to assess the impact of Upin and Ipin animation on aggressive behavior in 5-6-year-old children. This research aims to empirically fill the current knowledge gap and deepen our understanding of the effects of children's animations on their behavior.

Methods
This research employs a quantitative method with an experimental approach. Using a quantitative method with an experimental approach is necessary to test a hypothesis regarding
the relationship between the traditional hide-and-seek game and early childhood social skills. The steps in this research include formulating the research objectives, determining the research design, selecting the sampling technique, determining the data collection technique, and finally, selecting the data analysis technique. The research design used is the Pre Experimental One Group Pretest Posttest Design without a control group. This design compares two data sets before and after the treatment (Ismail Fajri, 2018). The sampling technique employed in this study is non-probability sampling with a saturated sample type. Non-probability sampling is a technique that does not provide equal chances for all population members to be included in the sample.

This research utilizes a quantitative approach with an experimental method. The research design employed is a Non-Equivalent Control Group Design. The study was conducted at TK Dharma Wanita I Blitaran. The population comprises 20 children aged 5-6 years or Group B in TK Dharma Wanita I Blitaran. The sampling technique used in this research is saturation sampling since the population size is relatively small, resulting in 10 children assigned to the experimental group and ten to the control group. The experimental group is exposed to the intervention of watching Upin Ipin animated films for one week, with a duration of approximately 30 minutes, while the control group does not receive any specific intervention. Sugiyono (2014) describes the Non-Equivalent Control Group Design as follows:

<table>
<thead>
<tr>
<th>O1</th>
<th>X</th>
<th>O2</th>
</tr>
</thead>
<tbody>
<tr>
<td>O3</td>
<td></td>
<td>O4</td>
</tr>
</tbody>
</table>

**Figure 1: Non-Equivalent Control Group Design**

**Explanation:**
O1 dan O3: Initial observation (pretest) for the experimental and control groups
O2 dan O4: Final observation (posttest) for the experimental and control groups
X: Screening of Upin Ipin animated films

Data collection for this study is conducted using observation sheets and documentation. The observation sheets are completed twice, during the initial observation (pretest) and the final observation (posttest). Data processing and analysis involve testing for normality, homogeneity, and hypothesis testing using SPSS 24 software.

**Table 1. Instrument Grid for Aggressive Behavior in 5-6-Year-Old Children**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sub Variable</th>
<th>Indicator</th>
<th>Descriptors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggressive</td>
<td>Physical</td>
<td>Using body parts to harm others</td>
<td>After watching Upin Ipin animated films, the child exhibits behaviors such as hitting, kicking, pushing, throwing, resisting, etc.</td>
</tr>
<tr>
<td>Behavior</td>
<td>Aggression</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Verbal</td>
<td>Using inappropriate language toward others</td>
<td>After watching Upin Ipin's animated films, the child uses offensive words, such as insults, name-calling, shouting, being indifferent, and so on.</td>
</tr>
<tr>
<td></td>
<td>Aggression</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anger</td>
<td>Feeling the desire to harm others when wishes are not fulfilled</td>
<td>After watching Upin Ipin's animated films, the child refuses to compromise, take turns, or cooperate.</td>
<td></td>
</tr>
<tr>
<td>Hostility</td>
<td>Displaying displeasure in socializing, interacting, or collaborating</td>
<td>After watching Upin Ipin's animated films, the child refuses to cooperate, socialize, be indifferent, or share.</td>
<td></td>
</tr>
</tbody>
</table>
Result

3.1. Data Analysis Description

To assess the content validity of the study, an expert in the field of Psychology performed a content analysis at Al-Fadillah Kindergarten in Yogyakarta on November 25, 2022. Test instruments were used to evaluate the content validity, ensuring that the instrument's content aligns with the curriculum or daily learning implementation plan (Ekowati & Dkk, 2021). In this case, the research instrument was provided by Dr. Raden Rachmy Diana, S.Psi., M.A., Psi, an educational practitioner specializing in Educational Psychology.

Based on the pretest, the participants were then given the treatment of watching Upin Ipin animated films for one week, with a duration of approximately 30 minutes, followed by the posttest. The obtained results were analyzed using SPSS 24, and the descriptive analysis results are presented in Figure 2 below:

<table>
<thead>
<tr>
<th>Table 2. Descriptive Statistical Analysis of Pretest and Posttest in the Experimental and Control Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>Pretest Eksperimen</td>
</tr>
<tr>
<td>Posttest Eksperimen</td>
</tr>
<tr>
<td>Pretest Kontrol</td>
</tr>
<tr>
<td>Posttest Kontrol</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
</tr>
</tbody>
</table>

Based on the descriptive analysis results, the number of data (N) for the experimental and control groups was ten children. The average pretest score for the experimental group was 6.60, while for the control group, it was 6.10. The average posttest score for the experimental group was 7.90, and for the control group, it was 7.20. These results indicate an increase in the experimental group’s pretest score by 2.119 and a posttest score of 2.378. Subsequently, the normality of the pretest and posttest data was assessed using SPSS 24.

