



**DESIGN FOR YOUNG PARENTS AND KIDS TO  
INTERPRET SEXUALITY**



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**DESIGN FOR YOUNG PARENTS AND KIDS TO INTERPRET SEXUALITY**

by  
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was submitted in partial fulfillment of the requirements  
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### **Abstract**

A board game was designed for facilitating sexual education communication within Chinese families. This research introduces a board game designed to address sexual education for children aged 5 to 8 within Chinese society, taking into account cultural sensitivities and societal norms. An interactive board game was developed, aimed at facilitating communication between parents and children on sexual education subjects. Through the use of culturally appropriate imagery, language, and gameplay mechanics, cultural taboos are navigated, promoting open dialogue in a supportive and gentle manner. Based on principles of child development, educational psychology, and cultural sensitivity, the game emphasizes age-appropriate content and interactive learning experiences. The research was conducted with the objectives including 1) developing a board game as an educational tool for sexual education among young children in Chinese society; and 2) evaluating the effectiveness of the game in enhancing communication and understanding between parents and children regarding sexual education. Participant feedback was analyzed qualitatively, indicating the game's success in facilitating meaningful conversations and increasing comprehension of sexual education concepts among Chinese families. The results reveal the game's potential to significantly improve communication and education on this sensitive issue. Future research might explore the game's long-term impact and its adaptability across different cultural contexts, to gain insights into its effectiveness and wider applicability. This research contributes to closing the gap in sexual education discourse for young children in China, offering a viable method for fostering healthy attitudes and behaviors towards sexuality.

(Total 62 pages)

Keywords: Board Card Games, Communication & Interaction Between Parents and Children, Board Games As Sexual Educational Tools

Student's Signature ..... Thesis Advisor's Signature .....

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# Chapter 1

## Introduction

### 1.1 Background

In China, with the development of social economy and the renewal of people's ideas, children's sex education has gradually become a topic of concern. However, due to the influence of traditional cultural concepts and the lag of education, the development of children's sex education in our country is still facing many challenges. Therefore, it is of great practical significance to study and design the learning products of children's sex education.

This study embarked on an exploration of the current landscape, identifying key issues and obstacles within China's approach to sex education for children. It scrutinized the rationale behind the initiation of sex education from a young age and delineated the specific knowledge areas that should be addressed. Subsequently, the research proposed design methodologies and educational content aimed at advancing sex education for children, predicated on an analytical review of existing market offerings in educational products.

Child sex education is a complicated problem involving individual growth and social development. In modern society, with the improvement of people's living standards and the diversification of values, the importance of children's sex education has become increasingly prominent. Sex education for children is not only related to the physical and mental health of individuals, but also has great significance for the progress of social civilization and the construction of a harmonious society. Therefore, it is of great practical significance and social value to study and design learning products for Chinese children's sex education.



Figure 1.1 Picture of conversations that often take place in Chinese families

Source: Researcher

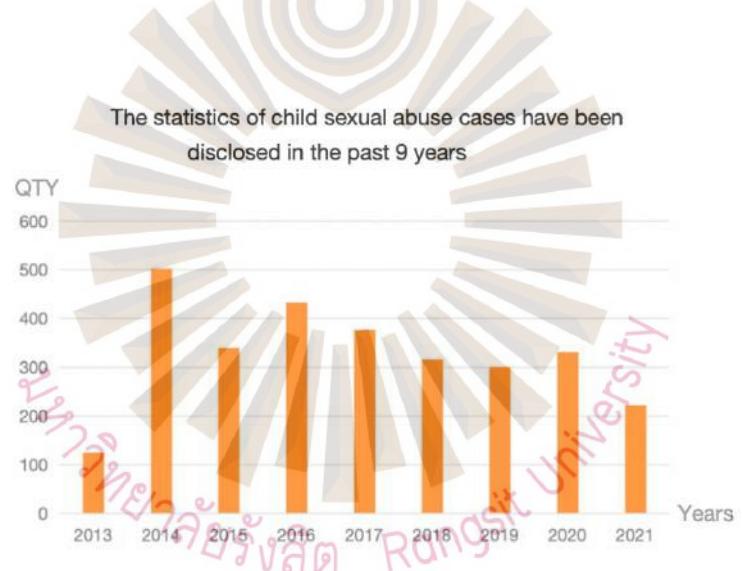


Figure 1.2 Child sexual abuse cases are increasing from 2017 to 2021

Source: China Girls Protection Organization Association, 2022

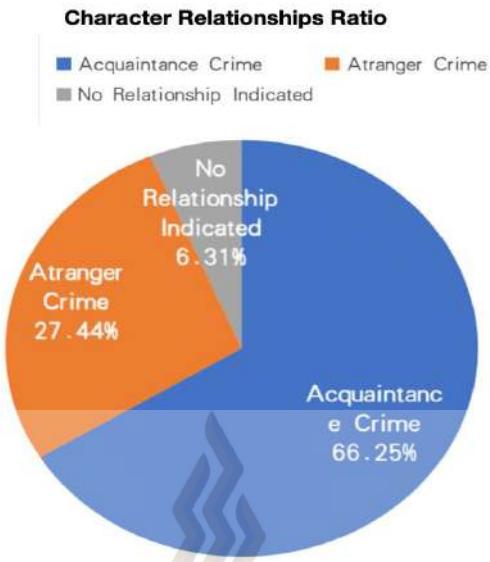


Figure 1.3 Character Relationships Ratio

Source: China Girls Protection Organization Association

According to the statistics of Data Figure 1.3, as we can see: the proportion of crimes committed by acquaintances is very high.

