

**THE INFLUENCE OF ANIMATION ON CHILDREN'S PROSOCIAL
BEHAVIOR IN PRIMARY SCHOOL STUDENTS**

WU SEN

**A THESIS SUBMITTED IN PARTIAL FULLFILLMENT OF THE
REQUIREMENT FOR THE DEGREE OF MASTER OF EDUCATION
PROGRAM IN LEARNING TECHNOLOGY AND INNOVATION
FACULTY OF TECHNICAL EDUCATION
RAJAMANGALA UNIVERSITY OF TECHNOLOGY THANYABURI
ACADEMIC YEAR 2023
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Thesis Title The Influence of Animation on Children's Prosocial Behavior
in Primary School Students


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Program Learning Technology and Innovation


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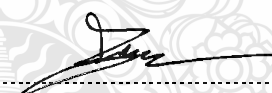
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ABSTRACT

The objectives of this study were to: 1) clarify the positive and negative effects of cartoons on children's prosocial behavior through the study on the influence of cartoons on children's prosocial behavior and 2) provide certain reference for school education and family education.

The samples of the study were 6 parents of children in each class, including 18 boys and 18 girls whom were selected by purposive random sampling technique. The two research instruments were observation record forms and interviews. The former were collected three times a week, each of which contained about 20 minutes. The latter were conducted in person after the experiment had ended.

The research results of three experimental methods showed that the experiment had a positive effect on the prosocial behavior of children. The influence of animation on the development of prosocial behavior of children had certain age characteristics. The experimental results showed that the promotion effect of the experiment on the four dimensions of prosocial behavior of children in the middle and senior classes was higher than that in the small class. The influences of cartoons on young children revealed differences between girls and boys. Girls were superior in comforting behavior whereas boys were higher in sharing behavior.

Keywords: animation, prosocial behavior, influence, development student, efficiency

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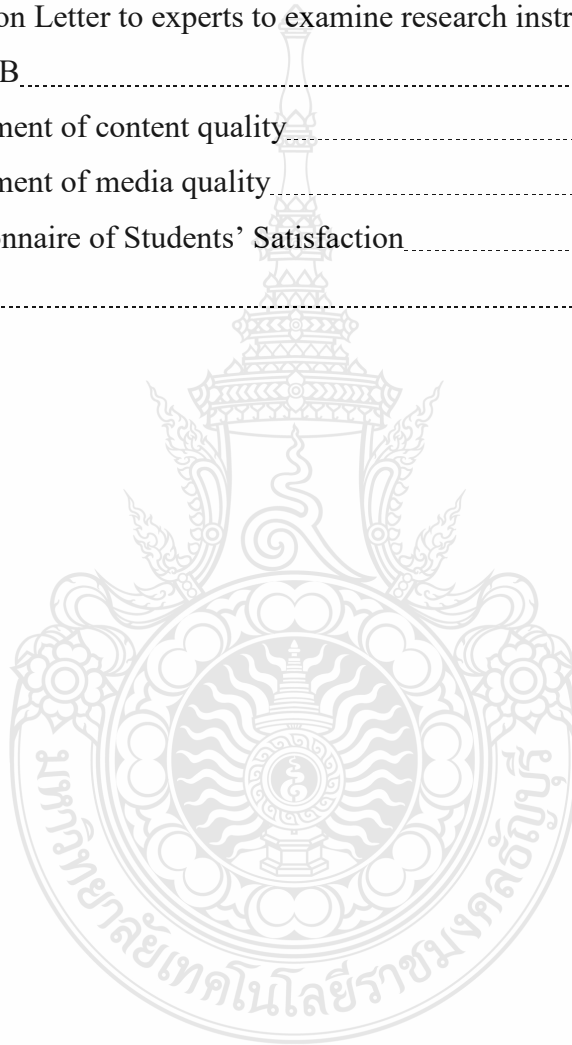
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CHAPTER 1

INTRODUCTION

1.1 Background and Significance of the Problems

Prosocial behavior is an important indicator of children's socialization, and also an evaluation indicator of children's social development level. Prosocial behavior includes helping, sharing, cooperation, comfort, sympathy, humility, and other behaviors, which is conducive to promoting children's social development. American researcher Eisenberg (2006) mentioned in his book *Research on Prosocial Behaviors of Loving Children*: "Before the age of three, the seeds of prosocial behaviors have been planted in the first year of a child's life, and newborn babies will cry when they hear other babies cry". Preschool childhood is a critical period of the formation of good behavior and moral character of children, but also children's social cognition, social skills, social emotional development of sensitive period, the implementation of social education in children's behavior moral sensitive period, can play a multiplier effect with half the effort, can promote the development of children's prosocial behavior faster. Good social behavior can make children get teachers, family members, peers in the spirit or material rewards, reduce the teacher, family members, peers on their own punishment, is conducive to the reserve of positive energy, promote children's physical and mental health growth.

Cartoons combine sound and image perfectly, with visual and vivid pictures, simple and clear language, beautiful music, strong stories, and are loved by children. Because children are easy to imitate, they are bound to be influenced imperceptibly when watching cartoons (Zhang Zixia and Wu Xiaoye, 2022). When children watch cartoons, they can understand social roles, broaden their horizons, and increase their knowledge. After watching cartoons, children will focus their psychological activities on the role models they want to learn from and perceive their social behaviors. Through the investigation and research of cartoons on children's prosocial behaviors, this study can understand the influence of cartoons on children's sharing, cooperation, helping and comforting behaviors, which can enrich the theoretical research of cartoons and children's social development, and also provide relevant data and conclusions.

Animation is an important part of children's life, affecting children's health, cognitive and social development. Children are easy to imitate, many animations, behaviors are children imitate the image. Through this study, it is expected to explore the influence of cartoons on children's prosocial behavior and explore the guidance methods of parents and teachers for children to watch cartoons, so as to promote the development of children's prosocial behavior. It is expected that the method discussed will have certain reference significance for parents and teachers (Wu Ruisi and Xu Wei, 2022).

1.2 Objectives of the Study

The purpose of this study aim to:

1.2.1 To clarify the positive and negative effects of cartoons on children's prosocial behaviors through the study on the influence of cartoons on children's prosocial behaviors.

1.2.2 To provide certain reference for school education and family education. According to the influence of animation on prosocial behavior of children.

this paper puts forward how to promote the development of prosocial behavior of children by using animation, so as to avoid the negative influence and make full use of the positive influence.

1.3 Statement of the Research Questions

1.3.1 Through watching cartoons and related activities, children can increase their prosocial behaviors.

1.3.2 The influence of cartoons on children's prosocial behavior has age characteristics.

1.3.3 There are gender differences in the development of prosocial behavior.

1.4 Research Methods and Contents

In order to ensure the experiment for the purpose of research, various considerations were made in the selection of research methods and finally three methods were determined.

1.4.1 Document method

Through literature review, I have mastered three aspects: first, the current research on 5-6 children watching cartoons; Second, current research on cartoons, such as the influence of cartoons on children, the time and types of children watching cartoons; The third aspect, about 5-6 years old children's moral development rules and characteristics of the study.

1.4.2 Experimental method

Experimental hypothesis: Different types of cartoons have an impact on the moral development of children aged 5-6 years old independent variable: dependent variable of teachers' and parents' intervention in speech and behavior during the broadcast of cartoons: the difference degree of moral development of children aged 5-6 years old with intervention and without intervention.

1.4.3 Interview method

In order to confirm my experimental hypothesis, in the process of the experiment, the kindergarten does not have as much time as I imagined to appear characters' language and actions related to cartoons, or it can be said that the kindergarten does not provide more language environment for children to talk about cartoons. Therefore, I decided to create an animation atmosphere on the basis of the experiment to carry out natural communication with children in the form of "impressions". However, the experimental activities lasted for a long time, making watching and talking about cartoons become children's daily life in kindergarten (Wu Ruisi and Xu Wei, 2022).

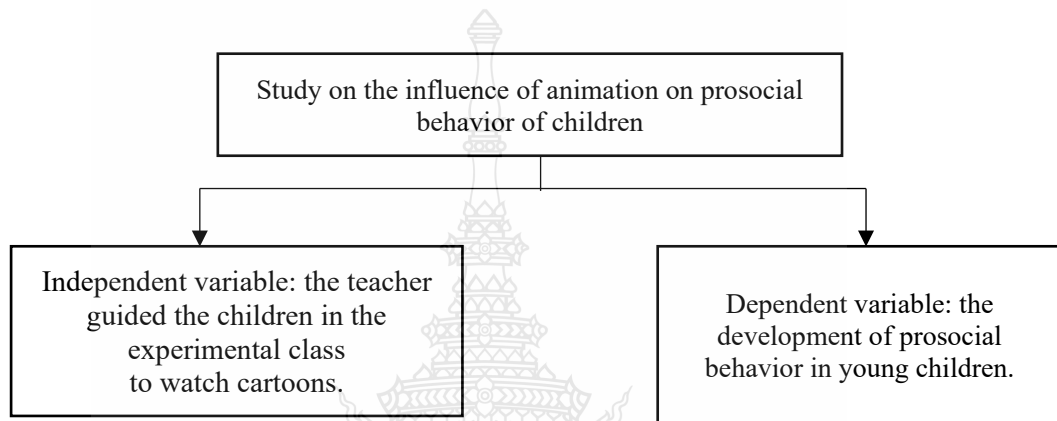
1.5 Scopes and Limitations of the Study

In this research, children's prosocial behaviors in cooperation, helping others, sharing and analyzed with the method of combining natural observation and situational observation. Select one class in each class of small, middle and large class as the experimental class, and one class in each class as the control class. Then, the experimental class watches cartoons three times a week for 15 to 20 minutes, and then organize children to carry out related activities after watching them. Control class to carry out normal teaching activities. Three months after the experiment, the children in the experimental class and control class were tested after the experiment. This method is used to study the

influence of cartoons on children's prosocial behavior, and to explore ways to guide children to watch cartoons, so as to promote children's prosocial behavior.

1.6 Conceptual Framework

Below is the conceptual framework model of the entire study. This model encapsulates the main variables to be tested in this study.



1.7 Contributions to Knowledge

Cartoons are children's growth partners, accompanied by the growth of children, influence the growth of children, both positive and negative impact, through the study of the influence of cartoons on children's prosocial behavior, Further explore the influence of cartoons on children in such aspects as helping others, being generous, sacrificing, defending, fearless, loyal, respecting others' rights and feelings, having a sense of responsibility, cooperating, protecting others, sharing, sympathizing, comforting, raising others, caring for others' interests, being kind and rejecting unjust things.

In this research, children's prosocial behaviors in cooperation, helping others, sharing and comforting were studied and analyzed with the method of combining natural observation and situational observation, and the interview method and case tracking method were combined. 36 parents of children were selected as the interview objects according to the previous test results. Through these methods, to study the influence of cartoons on children's prosocial behavior, and explore ways to guide children to watch cartoons, so as to promote children's prosocial behavior.

CHAPTER 2

REVIEW OF THE LITERATURE

The objectives of this chapter complement the introduction. This chapter will further contribute to the literature review during the research design period and introduce the influencing factors of children's prosocial behavior and the influence of animation on young children's development. This chapter is divided into the following parts:

- 2.1 The Concept of Animation
- 2.2 Concept of Prosocial Behavior
- 2.3 Research on Influencing Factors of Prosocial Behavior of Infants
- 2.4 Research on Animation and Infant Development
- 2.5 Relevant Research

2.1 The Concept of Animation

Animation, also known as "cartoon", takes the form of painting as the main expression means of character modeling and environmental space modeling. It draws the movements of people and objects into pictures one by one, and then shoots them one by one with the method of grid shooting. Through continuous projection, moving images are formed. It usually presents the story in an exaggerated, interesting, beautiful and lyrical form, which is popular and loved by children. Animation is a fantasy art, simple, bright, varied, highly expressive, easier to directly express and express people's feelings, can be impossible to see the reality into reality, expand human imagination and creativity (Xiong Li and Sun Shan, 2021).