3.2. Normality Test

Based on the descriptive analysis results, it was found that watching Upin Ipin animated films influenced children's aggressive behavior. Next, the normality test was conducted to determine the data distribution and select the appropriate statistical tests for hypothesis testing. Figure 3 below presents the results:

<table>
<thead>
<tr>
<th>Table 3. Shapiro-Wilk Normality Test of Pretest and Posttest in the Experimental and Control Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kelas</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>Hasil Perilaku Agresif</td>
</tr>
<tr>
<td>Pretest Eksperimen</td>
</tr>
<tr>
<td>Posttest Eksperimen</td>
</tr>
<tr>
<td>Pretest Kontrol</td>
</tr>
<tr>
<td>Posttest Kontrol</td>
</tr>
</tbody>
</table>

The calculation of the normality test yielded significance values for all data, both the pretest and posttest data of the experimental and control groups, using the Shapiro-Wilk test, with p-values > 0.05. Therefore, this study can be concluded to have normally distributed data.
3.3. Homogeneity Test

After discussing the results of the normality analysis, which showed a normal distribution, the next step is to conduct a homogeneity test as a parametric statistical test when the data is usually distributed to analyze the data further. Figure 4 below presents the results:

| Table 4. Homogeneity Test of Posttest in the Experimental and Control Groups |
|------------------------------------------|--------|--------|--------|
| Levene Statistic                        | df1    | df2    | Sig.   |
| Hasil Perilaku Agresif                  | Based on Mean | 2.061  | 1      | 18     | .168  |
|                                         | Based on Median | 2.005  | 1      | 18     | .174  |
|                                         | Based on Median and with adjusted df | 2.005  | 1      | 14.505 | .178  |
|                                         | Based on trimmed mean | 2.042  | 1      | 18     | .170  |

The calculation of the homogeneity test yielded a significance value Based on a Mean of 0.168 > 0.05, indicating homogeneity. Therefore, this study can use parametric statistical hypothesis testing to analyze the data.

3.4. Hypothesis Testing

Following the discussion of the homogeneity analysis above, the data analysis for this study was conducted using the paired sample t-test to examine the influence of watching Upin Ipin animated films on the aggressive behavior of 5-6-year-old children. Figure 5 below presents the results:

| Table 5. Paired Sample T-Test Hypothesis Testing in the Experimental Group |
|---------------|--------|--------|---------|--------|--------|
|               | Mean   | Paired Differences | 95% Confidence Interval of the Difference | t      | df     | Sig. (2-tailed) |
|               | Std. Deviation | Std. Error Mean | Lower | Upper |       |       |
| Pair 1 Pretest - Posttest Experimen    | -1.300 | .675    | .213   | -1.783 | -817  | -5.091 | 9     | .000  |

The study used parametric statistics, specifically the paired sample t-test, to analyze aggressive behavior in children. The analysis yielded a t-value of -6.091 with a significance value of 0.000, less than 0.05. This result implies that watching Upin and Ipin animated films significantly influenced aggressive behavior in children within the experimental group.

**Discussion**

This study encompassed learning activities with 20 children aged 5-6 years. A pretest was executed before the treatment to assess the level of aggressive behavior in these children, facilitating a comparison of results. This assessment was performed via observation sheets provided by the researcher. Data from the research disclosed a substantial difference in the experimental group’s results before and after the treatment. The pretest for the experimental group averaged a score of 6.60, with ten being the highest and four being the lowest. Following exposure to the Upin Ipin animated film, the posttest results exhibited an average score of 7.90, with eleven as the highest and four as the lowest score. The observation demonstrates an increase of 1.30 in the test scores. Contrastingly, the control group, which did not partake in any specific treatment, had an average pretest score of 0.994 and an average posttest score of 1.476.
The findings of this research indicate that the animated film impacted young children's aggressive behavior. The four indicators used in this study, namely physical aggression, verbal aggression, anger, and hostility, showed their influence on children after the treatment. Previous studies by Nur Aisyah et al. (2022) have also suggested that animated films can influence aggressive behavior in children, particularly regarding physical aggression. Additionally, Wijethilaka (2020) found that animated films significantly influence children's aggressive behavior, and parents are often unaware of the potential harm caused by current animated content, which may include violence and sexual content. Therefore, supervision by teachers and parents is crucial when children watch animated content. Parents play a vital role in monitoring their children as they may not yet have the emotional maturity to control their behavior (Dunsmore et al., 2009).