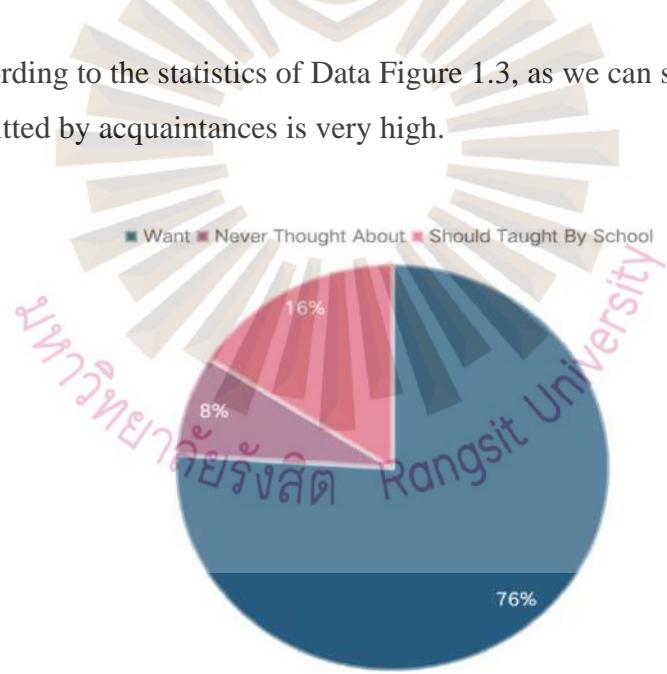


Figure 1.4 Survey on whether parent willing to provide sex education to their children

Source: Researcher

I interviewed parents what kind of sex education products do you think children need? Most parents choose toys and books.

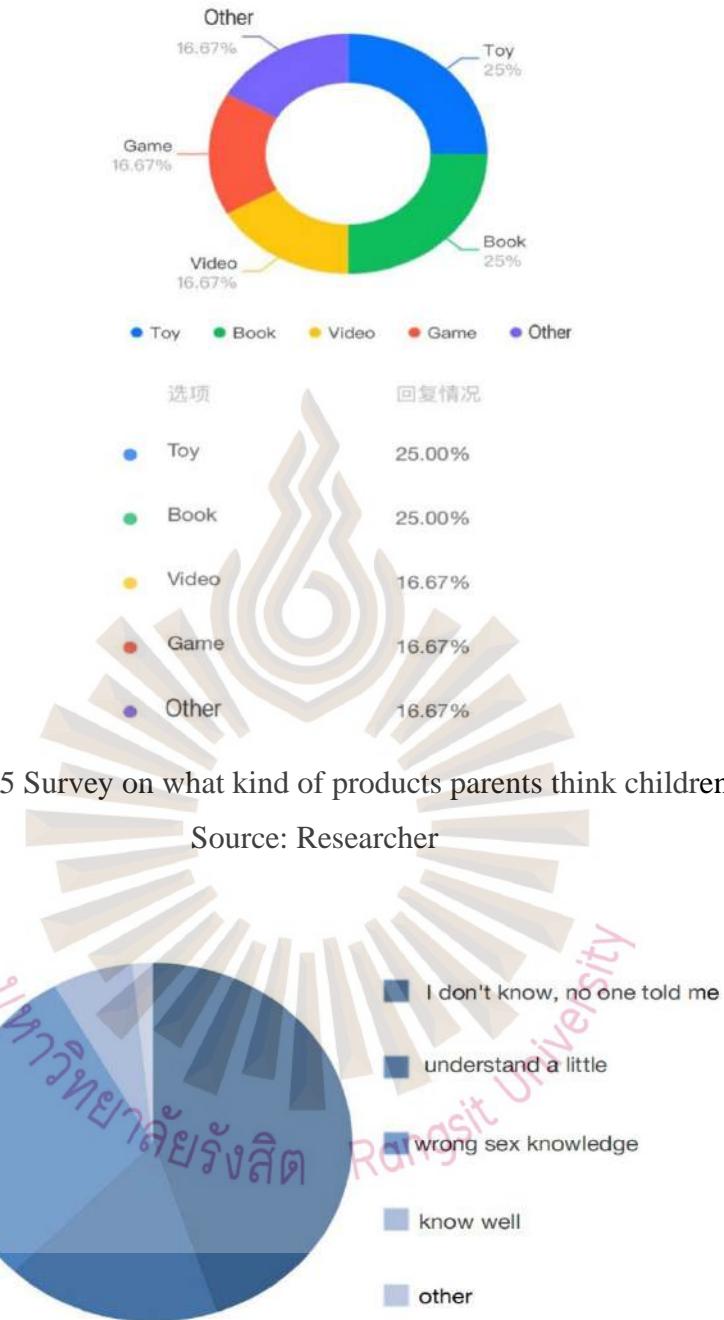


Figure 1.5 Survey on what kind of products parents think children need?

Source: Researcher



Figure 1.6 Survey on kids understanding of sex education

Source: Researcher

This analysis reveals that the level of sex education for children across all age groups in China is notably deficient. This deficiency contributes to a significant gap in children's self-protection awareness and abilities, potentially leading to serious consequences such as sexual assault, sexual abuse, unintended pregnancies and

abortions, sexually transmitted diseases, negative perceptions of sexual behavior, and deviations in sexual thoughts and actions. It is important to note that the data presented primarily cover reported cases of child sexual abuse, with the actual number of undisclosed incidents likely far exceeding those documented. The absence of essential sexual knowledge leaves children unaware of their private parts, oblivious to behaviors that could be harmful, and unequipped to protect themselves from sexual harm, including assault, due to a lack of self-awareness. Consequently, there is an urgent need to enhance sex education for children to address these critical issues.

## 1.2 Research Objectives and Significance

Research identifies the period before the age of 14 as the most effective for sex education. It has been observed that children as young as 5 years old start to exhibit curiosity about sexual organs and recognize differences in appearance and behavior between genders. This stage is critical for the identification of gender roles. Consequently, the focus of this research has been placed on children aged 5 to 8 years old. The implementation of child sex education requires the joint efforts of "family sex education", "school sex education" and "social education". However, the implementation of "school sex education" and "social education" in China is still very difficult at this stage, and it is difficult to fully carry out. (Li, 2022) Consequently, family education is of great importance, and parents can carry out educational activities such as gender roles, sexual knowledge, sexual ethics, and sexual health for their children. The family constitutes the primary environment for children's living and learning experiences, with parents serving not merely as caregivers but also as the initial educators in their children's lives. The early introduction of sex education within the family setting is recognized as beneficial for enhancing the effectiveness of subsequent sex education efforts. Indeed, family-based sex education plays a pivotal role in the developmental process of children. (Wilson, 2010) However, a significant challenge reported by many Chinese parents is the uncertainty regarding the initiation and implementation of sex education. This lack of clarity and confidence represents a substantial barrier that parents face in the endeavor to provide sex education. (Sun, 2011) Through the implementation of the designed card game, an increase in parent-

child interaction is facilitated. Such positive family interactions are instrumental in reducing the gap between parents and their children, thereby fostering a robust parent-child relationship. This enhancement in the parent-child bond contributes significantly to a healthier relational dynamic. Moreover, a harmonious family atmosphere and a strong parent-child relationship serve as foundational elements for the effective progression of sex education. Based on this situation, the objective of this research is to design highly interactive, scientific and interesting learning card board game toys for young parents and children, and build a bridge for children and parents to communicate, which can avoid the situation that some parents feel embarrassed and choose to avoid sex education for children, while allowing children to learn in a happy and efficient state.