2.2 Concept of Prosocial Behavior

There are many different names for prosocial behavior, altruistic behavior, altruism behavior, helping behavior and so on. In social psychology, in 1972, "American scholar Weisberg first proposed the term prosocial behavior to represent all negative behaviors such as sympathy, sharing, friendliness, assistance, donation, disaster relief and self-sacrifice in his paper Examination of Social Positive Forms".

As for prosocial behavior, different scholars have given different definitions. Some of them are as follows: prosocial behavior is a kind of behavior that people voluntarily undertake to benefit others (Baston, 1998); Mussen & Eisenberg (1977) proposed that "true altruistic behavior refers to that the actor does not expect reward, does not try to avoid punishment, but tries to help others or act for the benefit of others". Wang Lei (1994) believed that "prosocial behavior refers to those behaviors accepted or encouraged by society, which are behaviors that individuals consciously abide by social rules so as to obtain the affirmation of social norms, and its motivation is more embodied in benefiting others". Although many psychologists define prosocial behavior differently, most prosocial behavior has four characteristics: it is voluntary; With the purpose of benefiting others; Without any expectation of future reciprocation; The altruist has something to lose (Yuan Feifei, 2021).

2.3 Research on Influencing Factors of Prosocial Behavior of Infants

2.3.1 Surroundings

Parent-child relationship

Zhao Jinxia and Wang Meifang (2021) used the Parenting behavior questionnaire and the Chinese standardized version of Achenbach child behavior scale to measure 260 children aged 4-6 year. The results show that there is a significant positive correlation between the authoritarian parenting style and children's internal and external behaviors. Authoritative parenting has a significant negative correlation with both internal and external behavior. There is a significant negative correlation between authoritarian parenting style and children's peer acceptance and a significant positive correlation between authoritarian parenting style and children's peer rejection. Authoritative parenting was not significantly associated with peer acceptance or peer rejection. The conclusion is that authoritarian parenting style does not directly affect children's peer repulsion, but indirectly affects peer repulsion as a mediator variable of children's externalizing behavior (Yang Siyi and Hang Dandan, 2020).

Peer relationships play an important role in the development of children. Mize and Cox (1990) found that friendship among children enhances cooperation, and cooperation occurs much more among friends than among non-friends.

Guo Boliang and Zhang Lei used meta-analysis to study the correlation between children's prosocial and peer relationships in the past two decades, and the results show that children's prosocial behavior has a positive correlation with peer acceptance and a negative correlation with peer rejection.

Teacher-student relationship

Birch and Ladd (1998) studied the relationship between teacher-student relationship and children's interpersonal behavior. The results show that close teacher-student relationship is highly correlated with prosocial behavior. Dependent and conflict-oriented teacher-student relationship is highly correlated with children's antisocial behavior.

Fisher (1998) and Adelman (2002) also showed that in the democratic-intimate teacher-student relationship, children mostly show cheerful personality and helpful behavior; In the autocratic and tense teacher-student relationship, children show more rebellious psychology and timidity. Children are more likely to show uncooperative and aggressive behavior in the laissez-faire teacher-student relationship.

2.3.2 Empathize

Hoffman points out through his research on empathy that empathy is an important motivation for prosocial behavior. Wei Yugui and Li Yousui studied the influence of empathic training on children's sharing behavior. The experiment selected a total of 162 subjects in kindergarten middle class, primary school grade one and primary school grade three. They were randomly divided into a situational discussion group, a role-playing group and a control group. The training lasted for one hour three times a week for a month. Through the posttest and posttest of the empathic training of the situation discussion and the posttest and posttest of the role-playing empathic training, it is shown that the two kinds of empathic training methods can effectively promote the development of children's sharing behavior. The experimental effect of situation discussion method increased with the age of children. The effect of role-playing decreased with the increase of age. In the two groups of primary school children, role-playing method delayed sharing behavior more significantly than situational discussion method. There was no obvious evidence in the middle class of kindergarten (Zhang Qian, 2020).

2.3.3 Cognition

Hu Jinsheng and Yang Lizhu (2005) studied children's emotional cognitive development and its influence on children's intention to help others. In the study, 314 children were selected as subjects and told stories by making up their own story books. Then the subjects were asked questions. According to the answers, children's emotional cognition was divided into five levels: unrelated to the story content, involving only the situational information, the projection of their own experience, the understanding of empathy and the understanding at the processing level. The results showed that: 3-5 years old children's emotional cognition is in the stage of description of situational information and projection of their own experience. After 7 years old, empathic understanding and processing understanding are dominant. There is no gender difference in emotional cognition, and it has a significant effect on helping intention.

2.4 Research on Animation and Infant Development

2.4.1 The influence of cartoons on children's health

In terms of the impact of cartoons on health, watching cartoons for a long time will not only affect children's eyesight, but also hinder children's metabolic rate. In addition, many children eat fatty foods while watching cartoons, which increases the possibility of obesity (Liu Yuhong, 2020).

2.4.2 The influence of cartoons on children's cognition

Many studies have focused on the effects of cartoons on young children's language development. The animation can exert the best effect on the language education of children. Enhance children's interest in language learning, expand children's vocabulary, cultivate children's listening ability and habits, and enrich children's perceptual understanding of different language styles. At the same time, many researchers believe that the rich and varied content of cartoons can help children's sensory training and the multiple sensory stimulation in cartoons (Bao Jie and Feng Rui, 2019).

2.4.3 The influence of cartoons on children's social development

Through combing the data, it is found that animation has positive and negative effects on children's social development. The effects of these two aspects were elaborated respectively.

First, the study of the positive influence of animation on children's social development. Children's TV art films, which promote the beauty of human nature, are derived from children's literature works, and these children's literature works contain positive thoughts and emotions, which can make children get emotional relaxation and have a positive effect on children's positive social emotional experience. The content of TV art films is often a clear theme, simple plot, but the performance is extremely graphic, diverse, can let children intuitive perception, understanding, is conducive to deepen children's understanding of the "story" content, further perceive the hero's behavior, and accumulate certain experience on the behavior of right and wrong discrimination, so as to promote the development of children's social cognition (Yan Xiaoqing and Wu Xiaoyan, 2019).

Second, the study of the negative influence of animation on children's social development. The research on this aspect mainly focuses on the influence of cartoons on children's aggressive behavior. According to the collected data, many researchers are aware that violence scenes in cartoons, especially in Japanese and American cartoons, will have a negative impact on children's social development, but there are few systematic studies (Zhang Jianxin, 2019).

2.5 Relevant Research

Shuhua Zhao (2022) studied the functions and problems of children watching cartoons in the era of electronic images. This study shows that human beings are living in an era of electronic images, and watching cartoons has become a "commonplace" for children aged 2 to 6. Many elements of cartoons have a deep impact on children's language development, social needs and satisfaction of imagination. At the same time, there are also some problems that cannot be ignored when children watch cartoons: the resources of cartoons are becoming more and more homogeneous, watching cartoons encourages children's irrational consumption behavior, and parents regard cartoons as "electronic babysitters" to liberate themselves. In order to make cartoons a healthy and beneficial "partner" for children, parents need to effectively guide children to watch cartoons and play the intermediary role of parents.

Zixia Zhang and Xiaoye Wu (2022) studied the effects of cartoons on young children's perception of themselves and the world. This study shows that animation is an important other for children aged 3-6 to recognize themselves and the world and is the most direct spiritual food for children's intellectual development, imagination cultivation and social development. The realization of its role depends on parents' correct guidance for children's watching animation. Taking Changsha city as an example, this paper investigates the current situation of children's cartoon watching from three aspects: the situation of children's cartoon watching, the attitude of parents towards children's cartoon watching and the concept of "watch and guide", and the behavior of parents' guide to children's cartoon watching. The research finds that the situation of children watching cartoons is not optimistic, parents' attitude towards children's cartoons and the concept of "watching guidance" are many misunderstandings, and parents' behavior of guiding children to watch cartoons is obviously improper. In this regard, parents need to improve the overall educational quality, strengthen the "guide" knowledge learning, improve the "guide" ability; At the same time, the society should strengthen the research, publicity, and guidance of parents' "guidance" to control the quality of cartoons.

Ruisi Wu and Wei Xu (2022) studied how adults' choice of cartoons for preschool children can reduce or avoid the influence of adverse factors on preschool children. According to the investigation of preschool teachers and parents in this study, there are some problems in the process of adults choosing cartoons for preschool children, such as lack of initiative, absolute choice, lack of professional, authoritative, and operable selection criteria, and limited types of cartoons. On this basis, the paper puts forward some improvement strategies, such as fulfilling the selection responsibility, paying attention to the needs of preschool children, improving the quality of animation, implementing the domestic animation grading system, constructing animation resource library, and providing relevant support for parents.

Li Xiong and Shan Su (2021) studied that in this era of information, animation education has become one of the indispensable resources for early childhood education. At present, there are four kinds of path deviation in animation education for children aged 3-6: uneven quality of animation, parents' misunderstanding of animation education, teachers' stereotyped animation education mode and animation education

environment template. To this end, the article puts forward four correction strategies to improve the effect of animation education: child-oriented, quality education; Education in the film, with the film to nurture children; Teachers and children sharing, home co-breeding; in order to educate children.

Feifei Yuan (2021) studied the language construction channels that should pay attention to children's movies and TV programs in terms of children's psychological characteristics and language development rules, reflecting the characteristics of children's literature. First of all, we should emphasize the simplicity of children's language expression and reflect the characteristics of children's language expression; Secondly, we should emphasize simplicity, so that children can understand; Third, we should emphasize the image to attract children's attention; Fourth, we should emphasize interest and stimulate children's ability to imitate. Fifth, we should emphasize philosophy and guide children to understand the truth of life. Using the idea of language design, with simplicity as the premise, simplicity as the symbol, image as the basis, interest as the medium, philosophy as the extension, we should provide children with high-quality language learning environment.

Siyi Yang and Dandan Huang (2020) studied the current situation of children aged 4-6 watching cartoons as a starting point, and investigated 120 parents, 45 teachers and 15 children with questionnaire survey and interview method. The survey results show that there are some problems when children aged 4-6 watch cartoons, such as improper viewing content, too long watching time, increased imitation behavior of children after watching, low involvement of parents, and complete dominance of teachers and neglect of children's subject status. In order to guide children to watch cartoons reasonably, parents should: choose the appropriate animation theme and content; Set viewing time, diversified entertainment; Timely guidance to improve children's imitation behavior; Improve parents' participation and establish a scientific view of parenting; Improve the professional quality of teachers, pay attention to the main position of children.

Yuping Yan (2020) shows that at present, in the information age, there are many drawbacks in the moral education of children in our country. Many kindergarten teachers still teach in the way of preaching or telling when carrying out moral education.

The boring form of moral education makes children less interested and unable to effectively grasp moral education knowledge. Therefore, teachers should update the methods of preschool moral education according to the development of The Times. The combination of children's moral education and animation viewing means that many elements such as art, music, dance, language, and natural science are integrated in animation. At the same time, it also contains rich moral education resources, which is more in line with the age characteristics of children and is conducive to the development of moral education teaching for children. However, the development of children has its own natural laws, and the general law of children's psychological development is children.