His research data analysis unveiled a substantial impact of the Upin Ipin animated films on aggressive behavior among 5-6-year-old children attending TK Dharma Wanita I Blitaran. This impact is evident from the calculated significance value of 0.000, less than 0.05. This statistical result supports rejecting the null hypothesis ($H_0$) and accepting the alternative view ($H_1$). The data suggests that these children tend to mimic the scenes and actions portrayed by the characters in the Upin Ipin film after its screening during the study. As Crain Tarsono (2018) noted, while not all aggressive behavior stems from imitation, such behavior can also be influenced by mass media, including animated films aired on television. This influence can result in manifestations of both verbal and physical aggression.

The analysis based on the context and content indicates that animation, particularly Upin, and Ipin, plays a significant role in the development of children’s behavior. Within the given context, the research shows an influence after the screening of this animation, indicating that the film impacts children’s behavior, including physical aggression, verbal aggression, and hostility. However, another study by Ilham et al. (2021) found that Upin and Ipin animation has positive effects, such as promoting cooperation, kindness, sympathy, friendliness, and selflessness (Ilham et al., 2021). These contrasting yet consistent findings align with a study by K. Habib & T. Soliman (2015), highlighting how animation or cartoons can teach children various social skills and values when presented engagingly (Habib & Soliman, 2015). In conclusion, the potential of Upin and Ipin to influence aggressive behavior should not overshadow their capability to function as practical educational tools that promote positive social behavior and other essential skills. Hence, the extent to which animations like Upin and Ipin can shape children’s behavior depends significantly on the content and presentation methods.

Aggressive behavior occurs as expressing anger to obtain something they desire. However, not all aggressive behavior in children is categorized as such unless it aims to hurt or harm others and is consistently displayed (Anantasari, 2006). Aggressive behavior manifests as an expression of anger in children, as observed in the experimental group exposed to the treatment of watching Upin and Ipin animated films, displaying more aggressive behavior compared to the control group without any specific treatment. Children in the experimental group imitated aggressive behavior, such as pushing and hitting, and exhibited tantrums similar to the character Kak Ros in the Upin and Ipin animated film.

The understanding that modeling or imitation can be a supporting factor in the formation of aggressive behavior is supported by research conducted by Izzaty (2017). He posits that when children imitate violent scenes they have viewed on television and reproduce them, it can lead to aggression in later stages. This viewpoint aligns with the findings of Okoronkwo et al. (2020), who argue that children can acquire new behavior and knowledge through observing models or individuals. By following the behavior of models or individuals, they suggest, children can imitate both positive and less desirable behavior. In this context, the animated films of Upin and Ipin, which do contain scenes unsuitable for young children, can be potentially harmful. These films can have adverse effects, especially if parents do not actively guide their children or explain that certain scenes are inappropriate to imitate or engage in.
In line with other research by Sallehuddin & Omar (2011), children tend to imitate the aggressive behavior they see in anime programs, exhibiting various levels of aggression ranging from hitting, attacking, kicking, or hurting others (Sallehuddin & Omar, 2011). However, it should be emphasized that this behavior is not universal and only occurs when they are provoked first. Nevertheless, it is crucial to highlight that Bandura’s research (2008) notes that aggressive behavior does not always manifest in every child who witnesses rewarded aggressive behavior in their media consumption. Other factors, such as parents, siblings, and their environment, also play essential roles in determining aggressive behavior (Bandura, 2008). In practice, the impact of anime culture may not be significant, but if local animations feature similar program types, the likelihood of children being influenced and imitating aggressive behavior will be higher.

Ultimately, Meliawati (2021) suggests the importance of parental involvement in monitoring and selecting educational content for children and redirecting their attention to more beneficial activities (Andriani Meliawati, 2021). Therefore, although animated shows and cartoons can potentially influence aggressive behavior in children, many other factors are at play, and parents have a crucial role in guiding and directing their children in consuming media.

Conclusion
This study aimed to assess the effect of Upin and Ipin animated films on the aggressive behavior of children aged 5-6 years. In interpreting the results, it became clear that children's exposure to these animations significantly influenced their aggressive behaviors: physical aggression, verbal aggression, anger, and hostility. This conclusion was drawn from data collected at TK Dharma Wanita I Blitaran, where the experimental group exhibited an average pretest score of 6.60, which subsequently increased to an average posttest score of 7.90. These figures point to a noticeable rise in aggressive behavior. A significant value of 0.000 < 0.05 emerged from the paired sample t-test hypothesis testing, which necessitated the rejection of the null hypothesis in favor of the alternative. Such results underscore a substantial influence of the Upin and Ipin animated films on the aggressive behavior of children aged 5-6 years. These insights shed light on the profound impact that mass media, particularly animated films, can have on children’s behavior. However, this study’s limitations include a singular focus on Upin and Ipin animated films and a relatively small sample size. Despite these limitations, the findings underscore the importance of understanding how mass media can sway children's behavior. Future research is advised to encompass larger samples and a wider variety of animated films. On a practical level, these findings advocate for parental and educational vigilance towards the content children consume and the need for adequate guidance. It also implies that policy-making may need to factor in regulating children's media access, especially for content potentially negatively affecting their behavior.

References