### **1.3 Research innovation points**

1.3.1 Currently, the majority of existing theoretical research within China predominantly concentrates on children's sex education and related literature, with a noticeable scarcity of investigation into alternative educational tools. This thesis explores the benefits of utilizing card games in children's sex education, presenting an approach that is both unique and innovative.

1.3.2 Guided by the foundational principles of child sex education, this study emphasizes the integration of elements that are comprehensible, scientific, engaging, and interactive. By leveraging both visual and auditory components, alongside dynamic and interactive elements, the research seeks to achieve a harmonious balance between engaging interaction and the acquisition of knowledge.

### **1.4 Research Methods**

#### **1.4.1 Literature Review Method**

A comprehensive review of existing literature was conducted using various sources, including libraries, Google Scholar, CNKI.NET, and the Wanfang database. This approach ensured a solid theoretical foundation for the research presented in this thesis. (Jones, 1992)

#### 1.4.2 Survey Method

An online questionnaire survey was deployed to gather insights into the current state and challenges of sex education among children aged 5 to 8. This method facilitated an understanding of the practical aspects and societal perceptions of sex education in this age group. (Jones, 1992)

#### 1.4.3 Case Study Analysis

An in-depth analysis of current market offerings in sex education card games was undertaken. This involved examining their design techniques and methodologies, as well as identifying any challenges encountered during the design process. (Jones, 1992)

#### 1.4.4 Project-Based Method

Building on the theoretical groundwork laid by the literature review, practical design experiments were conducted. These projects served to test the theoretical concepts in real-world scenarios, evaluating both their academic and practical applicability. (Jones, 1992)

#### 1.4.5 Design Thinking Method

This research employs design thinking as a methodological approach to address the complexities of children's sex education through innovative solutions. Design thinking's iterative process — empathize, define, ideate, prototype, and test — was utilized to deeply understand users' needs, challenge assumptions, redefine problems,

and create innovative solutions to prototype and test. This method facilitated a human-centered approach to designing the educational card game, ensuring that the final product is both effective and engaging for its target audience. (Jones, 1992)



## Chapter 2

### Theoretical Research on Children's Sex Education

#### 2.1 Positioning of children groups

Children at each stage have different cognitive characteristics, with their own sexual development, sexual needs and understanding are also different. Therefore, in order to make the research more in-depth and the target group of sex education toys more targeted, I set the research object as children aged 5-8.

#### 2.2 Cognitive development characteristics of children

Childhood is the key period for the formation of the world outlook, outlook on life and values. In addition to the basic education of moral, intellectual, physical and beauty for children, it is also necessary to carry out appropriate sex education. (Haydon, 2002). Sex education in the form of card games is easier for children to understand and accept. Therefore, when designing, it is necessary to take into account the physical and psychological characteristics of children, and fully understand the cognitive development characteristics of children in the design process.



Figure 2.1 Jean Piaget's photo

Source: AFP Via Getty Images, 1967

Jean Piaget was Swiss. A famous SWISS child psychologist of modern times. whose theory of children's cognitive development has become a model of this discipline, leaving more than 60 monographs and more than 500 papers, he has lectured in many countries, and won dozens of honorary doctorates, honorary professors, and honorary scientific academicians.

Piaget was a pioneer in child psychology and cognitive development theory. He believes that cognitive development refers to the cognition of things and the way of thinking and ability of an individual to face problems in the process of adapting to the surrounding environment after birth. (Piaget, 1923). At the same time, he also believes that children do not behave mechanically in response to environmental stimuli reactive, but active explorers, whose psychology is the result of the interaction between innate genetics and acquired environment. In addition, an important point in Piaget's theory of child cognitive development is that he believes that children have their own cognitive characteristics at each stage of development, and the development of the later stage should be based on the development of the previous stage. The research object of this paper is 5-8 years old children, which belongs to the concrete operational stage of Piaget's cognitive development stage.

Birth 2 years: Babies rely on their senses and movements to learn and understand their environment. Cognitive structures are built on movement and then become more and more complex and coordinated. It is only later in this stage that activities begin to internalize, forming representations that represent concrete things.

Ages 2-7: Children can use symbols (e.g., words, mental images) to understand the world. Children can clearly distinguish the difference between reality and fantasy. Thinking is self-centered, and it is not until later in this stage that children take into account the perspectives of others. (Schaffer, 2003)

Ages 7-11: Children acquire the ability to perform a number of mental operations, such as multiple classification, reverse, sequence, and conservation. Through these actions, they are able to manipulate symbols in different ways. Logical

thinking emerged during this period but was still mainly related to concrete events and is not associated with abstract concepts. (Schaffer, 2003)

After age 11: Children acquire the ability to perform a number of mental operations, such as multiple classification, reversal, sequence, and conservation. Through these actions, they are able to manipulate symbols in different ways. Logical thinking emerged during this period but was still mainly associated with concrete events rather than abstract concepts. During this period, children are able to perform intellectual activities, including abstract and logical reasoning. They can come up with a lot of solutions without having to actually do it, and they have the ability to solve problems in completely hypothetical situations. The thought of old people is more and more based on facts rather than concrete things. (Schaffer, 2003)

The application of Piaget's theory of cognitive development is fundamentally significant in crafting children's sex education card games, necessitating an adaptation of card content to align with the developmental stages and psychological characteristics of the child. A child-centered approach in the design of card content is imperative to facilitate effective learning of sexual knowledge. Furthermore, the incorporation of sex education content within the format of a card game not only enriches the learning experience with engaging interactions but also fosters a joyful and scientifically grounded acquisition of sexual knowledge. This approach contributes to enhancing children's sexual cognitive development and supports their overall sexual growth.