Qian Zhang (2020) studied the priming effect of violent cartoons on aggression cognition of kindergarten children based on the theory of general aggression pattern. 400 kindergartners aged 5 to 6 were randomly selected to participate in the experimental analysis, including 200 kindergartners in the violent cartoon group and 200 kindergartners in the non-violent cartoon group. An improved semantic classification task and ANOVA were used to measure the level of aggressive cognition. The results showed that: (1) the aggressive cognition of children in the violent cartoon group was higher than that in the non-violent cartoon group; (2) boys who watched violent cartoons had higher perceptions of aggression than boys who watched nonviolent cartoons; (3) kindergartners who watched violent cartoons had higher aggression cognition than those who watched nonviolent cartoons, while there was no significant group difference between moderate aggression and low aggression. (4) After viewing violent cartoons, there were no significant group differences in aggression perceptions between kindergartners aged 5 and 6. These findings suggest that sexual and behavioral aggression are important individual variables, and in the context of violent cartoons, this is the moderate perceived level of aggression in kindergarten children aged 5-6 years. (3) Kindergarten teachers who watched violent cartoons showed higher aggressive cognition, while those who watched nonviolent cartoons showed lower aggressive cognition, while kindergarten teachers with moderate aggression and low aggression showed no significant group difference; (4) After watching violent cartoons, there was no significant group difference in the cognition of aggression displayed by 5 - to 6-year-old kindergarten

teachers. These findings suggest that sexual and behavioral aggression are important individual variables, and in the context of violent cartoons, this is the moderate perceived level of aggression in kindergarten children aged 5-6 years. (3) Kindergarten teachers who watched violent cartoons showed higher aggressive cognition, while those who watched nonviolent cartoons showed lower aggressive cognition, while kindergarten teachers with moderate aggression and low aggression showed no significant group difference; (4) After watching violent cartoons, there was no significant group difference in the cognition of aggression displayed by 5 - to 6-year-old kindergarten teachers. These findings suggest that sexual and behavioral aggression are important individual variables, and in the context of violent cartoons, this is the moderate perceived level of aggression in kindergarten children aged 5-6 years. There was no significant group difference in aggression cognition of kindergarten children with moderate and low predisposition after watching violent cartoons. (4) There were no significant group differences among kindergarten children aged 5 to 6. These findings suggest that sexual and behavioral aggression are important individual variables, and in the context of violent cartoons, this is the moderate perceived level of aggression in kindergarten children aged 5-6 years. There was no significant group difference in aggression cognition of kindergarten children with moderate and low predisposition after watching violent cartoons. (4) There were no significant group differences among kindergarten children aged 5 to 6. These findings suggest that sexual and behavioral aggression are important individual variables, and in the context of violent cartoons, this is the moderate perceived level of aggression in kindergarten children aged 5-6 years. These findings suggest that sexual and behavioral aggression are important individual variables, and in the context of violent cartoons, this is the moderate perceived level of aggression in kindergarten children aged 5-6 years. These findings suggest that sexual and behavioral aggression are important individual variables, and in the context of violent cartoons, this is the moderate perceived level of aggression in kindergarten children aged 5-6 years.

Wanyu Zhang, Fang Jin and Jing Sun (2020) studied that in order to understand the current situation of children's exposure to electronic media at the age of 3-6, a questionnaire on the current situation of children's exposure to electronic media at the age of 3-6 was prepared, which was used as a research tool to make an overall grasp

of the current situation of electronic media exposure of children at the age of 3-6. The survey results show that households generally own electronic media; Parents have an open attitude towards children's exposure to electronic media; In terms of content, most children are more interested in cartoons and games; In this survey, there was no phenomenon of children addicted to the Internet.



CHAPTER 3

RESEARCH METHODOLOGY

This study is a research and development. 161 children from kindergartens in Jinan, Shandong Province were selected to study the subjects through educational experiment method, interview method and case tracking observation method. The structure of this chapter is as follows:

- 3.1 Research Design
- 3.2 Population and Sample
- 3.3 Research Tools
- 3.4 Instrument Development and evaluation
- 3.5 Steps for Discovering Media Validity
- 3.6 Data Collection
- 3.7 Data Analysis

3.1 Research Design

3.1.1 Research purpose

This study explores the impact of teaching activities based on cartoons on the development of prosocial behaviors of children, whether they can effectively promote the development of prosocial behaviors of children and the specific reasons, expand the forms of kindergarten activities, and provide references for kindergartens, teachers, and parents to carry out prosocial behaviors of children.

3.1.2 Research Objects

Children account for a large proportion of the audience of the cartoon. 161 children from kindergartens in Jinan, Shandong province were selected. Among them, the small class, the middle class and the large class have two classes each, one class is the experimental class and one class is the control class.

3.1.3 Research Methods

1) Educational experiment method

An equal-group experimental design was adopted, and the independent variable was that the teacher guided the children to watch cartoons. The dependent

variable was the development of prosocial behavior. The control class is taught according to the routine, and through the analysis of the pre-test and post-test data, the effect of the experiment is expected to be understood.

2) Interview method

Six children (half male and half female) were randomly selected from each class, a total of 36 children (half male and half female), and their parents were interviewed. The interviews were conducted after the end of the experiment, mainly in the form of face-to-face interviews.

3) Case tracking observation method

Two children were randomly selected as observation objects after the pre-test in each class, and the teachers of the class tracked and recorded the new behaviors, new characteristics, performance degree, causes and frequency of the prosocial behaviors of the children for qualitative analysis. The observation time was three times a week for 12 weeks.

Table 3.1 Influence of cartoons on prosocial behavior of children

Group	Pre-test	Intervention training	Post-test
Primary class experimental class	X1	O1	X1-1
Primary class contrast class	X2		X2-2
Intermediate class experimental class	X3	O3	X3-3
Intermediate class contrast class	X4		X4-4
Advanced class experimental class	X5	O5	X5-5
Advanced class contrast class	X6		X6-6

3.2 Population and Sample

The subjects were 161 children from kindergartens in Jinan City, Shandong Province. Selected by purposive random sampling from each class, a total of 36 children (half male and half female) Among them, the small class, the middle class and the large class have two classes each, one class is the experimental class and one class is the control class, the distribution is as follows:

Table 3.2 Distribution of participants

	Primary class		Intermediate class		Advanced class	
	Experimental group	Control group	Experimental group	Control group	Experimental group	Control group
Boy	14	13	15	16	16	15
Girl	11	10	13	13	13	12
Total	25	23	28	29	29	27

3.3 Research Tools

3.3.1 Questionnaire

The questionnaire is divided into two parts: the first part is used to collect the basic information of the children, such as age, gender, family environment, etc. The second part includes questions about cartoon viewing habits and prosocial behaviors. Cartoon viewing habits include watching frequency, watching time, favorite types of cartoons and so on. Prosocial behavior problems include behaviors such as cooperation, sharing, and empathy that young children exhibit when interacting with peers and family members.

3.3.2 Child prosocial behavior case tracking record form

A behavior observation record sheet was designed to record the prosocial behavior of children in a specific observation period. The observation period can be set in a scenario where the child interacts with other children or family members in the kindergarten or home. The prosocial behaviors in the record sheet include but are not limited to: cooperative play, sharing of toys, facial expression, tone or body change, language expression, behavior expression, etc. (Li Dan, 2019).

3.3.3 Behavioral experiments

One class in each class was selected as the experimental class, and one class in each class was selected as the control class. Before the experiment, the experimental class and the control class were pre-tested, and then the experimental class watched cartoons three times a week for 15 to 20 minutes each time. After watching cartoons, the children were organized to carry out related activities and observe their prosocial behaviors displayed in the simulated situation.

3.4 Instrument Development and Evaluation

Instrument development

1) Literature review: Through the review of relevant literature, the definition and measurement indicators of prosocial behavior and the possible influence of cartoons on children's prosocial behavior are understood. This will help you identify the key behavioral categories covered by the scale.

2) Develop a preliminary scale: based on the findings of literature review, develop a preliminary scale that includes various dimensions of prosocial behavior. For example, cooperation, sharing, empathy, helping others, etc.

3) Expert opinion: submit the preliminary scale to experts in pedagogy, psychology and other related fields for their opinions and suggestions. Expert review will help ensure that the content of the scale is valid and scientific.

4) Revision and adjustment: revise and adjust the preliminary scale according to the opinions of experts to ensure that the items and indicators of the scale properly reflect the prosocial behaviors of children.

5) Prepare a formal scale: according to the revised content, prepare the final version of the observation scale to ensure that the expression is clear and easy to use.

Instrument evaluation:

1) Content validity: a group of young children were observed and the observation results were compared with other widely accepted prosocial behavior assessment tools to assess the content validity of the scale.

2) Construction validity: correlation analysis between the scale and other established measurement tools was carried out to evaluate the scale's construction validity.

3) Factor analysis: use factor analysis method to explore the scale structure and determine the factor structure of each item in the scale.

4) Implementation site and subject selection: appropriate kindergarten or family environment is selected as the implementation site to ensure that the age and background of the subjects are diversified.

5) Reliability and validity evaluation: for the above evaluation results, evaluate the reliability and validity of the scale. By synthesizing the results of the above steps, the reliability and validity of the scale are determined.

3.5 Steps for Discovering Media Validity

3.5.1 Pre-test

The pre-test is to test the four dimensions of prosocial behavior: helping, cooperating, sharing and comforting. The four dimensions of children's prosocial behavior were tested by a combination of natural observation and situational observation. The assessment of prosocial behavior is a situational experiment designed by Janice J. eaty. (2020)

3.5.2 Classification and selection of cartoons

The classification of animation, according to the technical composition of animation can be divided into plane style, three-dimensional style, computer-generated virtual form. Flat cartoons with single lines, such as "Snow White"; Sketching, such as "The Man Who Planted Trees"; An oil painting, such as The Calf. Three-dimensional animation has traditional puppet animation, which mainly uses the traditional puppet system of expression, such as "The chicken crows at Night" is composed of this technology. There are modern even animation and material even animation, modern even animation production process is very complex, time-consuming and laborious, but infectious, natural and realistic. Computer-generated avatars are divided into two-dimensional animation and three-dimensional animation (Guo Lianqin, 2019).

According to the way of transmission, it can be divided into cinema cartoons, TV cartoons and experimental cartoons. The movie played in the theater, the playing time is generally 90 minutes, generally takes three or four years to complete, in fact, is the use of animation means to produce a movie. The production process of television cartoons is simpler than that of film animations, which are episodic narratives, such as Tom and Jerry. Experimental animation is aimed at experiment and research.

According to the content of cartoons, cartoons can be divided into humorous cartoons, heroic cartoons and didactic cartoons. Humorous cartoons refer to those animated characters whose behaviors, words and facial expressions are interesting and humorous, and are relatively not very complicated, relatively simple and relaxed, lively cartoons. Such as "Doraemon" and "Winnie the Pooh". The protagonists of heroic cartoons are mostly very brave and great characters, and these plots are more complex, with the theme of revenge, rescue, and fighting for defense. For example: "Ultraman",

"Legend". Most of the didactic cartoons focus on teaching and are based on some traditional Chinese stories. Such as: "Three-character classic" Chinese story of traditional virtues (Ma Yao, 2019).

The selection principles of cartoons in this study are as follows: (1) Because cartoons played in the form of movies have a long time and complicated plots, which do not meet the age characteristics of children, some TV cartoons with relatively simple plots are selected, and children can often see them. (2) Consider choosing some humorous cartoons from the cartoon content, which are interesting and humorous in line with the interests of children. Because the heroic cartoon attacking and fighting behavior affects the aggressive behavior of children after watching more, the didactic cartoon has more didactic content, which increases the prosocial behavior of children in the rear side and affects the test effect. Considering various factors, the author chooses humorous cartoons to be played on TV in this study.

Table 3.3 Animation for research

Cartoon title	Selection reason
Pleasant Goat and Big Big Wolf	A cartoon that every child likes very much and has a great influence on children.
Tom and Jerry	The content is easy to understand, and the children also like it very much.
Big Head Son and Small Head Dad	The content before the animation is close to the life of children.

3.5.3 The playing plot of the cartoon

Take the episode of "Happy Goat and the Big Big Wolf" as an example, the researcher prepares the animation to be played at the specified time and asks the children to guess what the teacher is going to do now. What's your favorite cartoon? Each child talked about their favorite cartoon, and some of them said they liked "Pleasant Goat and Big Big Wolf" very much. Some of the children named their favorite cartoon characters. Happy to find lazy boiling sheep sheep sheep to help it, but suddenly gray Wolf appeared (Zhang Jichun, 2018). In the process of watching the child, one of the

children said he wanted to go to the toilet, and then the auxiliary class teacher led to go, the child may be afraid of delay to watch the cartoon, quickly went to the toilet back to his position, the total playback time of the cartoon is 15 minutes, after playing the teacher and the child to discuss, just happy they helped who? I don't know what they can do. No matter who they are, they speak their mind positively.

3.5.4 Post-test

The post-test was conducted at the end of the experiment, and the post-test activities were still based on Betty's ideas and the subject of the experiment was the same as the subject of the pre-test.

3.6 Data Collection

3.6.1 Questionnaire survey

For parents or guardians of young children, a questionnaire was designed to understand the basic information of young children (age, gender, family background, etc.), as well as the frequency, time and type of cartoons they watch. In the questionnaire, parents were further asked whether they had observed any changes in prosocial behaviors, such as cooperation, sharing and helping others, after watching cartoons.

3.6.2 Record observations

The prosocial behavior of children was recorded by field observation in kindergarten or family environment. Create an observation sheet or record sheet that identifies the type of behavior to be observed, such as cooperative play, sharing toys, helping others solve problems, etc. During the observation period, the children's prosocial behavior was recorded, which could be recorded using qualitative description or quantitative rating.

3.6.3 Animation selection test

Design an animation choice test where young children watch several different types of animation clips and then ask them how much they like each clip. The test results were used to understand the types of cartoons the children preferred and how these cartoons might affect their prosocial behavior.

3.6.4 Prosocial Behavior Assessment Scale

The young children were assessed using existing prosocial Behavior assessment scales, such as Preschool Emotion Regulation and Socialization (PERS) or PSBS (Preschool Social Behavior Scale). The assessment of prosocial behavior in young children through the scale can complement and supplement the results of other data collection methods.

3.7 Data Analysis

3.7.1 Descriptive statistical analysis

Descriptive statistical analysis was conducted on the basic information of the questionnaire, such as calculating the average age of children, gender ratio and family environment distribution. Descriptive statistics were carried out on cartoon watching habits, such as calculating the frequency, time distribution and favorite types of cartoons watched by children.

3.7.2 Correlation analysis

Correlation analysis (such as Pearson correlation coefficient or Spearman correlation coefficient) was used to explore the relationship between children watching cartoons and prosocial behaviors. The correlation between frequency and time of watching cartoons and the score of prosocial behavior was examined to determine whether there was a correlation.

3.7.3 T-test or analysis of variance

Statistical methods such as t test or analysis of variance were used to compare the differences in prosocial behaviors of children with different frequency or types of watching cartoons. The children were divided into groups with high and low viewing frequency and different types of cartoons to compare whether there were significant differences in prosocial behavior.

3.7.4 Multiple regression analysis

After controlling for other possible influencing factors by multiple regression analysis, the independent relationship between cartoon viewing frequency and prosocial behavior was studied. For example, variables such as children's age and family background were included in the regression model to analyze the predictive effect of cartoon viewing frequency on prosocial behavior.

3.7.5 Content analysis

Qualitative data such as interviews and focus group discussions were analyzed to explore the subjective views and feelings of parents and guardians of young children on the influence of cartoons on prosocial behavior.

1) The formula for calculating the arithmetic mean (\bar{X}) is:

$$\bar{X} = \frac{\sum X}{N}$$

Whereas \bar{X} = Average or Arithmetic Mean

$\sum X$ = Sum of all score results

N = Number of students

2) The formula for calculating the standard derivation (S.D.) is:

$$S.D. = \sqrt{\frac{\sum (x - \bar{x})^2}{N}}$$

Whereas S.D. = Standard derivation

N = Number of students

\bar{X} = Mean value

X = Student's score

3) The formula used to determine the quality of the instruments were: In finding content validity of the achievement test, we conducted the IOC formula (Item Objectives Congruence) by following the formula below:

$$IOC = \frac{\sum R}{N}$$

Whereas IOC = Index of correspondence between the test and the objective

$\sum R$ = Sum of individual expert's value

R = Expert's rating

N = Number of experts

4) The formula used in finding the difficulty index of the achievement test were

$$P = \frac{R_H + R_L}{N_H + N_L}$$

Whereas P = difficulty level
 RH = the number of people who chose the highest option rate
 RL = the number of people who chose the lowest option rate
 NH = the total number of people in the high group
 NL = the total number of people in the low group

Table 3.4 Range of difficulty index and verbal interpretation

Difficulty Index	Verbal Interpretation
0.00-0.20	Very Difficult
0.21-0.40	Difficult
0.41-0.60	Average / Moderately Difficult
0.61-0.80	Easy
0.81-1.00	Very Easy

5) The formula for calculating the item discrimination of the achievement test is:

$$r = \frac{R_H - R_L}{N_H \text{ or } N_L}$$

Whereas r = Discrimination index
 R_H = Number of correct responses in the high group
 R_L = Number of correct responses in the low group
 N_H = Total number of students in the high group
 N_L = Total number of students in the low group

Table 3.5 Range of discrimination index and verbal interpretation

Discrimination Index	Verbal Interpretation
0.40 and above	Very Discriminating / Very Good Item
0.30 to 0.39	Discriminating / Good Item
0.20 to 0.29	Moderately Discriminating Item
0.10 to 0.19	Not Discriminating / Marginal Item
Below 0.10	Poor / Questionable Item

6) The formula for calculating the reliability of the achievement test K-R#20 by Kuder-Richardson is:

$$r_{tt} = \frac{k}{k-1} \left[1 - \frac{\sum pq}{S^2} \right]$$

Whereas r_{tt} = Reliability index

k = Number of test items

p = The proportion of the correct answer

q = The proportion of the incorrect answer

S^2 = The variation of the entire test

7) The formula for calculating the variability of the achievement test is:

$$S^2 = \frac{n \sum fx^2 - (\sum fx)^2}{n(n-1)}$$

Whereas S^2 = Variance

n = Number of students

x = Achievement test score

f = Data of frequency

8) The formula used to verify the hypothesis were: The formula used in analyzing the differences in achievement scores using the dependent t-test was:

$$t = \frac{\sum D}{\sqrt{\frac{n \sum D^2 - (\sum D)^2}{n-1}}}$$

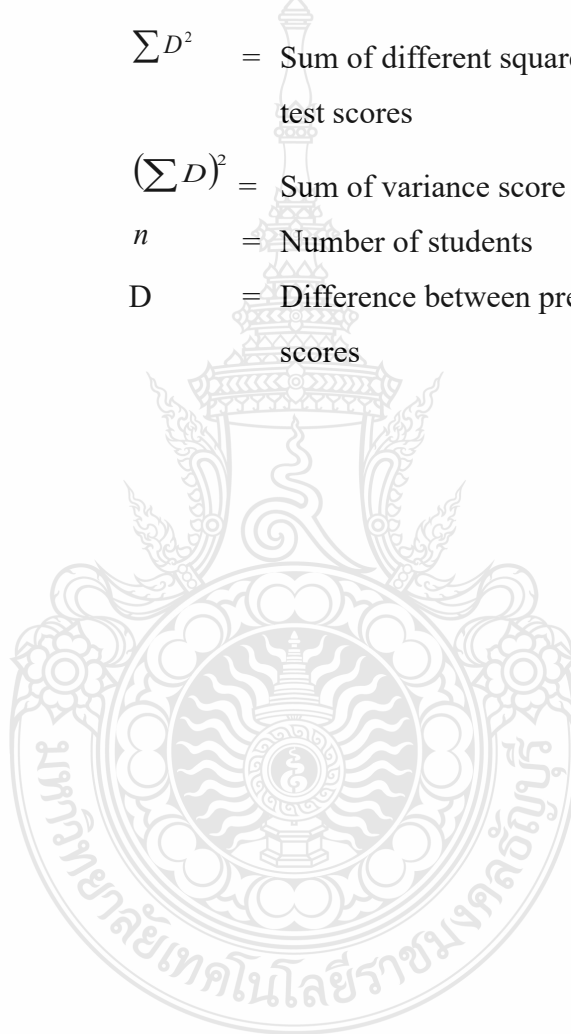
Whereas $\sum D$ = Sum of variance score of achievement test

$\sum D^2$ = Sum of different squares of achievement test scores

$(\sum D)^2$ = Sum of variance score of the square test

n = Number of students

D = Difference between pre-test and post-test scores



CHAPTER 4

RESEARCH RESULT

This chapter reports the use of SPSS statistical software to investigate and analyze the prosocial behavior of children in experimental class and control class.

4.1 Comparison of development level of helping behavior

4.2 Comparison of the development level of cooperative behavior

4.3 Comparison of sharing behavior development level

4.4 Comparison of development level of comforting behavior

4.5 Development of prosocial behavior in different dimensions of small class children

4.6 Development of prosocial behavior in different dimensions of middle class children

4.7 Development of prosocial behavior in different dimensions of children in large classes

4.8 Gender differences in prosocial behavior development of young children

4.1 Comparison of development level of helping behavior

Table 4.1 Influence of cartoons activities on helping behavior development of small, middle and old children

Group		Primary class		Intermediate class		Advanced class	
		Before-experiment	Post-experiment	Before-experiment	Post-experiment	Before-experiment	Post-experiment
Experimental	M	1.56	3.40	1.64	3.32	2.00	3.31
group	SD	0.65	0.57	0.67	0.61	0.84	0.65
Control	M	1.69	2.39	1.68	2.10	1.59	1.80
group	SD	0.76	0.72	0.71	0.72	0.63	0.56
t		0.98	2.13*	0.95	2.34***	1.12	2.25**

Note: *P<0.05, **P<0.01, ***P<0.001

Table 4.1 shows that there is no significant difference between the experimental class and the comparison class in all age groups before the experiment. The developmental level of their helping behavior is homogeneous. After the experiment, there was a significant difference in the overall development level of helping behavior between the experimental class and the comparison class, and the development level of middle class children after the experiment was very significant ($P<0.001$), indicating that cartoon activities promoted the development of helping behavior of children.

4.2 Comparison of the development level of cooperative behavior

Table 4.2 Influence of cartoons on cooperative behavior development of children in primary and middle schools

Group		Primary class		Intermediate class		Advanced class	
		Before-experiment	Post-experiment	Before-experiment	Post-experiment	Before-experiment	Post-experiment
Experimental group	M	1.68	3.52	1.73	3.53	1.82	3.27
	SD	0.80	0.51	0.59	0.63	0.84	0.59
Control group	M	1.34	2.26	1.72	2.10	1.66	2.07
	SD	0.64	0.81	0.53	0.61	0.73	0.79
t		1.02	2.13*	1.12	2.20**	1.06	2.10**

Note: * $P<0.05$, ** $P<0.01$, *** $P<0.001$

Table 4.2 shows that before the experiment, there was no significant difference between the experimental class and the comparison class. After the experiment, there was significant difference between the experimental class and the comparison class in the overall development level of helping behavior, among which the small class was more significant ($P<0.05$), and the middle class and the large class were significant ($P<0.01$). It shows that cartoon activities promote the development of children's cooperative behavior. The development of large and medium classes is more significant.