The intersection of children's cognitive development and the design of sex education card games underscores a pivotal aspect: the quality of the educational card games directly influences children's understanding and perception of sexuality. This relationship establishes a dynamic, two-way interactive process between the educational tool and the cognitive development of the child. Therefore, integrating Piaget's cognitive development theory into the design process not only ensures that the educational content is age-appropriate and developmentally suitable but also enhances the effectiveness of the sex education conveyed through these games.

## 2.3 Characteristics of children's sexual development

Sexual development is a continuous process that runs through life. The famous Austrian psychologist Sigmund Freud's theory of personality development divides human sexual development into five stages: oral and anal stage, genital stage, latent stage, reproductive stage. He believes that after the age of six, children begin to develop an interest in the surrounding things. Therefore, from the point of view of the original desire, it presents a latent state until the end of adolescence. During this period, due to the psychological development of inhibiting sexual activities, male and female children were emotionally estranged from each other, and group activities were more of a trend of male and female separation. They begin to resist the self-centered "sex" of childhood, and they expect their sexual activities to conform to the moral expectations of their parents and society. However, human sexual civilization has accumulated over thousands of years. Children have to bear in just ten years.

After thousands of years of cultural accumulation, we must learn the initial control instinct and learn the initial reaction of adult social morality. They are only partially capable of self-change and need adults to help them achieve their developmental goals. Therefore, adults should gradually educate children about sex-related knowledge, but also take into account their age cognition and sexual psychological development at this stage. (Liang, 2021)

For children after the age of 5, adults should not only help children complete the developmental tasks of the incubation period, but also help children repair and make up for the lack of sexual development before the age of 5. Children who get better help with sexual development before the age of 5, after the age of 5, their energy will be transferred to learning, interests, hobbies, and more exploration of the outside world, and this exploration activity will also extend beyond their own, this sexual orientation provides conditions for healthy psychological development. 0-1.5 years old: In addition to the satisfaction of getting nutrition, the baby will stimulate the skin and mucous membranes by sucking water, which can even make the baby forget the point.

Sometimes it can trigger a response similar to an orgasm. Is that why kids like to suck on their hands, fingers, and why we love kissing as adults. (Freud, 1997)

1.5-3 years old: In addition to normal physiological functions, the anus will also become a pleasure zone. And children often get pleasure by holding in their feces and urine to stimulate their mucous membranes during the first peak of human sexual development, children get sexual pleasure by stimulating their genitals by hand or by any means. (Freud, 1997)

3-6 years old: The first peak of human sexual development, children through the hand or any way to stimulate the genitals to get sexual pleasure. Masturbation in early childhood is very important for sexual experience in adulthood. Parents' scolding and exclusion of children's masturbation behavior may cause sexual apathy in adulthood. (Freud, 1997)

Ages 6-12: Sexual development fades and the child loses interest in sexual pleasure. They also begin to experience more spiritual pleasure from the environment. Therefore, many of the behaviors of the above three stages will gradually disappear during this stage. (Freud, 1997)

After age 12: The second peak of human sexual development, when sexual activity in early childhood is replaced by more adult sexual activity. Activity in the pleasure zone begins to be dominated by the genitals. (Freud, 1997)

Of course, not every child enters the incubation period, sexual development will be smoothly in accordance with the normal track, family wrong parenting, sexual assault, see pornographic movies or videos, see parents do love, peer sexual activities, etc., may change the child's sexual psychological development track, there is precocious or late maturity of sexual psychology phenomenon.

Therefore, the correct, appropriate, and appropriate guidance of sex education helps children aged 5-8 to establish a correct sexual choice and sexual attitude.

## 2.4 Overview of child sex education

### 2.4.1 The necessity of sex education in childhood

Sex education for children refers to the education of sexual psychology, sexual physiology, sexual science, sexual morality, and sexual civilization. Child sex education is an educational system project involving families, schools, and the whole society, and it is also a re-socialization process that develops with the age of the educated.

Sexual development is a lifelong process, and sex education is also a lifelong education. Childhood is a very critical period of sex education, which plays a crucial role in the transition of children to teenagers. In real life in China, incidents of sexual assault on children occur from time to time. The young age of sexual assault, early maturity of sex, and mixed information on the Internet are present in children groups, which makes it particularly necessary to carry out child sex education.

1) Sexual assault at a younger age and acquaintance, calling for universal sex education, according to the incomplete statistics of "Girl Protection", the number of sexually abused children (18 years old) publicly reported by the media in 2021 there were 223 cases, 569 victims, and the youngest victim was only 2 years old, showing child sexual abuse the trend of low aging. (Beijing ZhongYi Public,2021). And many sexually abused children are too young to understand what sexual activity is, what's more, I can't say which specific part of myself has been violated, in this case, the law is also difficult to be violated a fair child. In addition, in more than 80 percent of these cases, acquaintances committed the crime. (Beijing ZhongYi Public,2021). Children have not yet developed physically and mentally mature, simple thinking, lack of preparedness for acquaintances, coupled with poor awareness of prevention, it is easy to suffer sexual assault.

2) The occurrence of precocious puberty requires sex education sooner rather than later according to the survey data released by the China Association of Health Promotion and Education, there are about 530,000 children in China who

experience early puberty, secondary sexual characteristics begin before the age of 8 in girls and 9 in boys (Beijing ZhongYi Public, 2021). Precocious puberty is also associated with physiological changes, it will also cause a heavy psychological burden, resulting in fear, inferiority, depression and other psychological, and may be laughed at, bullying or isolation has a negative impact on psychological well-being. Sexual characteristics appear early, when the intellectual and sexual psychology is not mature, it is easy to produce fear and anxiety, which further leads to social problems (Chen, 2021).

3) The flood of network information requires scientific guidance education with the progress of information technology, communication equipment is becoming more and more developed, and the more electronic equipment children can access the more you come. The Internet is full of videos, pictures and articles about adult emotions and passions, and these online letters bearing a wide range of information, the number of large, will lead to children's thinking more and more precocious, the intimate things of men and women will feel to curiosity, coupled with the lack of sexual knowledge of parents, they will also be ashamed to talk about sexual knowledge to their children, resulting in children have the urge to try, which eventually leads to bad consequences. (Li, 2008). Therefore, as early as possible to children scientific, effective sex education is very necessary. It can not only enhance children's ability to distinguish information, but also help children establish correct sexual values.