4.3 Comparison of sharing behavior development level

Table 4.3 Influence of cartoons on the development of sharing behavior of young children

Group		Primary class		Intermediate class		Advanced class	
		Before-experiment	Post-experiment	Before-experiment	Post-experiment	Before-experiment	Post-experiment
Experimental group	M	1.12	3.20	1.57	3.28	1.75	3.34
	SD	0.72	0.64	0.69	0.59	0.89	0.55
Control group	M	1.43	2.26	1.55	2.17	1.80	2.00
	SD	0.50	0.75	0.68	0.60	0.75	0.86
t		0.87	2.25*	0.93	2.38**	0.99	2.40**

Note: *P<0.05, **P<0.01, ***P<0.001

Table 4.3 shows that before the experiment, the overall difference between the experimental class and the comparison class was not significant, but after the experiment, the overall development level of sharing behavior between the experimental class and the comparison class was significant, among which the senior class was significant (P<0.01). It shows that cartoon activities promote the development of children's sharing behavior, and have a greater impact on children in large classes, and there are age differences.

4.4 Comparison of development level of comforting behavior

Table 4.4 Influence of cartoons on the development of comfort behavior of young children

Group		Primary class		Intermediate class		Advanced class	
		Before-experiment	Post-experiment	Before-experiment	Post-experiment	Before-experiment	Post-experiment
Experimental group	M	1.55	3.12	1.75	3.27	1.85	3.14
	SD	0.74	0.64	0.69	0.59	0.89	0.59
Control group	M	1.56	2.23	1.68	2.17	1.76	2.19
	SD	0.66	0.70	0.84	0.75	0.81	0.68
t		0.73	1.69*	0.79	1.87**	0.80	1.92**

Note: *P<0.05, **P<0.01, ***p<0.001

As shown in Table 4.4, there were no significant differences between experimental and comparison classes in all age groups before the experiment ($P>0.05$). The level of comfort behavior development is homogeneous. After the experiment, there was a significant difference in the overall development level of comfort behavior between the experimental class and the contrast class ($P<0.01$), indicating that cartoon activities promoted the development of children's comfort behavior.

4.5 Development of prosocial behavior in different dimensions of small class children

Table 4.5 Influence of cartoons on four dimensions of children's development in small classes

Group		Helping behavior		Cooperative behavior		Sharing behavior		Consolation behavior	
		Before- experiment	Post- experiment	Before- experiment	Post- experiment	Before- experiment	Post- experiment	Before- experiment	Post- experiment
Experimental group	M	1.56	3.40	1.68	3.52	1.12	3.20	1.55	3.12
	SD	0.80	0.51	0.80	0.51	0.72	0.64	0.74	0.72
Control group	M	1.69	2.39	1.34	2.26	1.43	2.26	1.56	2.23
	SD	0.76	0.72	0.64	0.81	0.50	0.75	0.66	0.70
t		0.98	2.13*	1.02	2.21*	0.87	2.25*	0.73	1.69**

Note: * $P<0.05$, ** $P<0.01$, *** $P<0.001$

Table 4.5 shows that there were no significant differences in helping, cooperating, sharing and comforting behaviors between the small experimental class and the comparison class before the experiment ($P>0.05$), while the developmental levels of helping, cooperating, sharing and comforting behaviors of children in the experimental class were significantly improved after the experiment ($P<0.05$). However, after the experiment, the development of helping, cooperating, sharing and comforting behaviors of children in the comparison class was relatively poor ($P>0.05$), and the development of comforting behaviors in the experimental class was very significant before and after the experiment ($P<0.01$).

4.6 Development of prosocial behavior in different dimensions of middle class children

Table 4.6 Influence of cartoons on four dimensions of prosocial behavior development of middle class children

Group		Helping behavior		Cooperative behavior		Sharing behavior		Consolation behavior	
		Before-experiment	Post-experiment	Before-experiment	Post-experiment	Before-experiment	Post-experiment	Before-experiment	Post-experiment
Experimental group	M	1.85	3.42	1.73	3.53	1.57	3.28	1.75	3.27
	SD	0.59	0.63	0.59	0.63	0.69	0.59	0.78	0.59
Control group	M	1.82	2.10	1.72	2.10	1.55	2.17	1.68	2.17
	SD	0.53	0.61	0.53	0.61	0.68	0.60	0.84	0.75
t		0.95	2.34***	1.12	2.20**	0.93	2.38**	0.79	1.87**

Note: *P<0.05, **P<0.01, ***P<0.001

Table 4.6 shows that there were no significant differences in helping, cooperating, sharing and comforting behaviors between the experimental class and the comparison class before the experiment ($P>0.05$), while the developmental levels of helping, cooperating, sharing and comforting behaviors of children in the experimental class were significantly improved after the experiment ($P<0.01$). However, after the experiment, the development of helping, cooperating, sharing and comforting behaviors of children in the comparison class was relatively poor ($P>0.05$), and the development of helping behavior in the experimental class was very significant before and after the experiment ($P<0.001$). The results showed that cartoon activities had a significant effect on prosocial behavior of middle class children.

4.7 Development of prosocial behavior in different dimensions of children in large classes

Table 4.7 Influence of cartoons on four dimensions of prosocial behavior development of children in large classes

Group		Helping behavior		Cooperative behavior		Sharing behavior		Consolation behavior	
		Before-experiment	Post-experiment	Before-experiment	Post-experiment	Before-experiment	Post-experiment	Before-experiment	Post-experiment
Experimental group	M	2.00	3.31	1.82	3.27	1.75	3.34	1.85	3.14
	SD	0.84	0.65	0.84	0.59	0.89	0.55	0.81	0.59
Control group	M	1.59	1.80	1.66	2.07	1.80	2.00	1.76	2.19
	SD	0.63	0.56	0.73	0.79	0.75	0.86	0.81	0.68
t		1.12	2.25**	1.12	2.20**	0.99	2.40**	0.80	1.92**

Note: *P<0.05, **P<0.01, ***P<0.001

Table 4.7 shows that there were no significant differences in helping, cooperating, sharing and comforting behaviors between the experimental class and the comparison class before the experiment ($P>0.05$). After the experiment, the developmental levels of helping, cooperating, sharing and comforting behaviors of children in the experimental class were significantly improved ($P<0.01$). However, after the experiment, the development of helping, cooperating, sharing and comforting behaviors of the children in the comparison class was less significant ($P>0.05$), indicating that animation activities had a very positive impact on the prosocial behaviors of the children in the big class.

4.8 Gender differences in prosocial behavior development of young children

Table 4.8 Gender covariance difference test of prosocial behaviors in young children

Gender		Helping behavior		Cooperative behavior		Sharing behavior		Consolation behavior	
		Before-experiment	Post-experiment	Before-experiment	Post-experiment	Before-experiment	Post-experiment	Before-experiment	Post-experiment
Boy	M	1.71	2.73	1.76	2.73	1.58	2.73	1.73	2.65
N=89	SD	0.75	0.84	0.70	0.90	0.71	0.90	0.90	0.79
Girl	M	1.68	2.73	1.65	2.85	1.51	2.85	1.89	2.69
N=72	SD	0.68	0.97	0.71	0.93	0.80	0.93	0.68	0.93
Total	M	1.70	2.73	1.71	2.78	1.56	2.78	1.66	2.66
	SD	0.72	0.90	0.71	0.91	0.75	0.91	0.81	0.85
	t	0.68	1.46**	0.76	1.65	0.71	1.63**	0.58	1.75***

Note: * $P<0.05$, ** $P<0.01$, *** $P<0.001$

As can be seen from Table 4.8, the test of prosocial behavior covariance (age control) difference between male and female children in the two classes before the experiment shows that there is a certain gender difference in the development of prosocial behavior between male and female children, and there is a significant difference in the development of sharing behavior between male and female children ($P<0.001$). There were also significant differences in comforting and helping behaviors ($P<0.01$), and girls were significantly better than boys. There was no significant difference in cooperative behavior between boys and girls ($P>0.05$). Therefore, when cultivating prosocial children, the gender characteristics of children should be taken into account.

CHAPTER 5

DISCUSSION AND RECOMMENDATION

In the research on the influence of cartoons on prosocial children, there are three main goals: 1) Children can increase prosocial behaviors by watching cartoons and related activities. 2) The influence of cartoons on children's prosocial behavior has age characteristics. 3) There are gender differences in the development of prosocial behavior. A total of 161 students studied in kindergartens in Jinan, Shandong Province, China. Targeted random sampling was used. The research tools used in this study are pre-test, post-test and questionnaire for students watching animation teaching. The conclusions, discussions and recommendations of this study are as follows:

- 5.1 Reinforcement Strategies
- 5.2 Observe the imitation strategy
- 5.3 Empathy training strategies
- 5.4 Choose suitable cartoons for children
- 5.5 Control the time for children to watch cartoons
- 5.6 Urge children to develop good viewing habits
- 5.7 Teachers, parents and children watch cartoons together and give timely guidance
- 5.8 Recommendation
- 5.9 Suggestion for Further Study

5.1 Reinforcement Strategies

Reinforcement refers to the process by which individuals are rewarded for appropriate or correct behavior or punished for improper or wrong behavior to encourage behavior correction. Reinforcement is an important way to shape children's behavior. "In the eyes of the child, whether it has been repeatedly reinforced by external stimuli is the only standard by which he measures the appropriateness of his behavior". The amount of practice itself does not affect the rate of behavioral response. Practice is important in child behavior formation because it provides an opportunity for repeated reinforcement to occur. Practice without reinforcement does not solidify and develop a behavior". As we mentioned earlier, some altruistic behaviors obtained by children through watching

cartoons, if they are to be sustained and gradually internalized into certain habits of children, cannot be separated from strengthening, and some aggressive behaviors must be completely eliminated, which cannot be separated from strengthening.

Reinforcement requires reinforcement to assist it. There are three types of reinforcers: physical reinforcers (such as certain toys), operational reinforcers (such as allowing children to watch more TV), and social reinforcers (such as praise or criticism from parents or teachers). Parents and teachers should use reinforcement strategies according to the situation and children's personality characteristics. When an introverted child first learns some prosocial behavior in the cartoon, such as helping other children to complete a task together, the adult can affirm it by verbal praise, thus stimulating the child to perform the same behavior in the future. If a child uses some of the aggressive behavior learned in the cartoon to bully other children, adults can take mild measures to punish him, such as not letting him play with his favorite toys or ignoring him. In daily life, a gentle, caring parent or teacher's punishment of children is often more effective than those who are harsh, cold parents or teachers' punishment of children, because care itself is a kind of social reinforcement, which helps children adhere to their own behavior norms and is conducive to the development of their communication skills. At the same time, when using reinforcement strategies, adults should also pay attention to the careful use of punishment. Although punishment can inhibit children's bad behaviors in the short term, in the long run, adults' punishment of children, especially corporal punishment, will also allow children to learn verbal and physical attacks to some extent. Because adult punishment is also a model of observation and learning.

5.2 Observe the Imitation Strategy

According to Bandura, all learning phenomena derived from direct experience can actually occur on the basis of a substitute for observing the behavior of others and the consequences of such behavior on others. Through experiments, he proved that in observational learning, people can learn new behaviors without external rewards or reinforcement, or even participation in practice, as long as they observe the example. This is a kind of "non-trial learning", which guides their own operations or actions by forming certain behavioral representations. The emphasis of observational learning proposed by

Bandura is on the imitation of external role models. He believes that learning is carried out on the basis of imitation, and the behavior of the role model is imitated by the observer and becomes the model of the imitator.