In conclusion, the necessity and urgency of sex education for children in contemporary society cannot be overstated, particularly with the aim of fostering self-protection awareness and healthy interpersonal relationships. Early intervention in sex education is paramount. This research specifically targets children aged 5 to 8 years, a critical developmental stage for introducing foundational concepts of sexual health. At this juncture, it is essential not only to impart basic knowledge about sexual organ health but also to prepare children for their physiological changes during adolescence, offering insights into the process of pubertal development.

Furthermore, from a societal perspective, the increasing incidence of child sexual assault underscores the importance of equipping children with the knowledge and skills to prevent sexual violence against them. This includes instruction on self-protection mechanisms and the cultivation of an understanding of appropriate interpersonal conduct between genders. By addressing these areas, sex education can play a pivotal role in safeguarding children's well-being and in promoting respectful and healthy interactions from a young age.

#### 2.4.2 Current situation and problems of child sex education in China

##### 1) School Level

The provision of sex education within schools faces significant challenges. Primarily, the existing curriculum in primary education is nearly at capacity, making the integration of additional sex education classes logistically challenging. Furthermore, there is a pronounced lack of educators who are professionally trained in sex education. Many teachers, although potentially willing, lack the necessary formal and systematic training in this area, which compromises the depth and effectiveness of their instruction. This issue is particularly acute in rural areas where financial constraints severely limit the feasibility of implementing sex education programs. (Cai, 2014)

##### 2) Student Level

At the student level, challenges are twofold: intrinsic and extrinsic. Students themselves are often at a stage of mental and physical immaturity, making them susceptible to misinformation and external influences due to their naivety and simplicity regarding sexual matters. Externally, the proliferation of information technology and media, such as mobile phones, television, and films, exposes children to potentially harmful content. Without adequate sexual knowledge and discernment, and in the absence of proper guidance from parents and educators, students are at risk of developing misconceptions and engaging in inappropriate sexual behavior.

### 3) Family Level

Family education is paramount in the sex education of children, with its impact surpassing that of teachers and schools. Despite increasing awareness among parents, partly due to the rising incidence of child sexual assault cases, the depth of sex education conducted within families remains superficial. Influenced by traditional cultural norms, many parents provide sex education that lacks scientific accuracy and objectivity. Consequently, the effectiveness of such education is limited, leaving child sex education largely neglected. (Chen, 2006)

In summary, the dissemination of child sex education requires more than mere didactic instruction; it necessitates the adoption of methodologies that resonate with children's cognitive abilities and learning preferences. Utilizing pictorial and textual cards as mediums for conveying sex education content emerges as a particularly effective strategy. This approach not only aligns with children's levels of cognition and comprehension but also facilitates the engaging presentation of sexual knowledge.

By integrating knowledge dissemination with game mechanics, the motivation of children to engage in learning is significantly enhanced. This method also serves to strengthen the interaction between parents and children, thereby reinforcing the educational process. Consequently, card games designed with educational purposes in mind prove to be highly suitable for the delivery of sex education to children, combining the elements of enjoyment and learning in a manner that is both accessible and effective.

## Chapter 3

### Case Studies

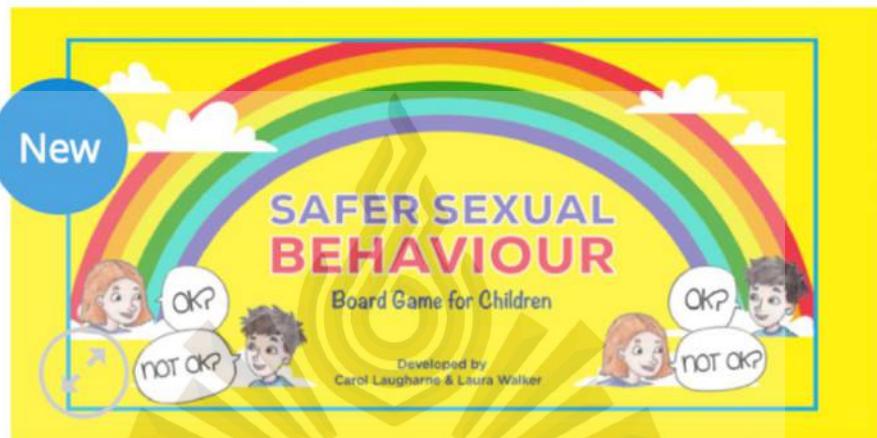


Figure 3.1 Card board game sex education products on the market (1)

Source: Laugharne & Walker, 2018

#### Game Description:

This educational game is designed to facilitate discussions among children about appropriate and inappropriate sexual behaviors in school settings, including potential risks associated with child sexual exploitation. It is particularly tailored to accommodate children with autism spectrum disorders or learning disabilities. The gameplay involves players taking turns to navigate a board, answering questions related to various school-related scenarios such as the school bus, classroom activities, playtime and physical education, lunchtime, restrooms, school trips, and the journey home.

#### Game Analysis:

Upon reviewing this product, it was observed that the game primarily focuses on scenarios encountered within school environments. However, the realm of sex education for children aged 5 to 8 extends beyond the school context to include a broader

range of situations and environments. This analysis highlights a limitation in the game's scope, suggesting the need for a more comprehensive approach that encompasses a wider variety of settings where children might encounter situations requiring knowledge of sexual health and safety.

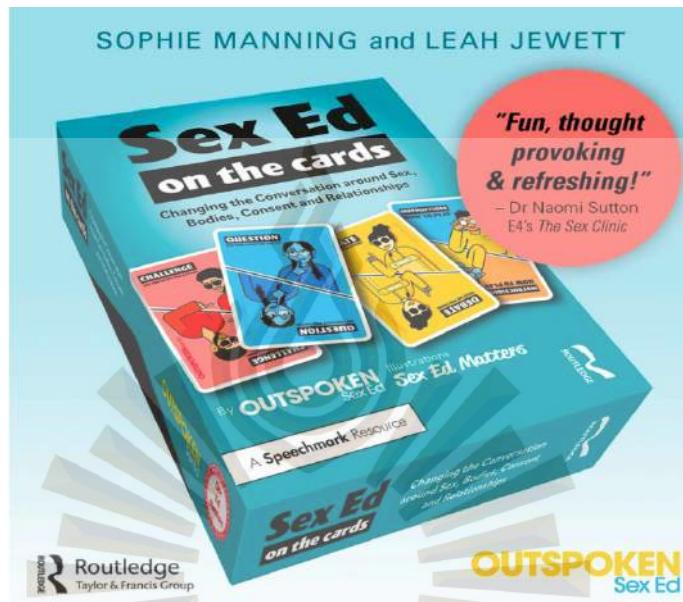


Figure 3.2 Card board game sex education products on the market (2)

Source: Manning, 2021

#### Game Description:

This innovative card game is structured around three distinct types of cards designed to engage students in comprehensive sex education. Question Cards serve to test and enhance the students' knowledge through quiz questions. Debate Cards initiate discussions, allowing students to examine and express their values regarding various aspects of sexual health and relationships. Challenge Cards are experiential, encouraging students to apply their knowledge and skills in practical situations. The game is characterized by its fun, factual, and lively approach to delivering sex education.