In particular, the behavior of respected figures has a vicarious reinforcement effect, and vicarious reinforcement is also a cognitive process. Under the influence of this role model reinforcement, children can form a large number of social behaviors even without any direct input. As mentioned above, even if the role models are some cartoon characters, children will imitate the role models in the cartoons or movie clips they see. Moreover, the concrete figurativeness of thinking development in early childhood determines the feasibility of observation and imitation for children. In daily life, when parents or teachers use this strategy, they should pay attention to guiding children to know which behaviors are encouraged, which behaviors are prohibited and should be punished in the process of observation, so that children can obtain the right communication skills. For example, when watching the animated film *Finding Nemo*, parents or teachers can guide children to learn the spirit of Nemo's cooperation. In addition, when parents or teachers guide children to observe a certain model behavior, they can also take some strengthening measures, such as verbal praise or material rewards, to enhance children's self-confidence, so that the model behavior can be internalized into a certain habit of children.

5.3 Empathy Training Strategies

Empathy is a psychotherapy method often used by psychoanalysis. It is an intellectual or conceptual grasp of another person's feelings and an alternative emotional response to another person's emotional experience. The research on the relationship between empathy and prosocial behavior has shown that empathy is an important social motivation factor to maintain positive social relations, it is a bridge of communication between people's inner world, is a good supplement to interpersonal interaction, and is essential in interpersonal relations. Empathy is the source of prosocial behavior. Empathy not only enhances prosocial behaviors such as helping others and sharing, but also reduces antisocial behaviors such as aggression. Empathy training strategy is a training method to improve children's ability to observe and understand the emotions of others, so as to

resonate. It can be seen that empathy training can enhance children's empathy ability, and then cultivate children's good social quality and promote the development of communication ability. In fact, almost all young children have the ability to empathize, but some children are more prone to empathic responses. Studies have proved that children can empathize and pity others' misfortune, but there are individual differences. When children watch cartoons, parents should carry out empathy training in a timely manner and teach children to experience the emotions of the characters in the film from their own perspective and from the perspective of others, which will be conducive to the development of children's communication skills. As children's self-awareness and social cognitive ability have developed to a certain extent, they can gradually recognize and understand the needs and emotions of others. Moreover, under normal circumstances, children's judgment of others' misfortune is often caused by the evaluation of adults, so parents and teachers can guide children to pay attention to the cartoon hero's point of view, so as to explain, help children think, discuss with them, and imagine their own feelings in similar situations, so as to achieve the purpose of empathy training. In the teaching activities designed according to cartoons, teachers can ask children to carry out empathy training through storytelling, story continuation, scene performance, etc., and pay attention to guide children to recall when they have had similar experiences with the cartoon protagonist, so as to arouse children's motivation to experience other people's emotions.

5.4 Choose Suitable Cartoons for Children

Because children are still young, the awareness of discrimination is not strong, they do not know which cartoons are not suitable for watching, parents should selectively help children choose to watch cartoons according to the psychological development characteristics of children. Preschool children's psychological changes are characterized by its progressive, preschool children's psychological changes are always improving, memory is constantly improving, thinking ability is constantly developing, whether it is psychological or personality aspects are changing towards a more advanced aspect, so parents should choose the right cartoon for children, both to ensure that the cartoon is good-looking and in line with its psychological development level.

First of all, cartoons should be selected according to the age of children. Children in small classes already have strong mental activity ability, particularly strong imitation ability, basic language formation, longer attention time, and begin to understand the content of animation. At this time, they can choose simple and easy to understand mythic stories, vivid and lovely characters, and distinctive characters. It is important to both satisfy their curiosity and cultivate their good qualities and positive behaviors. Boring and didactic films will certainly not be loved by children, after all, he is watching animation, such as "Little Tadpoles looking for their mother". Children in middle and senior classes are studious, inquisitive and have certain abstract ability, and have their own methods in terms of cognition, whether it is observation, attention, memory process or thinking and imagination process. When watching cartoons, they no longer look at random, but can have more directions or routes, and the viewing effect is significantly improved, and they can carry out follow-up associations according to the playback of the animation. Attention is not easy to disperse, this time parents should choose popular and educational cartoons.

Secondly, the selection of cartoons should pay attention to the standardization of its language, the content should be healthy, and the story should be compact, which is conducive to the cultivation of children's prosocial behavior. Research and reality tell us that fighting films, adult films, pornographic horror films and over-preaching cartoons are not suitable for children to watch. Children have a strong imitation ability, and many children imitate violent actions in the class. Almost 100% of male children regard themselves as Ultraman, electric shock kids, and violent behaviors occur from time to time. This is very unfavorable to the formation of good behavior habits of children. In the class often see such a scene: two children in the game in order to get the toys they want and regardless of the feelings of others forced to take, grab not two people fight, similar to this aggressive behavior repeatedly banned. Many parents also reflect that children love to watch these so-called "justice" and "hero" cartoons at home, have a soft spot for "Ultraman" and learn a lot of actions inside, and increasingly like to use "Ultraman" to teach others. Therefore, many cartoons are not suitable for children to watch, and parents should carefully help children choose cartoons to avoid adverse effects on the physical and mental health of children.

5.5 Control the Time for Children to Watch Cartoons

Unlike adults, children's self-control is relatively poor, and they are often attracted by wonderful TV cartoons, leading to watching cartoons for a long time or even being obsessed with cartoons. Many physiological functions of children have not been fully developed, parents should strictly control the time for children to watch cartoons, and do not let children watch cartoons for too long and affect their health.

Many children who wear glasses in kindergartens and primary schools have poor eyesight, or myopia, astigmatism or farsightedness, and most children have decreased vision because they watch cartoons for too long. Parents should limit the time for children to watch cartoons to no more than one hour, and to watch intermittently, each viewing time is suitable for 10-20 minutes, the baby is best not to contact TV, children's delicate organs are difficult to accept the strong radiation brought by TV. After watching for a period of time, children should be taken to the outside, change the environment, and change the things to watch, in order to buffer and eliminate visual fatigue.

5.6 Urge Children to Develop Good Viewing Habits

Watching cartoons is a way of leisure and relaxation, which is loved by most children, but relaxation is not indulgence, we must pay attention to details when relaxing, and form good habits when watching. Children should pay attention to keep two meters away from the TV, not too far in front, not too far away, with a sitting or standing posture, not lying down, must pay attention to keep the chest straight back, if a long time watching cartoons and standing posture, sitting incorrectly, it is easy to bend the spine and deformed, resulting in a to back, crooked neck. Secondly, eating while watching cartoons is believed to be more attractive than food in the eyes of children, so the TV must be turned off when eating, so that children can eat carefully, so as not to affect the digestion of food, resulting in indigestion and overnutrition.

5.7 Teachers, Parents and Children Watch Cartoons Together and Give Timely Guidance

Animation is not only rich in entertainment value and educational value, animation is also a kind of culture, adults should not think that only children can watch

cartoons, only belong to children and let children watch alone, in fact, adults can also watch cartoons to relax, more importantly, parents are very necessary to watch cartoons with their children. Statistics show that nearly 30% of parents never watch TV with their children, 60% of parents only occasionally watch TV with their children, and less than 10% of parents often watch TV with their children. The results of the interview also show this situation. Very few parents do not realize the importance of watching cartoons with their children, and seriously neglect the value of sharing animations with their children. Parents are best not to let the child alone in front of the TV, as long as there is time to try to watch with the child, because the child does not necessarily understand the plot of the TV. Parents can also explain the places they do not understand in time to strengthen children's ability to understand and learn, and at the same time, proper communication with children can bring the relationship between the two people closer with the help of cartoons. Let your child see you as a friend. In addition, parents need to give timely guidance to their children according to the content of the program. So that children can form a correct concept, so that children gradually learn the wonderful essence of cartoons. This study also shows that teachers sending children to watch animation and related activities can promote the development of children's prosocial behaviors.

5.8 Recommendation

In this research, researcher have suggested that the results of the study should be applied as follows:

5.8.1 Cartoons can be used as AIDS to help young children understand abstract concepts such as numbers, letters, shapes, and colors. Help them grasp the knowledge more easily by showing them vivid images and situations.

5.8.2 Through character creation and storyline, cartoons can convey morals, emotions and values, and help children establish correct moral concepts and value orientations.

5.8.3 Colorful and imaginative cartoons can stimulate young children's creativity and imagination, encouraging them to think, express and create freely.

5.8.4 By watching cartoons, children can be exposed to a variety of languages, and learn vocabulary, grammar and expressions to promote the development of language skills.

5.8.5 Cartoons can help young children recognize new things, understand the concept of time and space, and promote their cognitive development.

5.9 Suggestion for Further Study

Based on the summary and discussion of the study, the researcher has several suggestions for further study as follows:

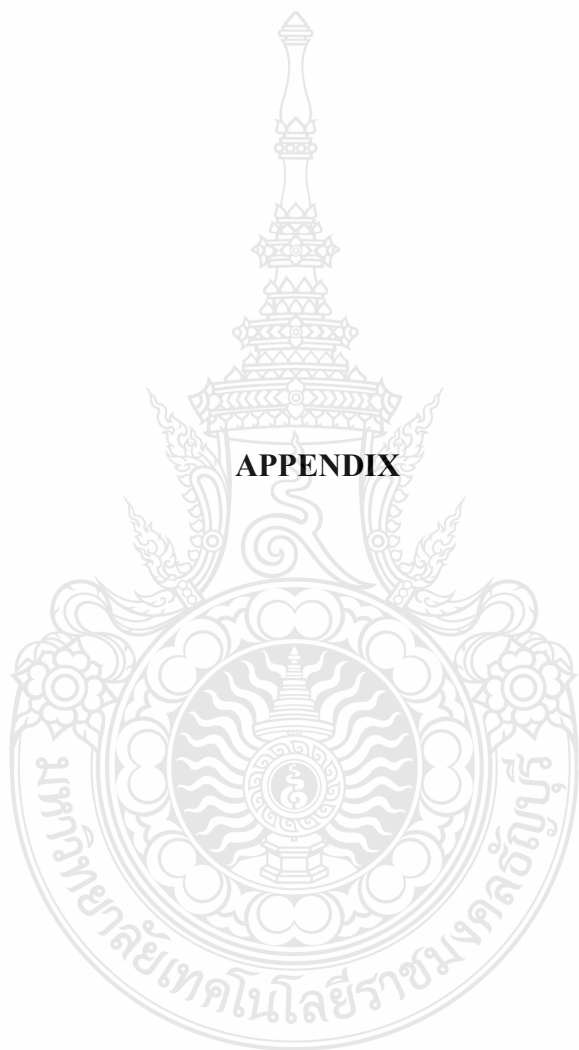
5.9.1 Study the effects of cartoons on children's cognitive development. This could include effects on cognitive aspects such as memory, problem solving and attention in young children after watching cartoons.

5.9.2 Conduct content analysis of different types of cartoons to understand the educational elements, moral concepts and content covered by cognitive development, and study the impact of these contents on young children's learning.

5.9.3 Exploring ways to increase the interactivity of cartoons, such as developing animated content that can engage young children in interactions that may further promote young children's sense of learning and engagement.

5.9.4 Long-term follow-up studies are conducted to observe the long-term effects on learning ability, social skills, and other developmental aspects of young children who regularly watch cartoons.

APPENDIX





APPENDIX A

- List of experts reviewing research instruments**
- Invitation Letter to experts to examine research instruments**

List of experts reviewing research instruments

Content Specialists

1. Mr. Xue Qingji
Nanyang Institute of Technology, China
2. Mr. Li Jian
Nanyang Institute of Technology, China
3. Mr. Xu Guoqing
Nanyang Institute of Technology, China

Media Specialists

1. Mr. Ding Huan
Nanyang Institute of Technology, China
2. Mr. Huang Qirui
Nanyang Institute of Technology, China
3. Ms. Xu Rui
Nanyang Institute of Technology, China

Assessment Specialists

1. Ms. Duan Chenjing
Heze Intermediate People's Court, China
2. Ms. Wu Qingju
Kaifeng City Water Group Co., LTD, China
3. Ms. He Aimin
Dongming County Hospital of Chinese Medicine, China

Invitation Letter to experts to examine research instruments

MHESI 1962.18/2023



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17 August, 2023

Dear Mr. Qingji Xue
Nanyang Institute of Technology, China

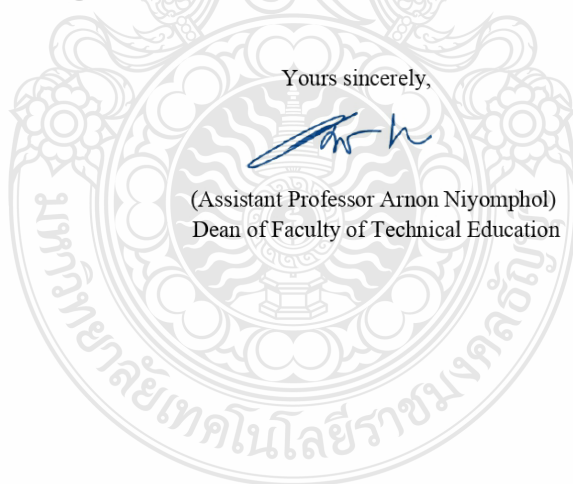
Subject: Respectfully Requesting for letter of Invitation of Experts for M.Ed.Thesis

I am writing to request your assistance as an honorary external research reviewer in evaluating the research instruments of Mr. Sen Wu, Master of Education Program in Learning Technology and Innovation, Rajamangala University of Technology Thanyaburi, who has been working on the thesis titled “The Influence of Animation on Children’s Prosocial Behavior for Primary School Students”. under the supervision of Assistant Professor Dr. Tiomyod Pasawano. In this regard, I would like to request your valuable time to evaluate the research instruments as I strongly believe that your expertise will be of great value in improving the research instruments.

If you have any questions or need further information, please feel free to contact Mr. Sen Wu, on the e-mail: wu_s@mail.rmutt.ac.th

Yours sincerely,

(Assistant Professor Arnon Niyomphol)
Dean of Faculty of Technical Education



MHESI 1962.19/2023



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17 August, 2023

Dear Mr. Jian Li
Nanyang Institute of Technology, China

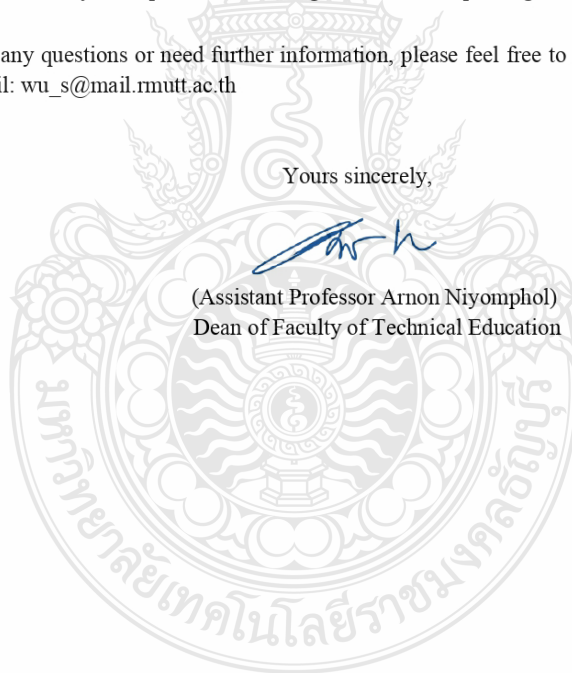
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If you have any questions or need further information, please feel free to contact Mr. Sen Wu, on the e-mail: wu_s@mail.rmutt.ac.th

Yours sincerely,

(Assistant Professor Arnon Niyomphol)
Dean of Faculty of Technical Education



MHESI 1962.20/2023



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17 August, 2023

Dear Mr. Guoqing Xu
Nanyang Institute of Technology, China

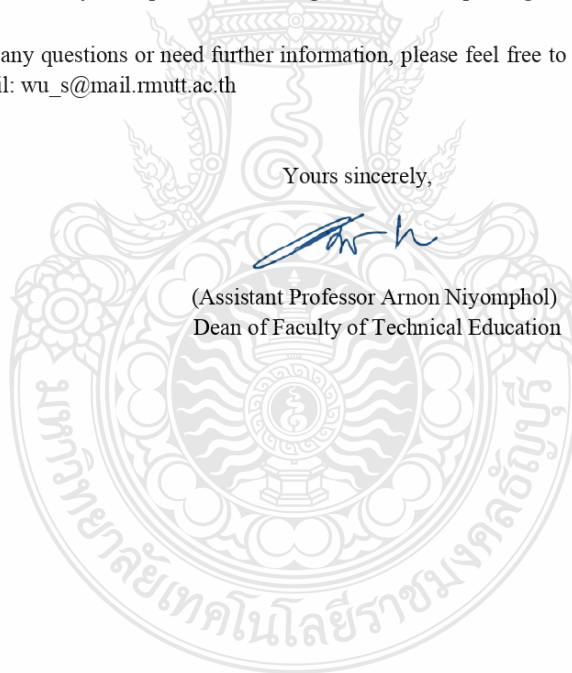
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If you have any questions or need further information, please feel free to contact Mr. Sen Wu, on the e-mail: wu_s@mail.rmutt.ac.th

Yours sincerely,

(Assistant Professor Arnon Niyomphol)
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17 August, 2023

Dear Mr. Huan Ding
Nanyang Institute of Technology, China

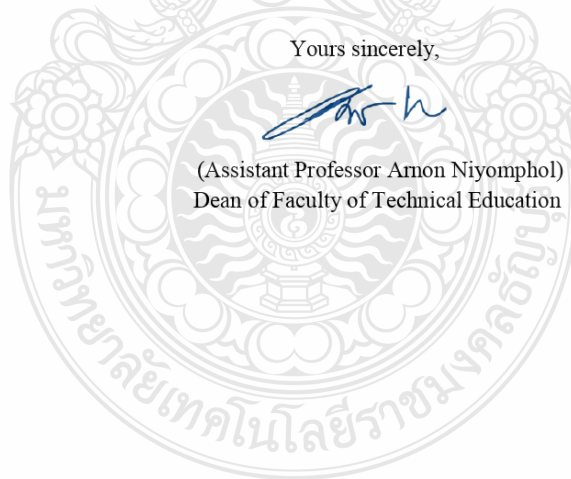
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If you have any questions or need further information, please feel free to contact Mr. Sen Wu, on the e-mail: wu_s@mail.rmutt.ac.th

Yours sincerely,

(Assistant Professor Amon Niyomphol)
Dean of Faculty of Technical Education



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17 August, 2023

Dear Mr. Qirui Huang
Nanyang Institute of Technology, China

Subject: Respectfully Requesting for letter of Invitation of Experts for M.Ed.Thesis

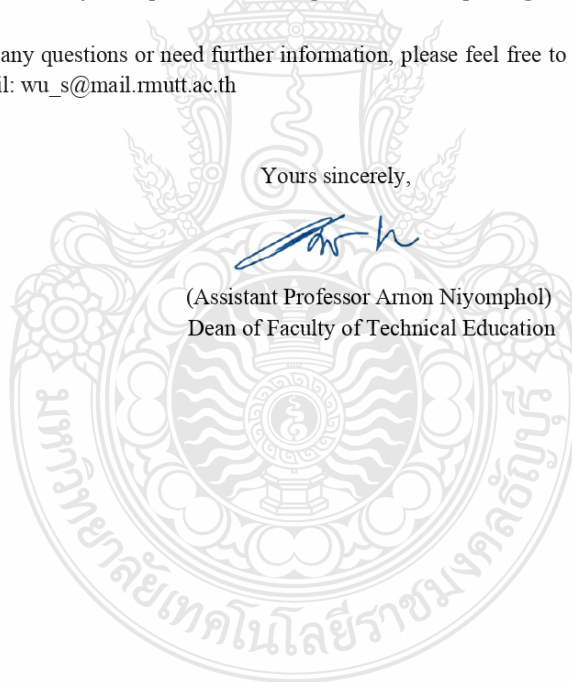
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If you have any questions or need further information, please feel free to contact Mr. Sen Wu, on the e-mail: wu_s@mail.rmUTT.ac.th

Yours sincerely,

A handwritten signature in blue ink, appearing to read "Amon Niyomphol".

(Assistant Professor Amon Niyomphol)
Dean of Faculty of Technical Education



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Klong Luang, Pathum Thani 12110 Thailand
Tel:+66-2-549-4710 Fax:+66-2-577-5049

17 August, 2023

Dear Mr. Qirui Huang
Nanyang Institute of Technology, China

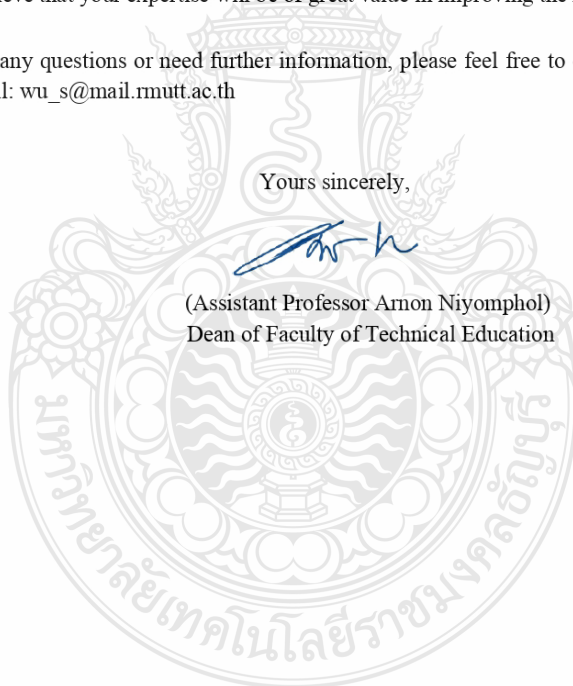
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If you have any questions or need further information, please feel free to contact Mr. Sen Wu, on the e-mail: wu_s@mail.rmUTT.ac.th

Yours sincerely,

(Assistant Professor Amon Niyomphol)
Dean of Faculty of Technical Education





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17 August, 2023

Dear Ms. Rui Xu
Nanyang Institute of Technology, China

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If you have any questions or need further information, please feel free to contact Mr. Sen Wu, on the e-mail: wu_s@mail.mutt.ac.th

Yours sincerely,

(Assistant Professor Arnon Niyomphol)
Dean of Faculty of Technical Education





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Tel: +66-2-549-4710 Fax: +66-2-577-5049

17 August, 2023

Dear Ms. Chenjing Duan
Heze Intermediate People's Court, China

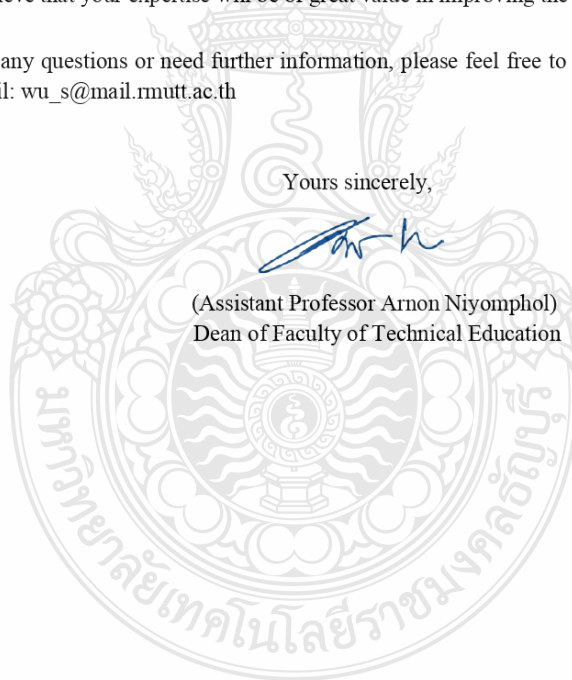
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Yours sincerely,