#### Game Analysis:

The game's multifaceted approach, incorporating quizzes, discussions, and practical challenges, offers a dynamic and interactive method of sex education. However, it is specifically tailored for students aged 14 and above. This focus on an older demographic indicates that the content and complexity of the game may not be suitable for younger children, particularly those aged 5 to 8, who are at a crucial stage of development and require age-appropriate educational materials. Therefore, while the game presents a valuable resource for teenagers, there exists a gap in the market for similar educational tools that cater to the needs of younger children, providing an opportunity for the development of tailored sex education games for this younger age group.



Figure 3.3 Card board game sex education products on the market (3)

Source: The Family Planning Association of Hong Kong, 2016

#### Game Description:

This card game employs illustrations as a primary tool for educating children about sex education. Designed for children to learn through visual engagement, the game simplifies complex topics into easily understandable images. This method offers

a straightforward learning process that relies heavily on visual cues for conveying information.

### Game Analysis:

While the use of illustrations is an effective means of making sex education accessible to children, this game's design presents certain limitations. Firstly, the learning process it facilitates tends to be unidirectional, with minimal opportunities for interactive engagement. Consequently, parental involvement in the educational process is notably low, which may affect the depth of understanding and discussion about the subject matter between parents and children. Furthermore, the scope of sex education knowledge covered by this product is found to be relatively narrow, lacking in comprehensive coverage of essential topics. This limitation underscores the need for more inclusive educational tools that not only broaden the range of covered topics but also encourage active participation from parents, thereby enhancing the learning experience.



Figure 3.4 Card board game sex education products on the market (4)

Source: Pierre, 2019

### Game Description:

"Sexploration" comprises a collection of five games, all presented in French, and is designed to facilitate sexual education for teenagers. The suite of games aims to

engage its audience through a variety of interactive and educational formats, catering specifically to the needs and interests of teenage learners.

#### Game Analysis:

While "Sexploration" offers a creative and engaging approach to sex education for its intended teenage audience, its applicability to younger children, particularly those aged 5 to 8, is inherently limited. The content, language, and complexity of the games are tailored for older students, which means the crucial early childhood demographic is not addressed by this product. This gap highlights a significant opportunity within the market to develop sex education resources that are specifically designed to be accessible, appropriate, and engaging for younger children. Creating such resources would address an underserved need, ensuring that foundational sexual education can begin at an earlier, critical stage of development.

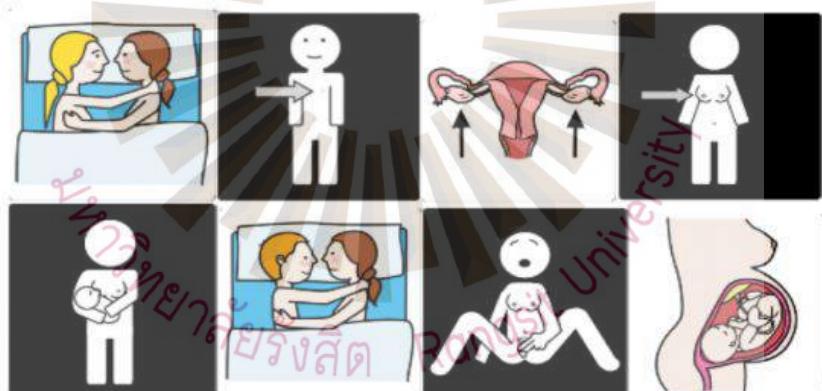


Figure 3.5 Card board game sex education products on the market (5)

Source: TRASE project, 2024

#### Game Description:

The Picture Bank utilizes a curated selection of pictograms focused on sexuality, sexual health, and sexual education, derived from the Picto-Selector tool by M.C. van der Kooij. Designed as a visual aid, this resource is aimed at facilitating sexual education among individuals with disabilities, such as those experiencing learning

difficulties. It offers users a comprehensive suite of straightforward and accessible images to aid in discussions about sexual topics, serving as a valuable tool for parents, trainers, caregivers, and professionals engaged in sexual education.

#### Game Analysis:

While The Picture Bank provides a valuable resource for visual learning, particularly for audiences with specific educational needs, it also presents limitations in terms of the scope and depth of content it can convey through pictorial means. The reliance on images, while making the material accessible, restricts the complexity and nuance of the information that can be presented. This can potentially limit the accuracy and comprehensiveness of the sexual education provided. Moreover, the pictogram-based approach, although beneficial for quick reference and understanding, may not fully address the broader educational requirements of all potential users, especially when detailed and nuanced explanations are necessary. Therefore, while The Picture Bank offers clear advantages for specific educational contexts, its utility is bounded by the inherent limitations of visual-only information dissemination.

Through the comprehensive analysis of five card game products currently available on the market, several key findings have emerged. Firstly, the overall engagement level of these games is relatively low, which may not capture or sustain the interest of children aged 5 to 8. Additionally, the content provided by these games is narrowly focused on a single domain of knowledge, lacking the diversity and breadth required to fully address the comprehensive needs of sex education for this age group.

Moreover, the rules and gameplay methods employed by these card games are not adequately tailored to the developmental stages and learning capabilities of children aged 5 to 8 years. Such discrepancies highlight a significant gap in the market for educational tools that are specifically designed to be both appealing and appropriate for young learners. Consequently, these limitations can hinder the potential to enhance children's enthusiasm and engagement in learning about sexual health and education effectively.

## Chapter 4

### Product Design

#### 4.1 Design principles for children's sex education card board games

The creation of sex education card games for children aged 5 to 8 necessitates adherence to specific design principles that cater to their developmental stage and cognitive abilities. These principles are crucial in ensuring that the educational content is both accessible and engaging for this age group.