(Assistant Professor Arnon Niyomphol)
Dean of Faculty of Technical Education





MHESI 1962.25/2023



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17 August, 2023

Dear Ms. Qingju Wu
Kaifeng City Water Group Co., LTD, China

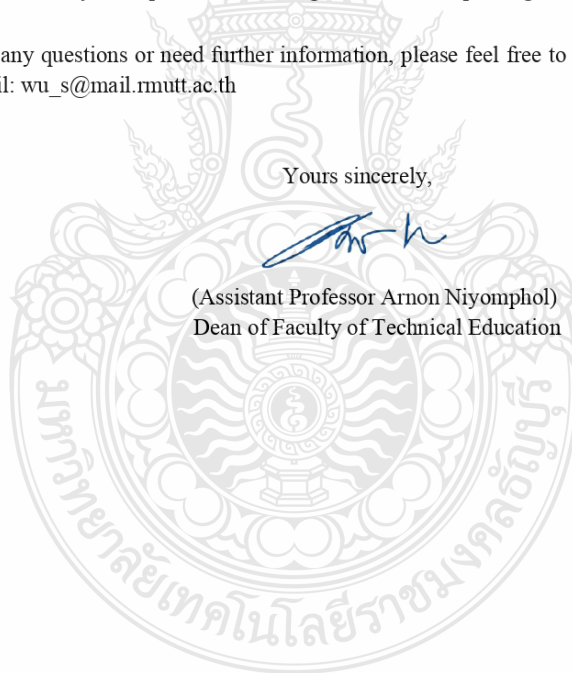
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Yours sincerely,

(Assistant Professor Arnon Niyomphol)
Dean of Faculty of Technical Education





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17 August, 2023

Dear Ms. Aimin He
Dongming County Hospital of Chinese Medicine, China

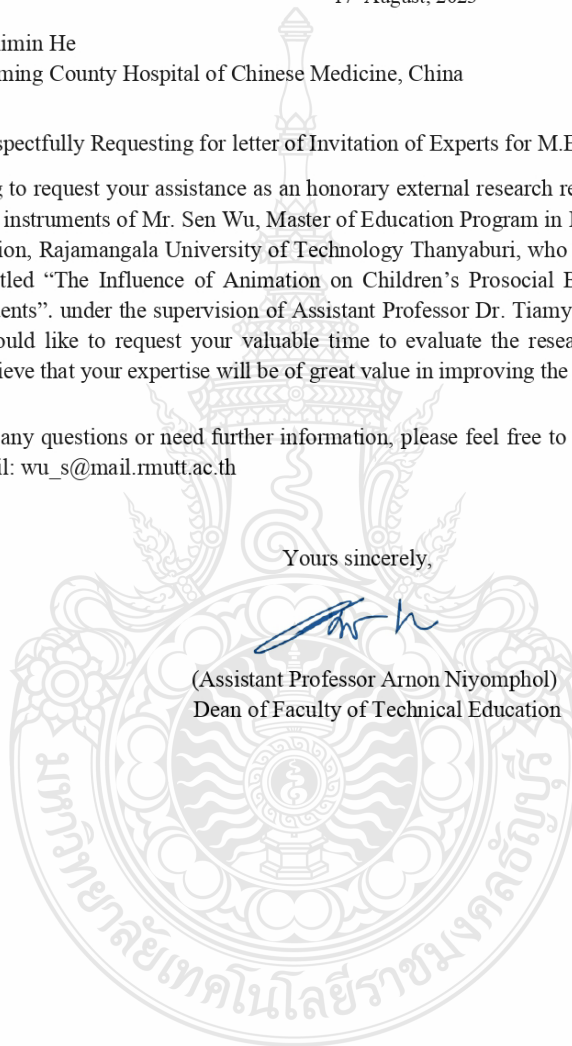
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Yours sincerely,

(Assistant Professor Arnon Niyomphol)
Dean of Faculty of Technical Education





APPENDIX B

- **Assessment of content quality**
- **Assessment of media quality**
- **Questionnaire of Students' Satisfaction**



**Assessment of content quality aspects of the influence of animation on children's
prosocial behavior for primary school students
(For Content Experts)**

Thesis Title	The Influence of Animation on Children's Prosocial Behavior for Primary School Students
Name Surname	Mr. Wu Sen
Program	M.Ed. (Technology and Learning Innovation)
Thesis Adviser	Assistant Professor Tiamyod Pasawano, Ed.D.

The assessment is a part of the thesis, approved by the Faculty of Technical Education, Rajamangala University of Technology Thanyaburi in Partial Fulfillment of the Requirements for the master's degree.

Research of Objectives:

1. To clarify the positive and negative effects of cartoons on children's prosocial behaviors through the study on the influence of cartoons on children's prosocial behaviors.
2. To provide certain reference for school education and family education. According to the influence of animation on prosocial behavior of children.

Directions: This questionnaire is designed to examine experts' opinion toward the Influence of Animation on Children's Prosocial Behavior for Primary School Students. Your answers will be kept confidential. The questionnaire is divided into 2 parts as follows:

Part 1: Please write √ in the box that corresponds to your opinion.

Direction: Please mark √ in a box that best describes the degree of your agreement with each statement.

- 5 = Strongly Agree
 4 = Agree
 3 = Undecided
 2 = Disagree
 1 = Strongly Disagree

Items	Level of agreement				
	5	4	3	2	1
1. Prosocial behavior is well defined.					
2. The research significance of this paper is of reference value.					
3. The research method of this paper is scientific and rigorous.					
4. The research hypothesis of this paper is reasonable.					
5. The definition of the scope and limitations of this study is accurate.					
6. The conceptual framework of this paper is logical and clear.					
7. The experiment of this study is reasonable.					
8. Data analysis is accurate and reasonable.					
9. The three strategies of reinforcement, observation and imitation, and empathy training are effective.					
10. The content of the thesis has certain guidance to the society.					

Part 2: Additional advice

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Signature.....

(.....)

Date.....





**Assessment of media quality aspects of the influence of animation on children's
prosocial behavior for primary school students
(For Media Experts)**

Thesis Title	The Influence of Animation on Children's Prosocial Behavior for Primary School Students
Name Surname	Mr. Wu Sen
Program	M.Ed. (Technology and Learning Innovation)
Thesis Adviser	Assistant Professor Tiamyod Pasawano, Ed.D.

Directions: This questionnaire is designed to examine experts' opinion toward the Influence of Animation on Children's Prosocial Behavior for Primary School Students. Please answer all the questions to the best of your knowledge. Your answers will be kept confidential. The questionnaire is divided into 2 parts as follows

Part 1: Please write ✓ in the box that corresponds to your opinion.

Direction: Please mark ✓ in a box that best describes the degree of your agreement with each statement.

- 5 = Strongly Agree
- 4 = Agree
- 3 = Undecided
- 2 = Disagree
- 1 = Strongly Disagree

Items	Level of agreement				
	5	4	3	2	1
1. The cartoons selected in this study promoted the helping behavior of young children.					
2. The cartoons selected in this study promoted cooperative behavior toward young children.					
3. The cartoons selected in this study promoted the sharing behavior of young children.					
4. The cartoons selected in this study promoted comforting behaviors for young children.					
5. The selection of cartoons is scientific and effective.					
6. The length of the cartoon is moderate.					
7. Cartoons are suitable for children's age.					
8. The content of the cartoon is in line with the interests of children.					
9. The types of cartoons fit the characteristics of children.					
10. The cartoons selected in this study can investigate children's prosocial behavior in multiple dimensions.					

Part 2: Additional advice

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Signature.....
 (.....)
 Date.....



Questionnaire of Students' Satisfaction

Thesis Title The Influence of Animation on Children's Prosocial Behavior
for Primary School Students

Name Surname Mr. Wu Sen

Program M.Ed. (Technology and Learning Innovation)

Thesis Adviser Assistant Professor Tiamyod Pasawano, Ed.D.

This assessment is a part of the thesis writing for a Master's degree in Education Program in Educational Technology and Communications, Rajamangala University of Technology Thanyaburi.

Research of Objectives:

1. To clarify the positive and negative effects of cartoons on children's prosocial behaviors through the study on the influence of cartoons on children's prosocial behaviors,
 2. To provide certain reference for school education and family education.
- According to the influence of animation on prosocial behavior of children.

Directions: The purpose of this questionnaire is to investigate the prosocial behavior of 161 children in Jinan City, in order to find out the influence of cartoons on children's prosocial behavior. Please answer all questions to the best of your knowledge. Your answer will be kept confidential. The questionnaire is divided into the following two parts:

Part 1: Please write √ in the box that corresponds to your satisfaction.

Direction: Please mark √ in a box that best describes the degree of your agreement with each statement.

- 5 = Strongly Agree
 4 = Agree
 3 = Undecided
 2 = Disagree
 1 = Strongly Disagree

Items	Level of agreement				
	5	4	3	2	1
1. Children Health					
1.1 Sitting for long periods of time in young children leads to obesity.					
1.2 Children watch cartoons for a long time and their eyesight deteriorates.					
1.3 Children do not exercise for a long time, resulting in a decline in motor ability.					
1.4 The influence of cartoons on the memory of young children.					
2. Children Cognition					
2.1 The effect of watching cartoons on young children's imagination.					
2.2 The effects of watching cartoons on children's creativity.					
2.3 The influence of cartoons on children's logical thinking ability.					

Items	Level of agreement				
	5	4	3	2	1
2.4 The influence of cartoons on children's visual cognition.					
3. Children Behavior					
3.1 Children may be influenced by these advertisements and have purchase desires or consumption behaviors.					
3.2 Young children tend to imitate the characters and behaviors they see in cartoons.					
4. Children Develop					
4.1 The influence of cartoons on children's language and communication ability.					
4.2 The influence of cartoons on children's emotional and social development.					
4.3 The influence of cartoons on children's cultural consciousness.					

Part 2: Additional advice

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Biography

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วิทยานิพนธ์ฉบับนี้เป็นงานวิจัยที่เกิดจากการค้นคว้าและวิจัย ขณะที่ข้าพเจ้าศึกษาอยู่ใน คณะครุศาสตร์อุตสาหกรรม มหาวิทยาลัยเทคโนโลยีราชมงคลธัญบุรี ดังนั้น งานวิจัยในวิทยานิพนธ์ ฉบับนี้ถือเป็นลิขสิทธิ์ของมหาวิทยาลัยเทคโนโลยีราชมงคลธัญบุรี และข้อความต่าง ๆ ในวิทยานิพนธ์ ฉบับนี้ ข้าพเจ้าขอรับรองว่าไม่มีการคัดลอกหรือนำงานวิจัยของผู้อื่นมานำเสนอในชื่อของข้าพเจ้า

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Wu Sen

(Mr. Wu Sen)

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FACULTY OF TECHNICAL EDUCATIONAL

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ลิขสิทธิ์ พ.ศ. 2565

คณะครุศาสตร์อุตสาหกรรม

มหาวิทยาลัยเทคโนโลยีราชมงคลธัญบุรี