##### 4.1.1 The principle of understand ability

This principle is pivotal in the design of children's sex education card games, ensuring that the content is easily comprehensible to young learners. It encompasses two primary levels:

###### 1) Visual level

Illustrations are a core element of the game's design, serving as a primary medium through which children engage with the content. For the target age group, it is essential that these illustrations are straightforward and relatable, incorporating elements from their everyday experiences. Simplification of specific images is necessary to ensure visual clarity and ease of recognition. (Li, 2020)

2) Children aged 5 to 8 years old engage with and internalize information effectively through a combination of visual, verbal, and textual narratives. This multimodal approach to learning is essential in facilitating their comprehension, communication, and expression of sexual knowledge. At this developmental stage, it is crucial that educational content is presented in a manner that leverages these diverse

narrative forms. Utilizing stories and scenarios that are visually engaging, linguistically simple, and textually clear can significantly aid in the child's ability to grasp complex concepts. This method not only respects the cognitive and developmental limitations of this age group but also enriches their learning experience by making abstract ideas more tangible and relatable. Due to the irreversible and centralized cognitive limitations of children aged 5 to 8, manifested as weak logical thinking, sex education can choose the way of storytelling language narration from the perspective of the third character, and integrate sexual knowledge into the story plot in the way of "storytelling", which is easy for children to understand. On the other hand, preschoolers are accustomed to being self-centered and are able to understand language expressions similar to their own more easily. Such as create a story scene from the perspective of the third character to tell the sex knowledge, enhance the story and make it easier for children to understand the sex knowledge. (Chen, 2021)

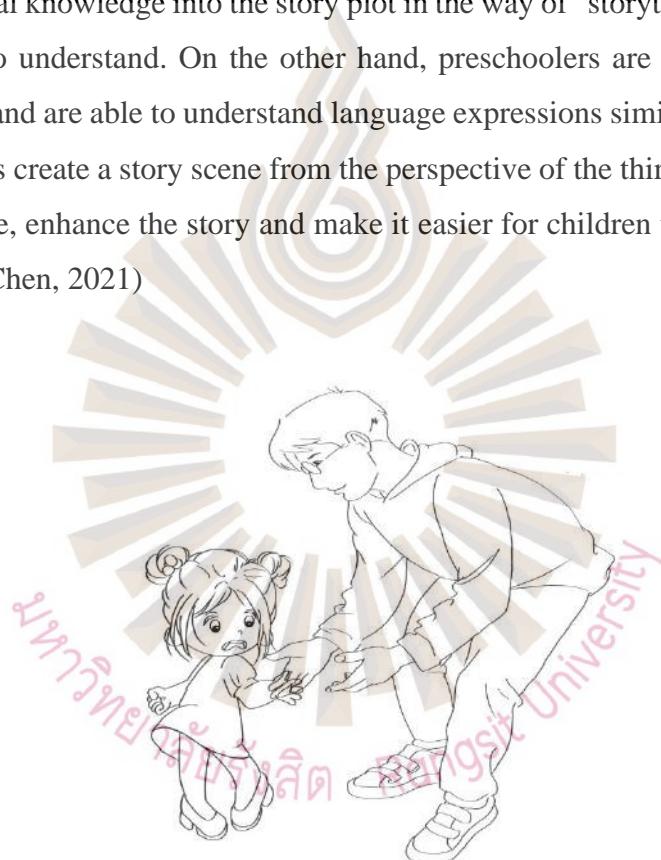


Figure 4.1 Card illustration example

Source: Researcher

#### 4.1.2 Easy of playing

The design of the game rules should be simple and easy for children to understand and operate. If the game rules are too complex, the children will lose their motivation to learn before they start. At the same time, some small reward mechanisms need to be added in the process of the game to make the children more motivated and

interested in the game, and do not let the children feel that there will be rewards only when they complete the task. So, in the process of the game to add some small reward mechanism, can effectively avoid the child in the process of playing the game gradually decline in enthusiasm.

#### 4.1.3 The principle of entertainment wisdom

5-8 years old is the golden period of rapid brain development of children, but also the best period of children's intellectual development, children in the sense motor stage after the end, the desire for knowledge and imagination continue to become stronger, a single boring sex knowledge content is easy to be abandoned by children. Sex education board games can integrate the way the game, just to meet their psychological needs. Integrate sexual knowledge into the game, set challenging tasks and other game elements, at the same time, it is necessary to encourage them to solve problems or complete tasks as much as possible, when they complete the task, give appropriate rewards, give a sense of achievement, and then exercise their thinking ability, and learn knowledge in an entertaining atmosphere.

### 4.2 Identification of Cards incorporating child sex education knowledge

In the design of card games for children's sex education, a comprehensive approach is taken to cover essential topics that contribute to a holistic understanding of human development, social relationships, and health. The game is structured around key thematic areas, each tailored to communicate complex concepts in a manner accessible to young learners.

The first theme, Human Development and Body Awareness, utilizes visual aids and simple narratives to introduce children to the anatomy and functions of the body, emphasizing the importance of understanding and respecting the physiological differences between genders. This sets the foundation for the next theme, Reproduction

and Life Cycles, which simplifies the concepts of reproduction, pregnancy, and childbirth. It also acknowledges the diverse structures of families, promoting an inclusive view of family dynamics.

Attention to Body Image and Self-Esteem encourages children to celebrate the diversity of human bodies and underscores the importance of maintaining healthy habits. This theme promotes a positive self-image and an appreciation for individual uniqueness, critical in early childhood development. The card game further explores Sexual Orientation and Respect for Diversity, offering straightforward explanations of various sexual orientations to foster an environment of respect and inclusivity. This theme is pivotal in teaching children to respect all individuals, regardless of their sexual orientation.

Relationships and Social Skills form another crucial thematic area, delving into the dynamics of different relationships, including family, friendships, and romantic relationships. It emphasizes the importance of love, respect, and effective communication, foundational elements for building healthy relationships.

To equip children with essential life skills, the game includes themes on Personal Skills, focusing on decision-making and communication. It encourages children to make informed decisions and effectively express their feelings and thoughts. Sexual Behavior and Health is addressed in a respectful and age-appropriate manner, acknowledging children's curiosity about their bodies and emphasizing the importance of personal safety and health. The theme of Sexual Abuse and Violence is approached with sensitivity, empowering children with knowledge about personal boundaries and safety measures. It is vital for children to understand their rights and know how to seek help if needed.

Lastly, Social and Cultural Influences examine how societal norms and media representations can shape perceptions of gender roles and sexuality. This theme encourages critical thinking and promotes equality and fairness. Overall, the card game is designed to educate children in a comprehensive, respectful, and developmentally

appropriate way, laying the groundwork for informed, respectful, and healthy development.

#### 4.2.1 Human development

##### 1) Visual level

(1) Each body part has a correct name and a specific function.  
 (2) A person's genitals, reproductive organs, and genes determine whether the person is male or female.

(3) A boy/man has nipples, a penis, a scrotum, and testicles.  
 (4) A girl/woman has breasts, nipples, a vulva, a clitoris, a vagina, a uterus, and ovaries.

(5) Some sexual or reproductive organs, such as penises and vulvae, are external or on the outside of the body while others, such as ovaries and testicles, are internal or inside the body.

(6) Both boys and girls have body parts that feel good when touched.

##### 2) Reproduction

(1) Men and women have specific cells in their bodies (sperm cells and egg cells) that enable them to reproduce.

(2) Reproduction requires that a sperm and egg join.  
 (3) Vaginal intercourse -when a penis is placed inside a vagina - is the most common way for a sperm and egg to join.

(4) Guidelines for comprehensive sexuality education  
 (5) When a woman is pregnant, the fetus grows inside her body in her uterus.

(6) A woman can be pregnant with more than one fetus at a time.

(7) Babies usually come out of a woman's body through an opening called a vagina.

(8) A woman's breasts can provide milk for a baby.

(9) Not all men and women have children.

(10) People who cannot have children may choose to adopt.

### 3) Body image

(1) Individual bodies are different sizes, shapes, and colors.

(2) All bodies are equally special, including those that are disabled.

(3) Differences make us unique.

(4) Good health habits, such as eating well and exercising, can improve the way a person feels about his or her body.

(5) Each person can be proud of his/her body.

### 4) Sexual orientation

(1) Human beings can love people of the same gender and people of another gender.

(2) Some people are heterosexual, which means they can be attracted to and fall in love with someone of another gender.

(3) Some people are homosexual, which means they can be attracted to and fall in love with someone of the same gender.

(4) Homosexual men and women are also known as gay men and lesbians.

(5) People deserve respect regardless of who they are attracted to.

#### 4.2.2 Relationships

##### 1) Families

(1) Marriage and lifetime Commitments, it is common for two people to make a commitment to share their lives with each other.

(2) Express love and intimacy in appropriate ways, make informed choices about family options and relationships.

## 2) Friendship

Develop and maintain meaningful relationships.

## 3) Love concept

(1) Love means having deep and warm feelings about oneself and others.

(2) People can experience different types of love.

(3) People express love differently to their parents, families, and friends.

(4) People can experience different loving relationships throughout their lives.

## 4) Romantic relationships and dating concept.

(1) Dating is when two people who are romantically attracted to each other spend their free time together.

(2) When children become teenagers, they spend more time with their friends and may begin to date.

(3) Some adults, including single parents, may date.

### 4.2.3 Personal skills

#### 1) Decision-making

Making responsible decisions about sexuality is important because those decisions affect individuals and the people around them. Everybody has to make decisions. Small children make many decisions, such as what clothes to wear, which

toys to play with, or who to be friends with. Decision-making is a skill that can be improved.

## 2) Communication

- (1) People communicate in many ways.
- (2) People speak, write, sign, or show how they feel with facial expressions and body language.
- (3) Communication is necessary in human relationships.

## 3) Looking for help

Family members and friends usually try to help one another. If parents cannot help, one can ask another family member, a teacher, religious leader, relatives, or another trusted adult.

### 4.2.4 Sexual behavior

- 1) Sexuality is a natural and healthy part of life.
- 2) Most children are curious about their bodies and both girls and boys may discover that their bodies feel good when touched.
- 3) Shared sexual behavior.

Individuals express their sexuality with a partner in diverse ways. People often kiss, hug, touch, and engage in other sexual behaviors with one another to show caring and to feel good.

### 4.2.5 Sexual health

#### 1) Reproductive health

Girls and boys need to take care of their bodies during childhood and adolescence. Like other body parts, the genitals need care.

## 2) Sexually transmitted diseases

Sexually transmitted diseases are caused by germs such as bacteria and viruses.

### 4.2.6 Sexual abuse, assault, violence, and harassment

- 1) One's body belongs to oneself.
- 2) There are parts of one's body that are considered to be private, including one's mouth, nipples, breasts, chest, penis, scrotum, vagina, vulva, and buttocks.
- 3) No one should touch the private parts of a child's body except for health reasons or to clean them.
- 4) Children should not touch the private parts of other people's bodies. Child sexual abuse is when someone touches the private parts of a child's body without a health or hygiene reason.
- 5) Sexual abuse can also occur when someone asks a child to touch the private parts of his/her body.
- 6) Both boys/men and girls/women can be sexually abused.
- 7) Everyone, including children, has the right to tell others not to touch their body when they do not want to be touched.
- 8) If a child experiences unwanted or uncomfortable touching, he/she should tell a trusted adult, even if he/she was told to keep it a secret.
- 9) Children can be sexually abused by a stranger or by someone they know.
- 10) A child is never at fault if a person – even a family member – touches him/her in a way that is wrong or uncomfortable.
- 11) If a stranger tries to get a child to go with him/her, the child should run and tell a parent, teacher, neighbor, or other adult.

4.2.7 Social and cultural environments shape the way individuals learn about and express their sexuality.

1) Gender Roles

(1) Girls and boys have many similarities and a few differences.

(2) Equality between men and women.

2) Diversity

(1) Individuals differ in the way they think, act, look, and live.

(2) Talking about differences helps people understand each other better.

(3) The belief that all members of a group will behave the same way is called a stereotype.

(4) Guidelines for Comprehensive Sexuality Education

(5) Stereotypes can hurt people. • All people should receive fair and equal treatment.

(6) People who are different are often treated negatively or unequally, which is unfair.

3) Sexuality and the Media

(1) Some information on television, in the movies, in books and magazines, on the radio, and on the Internet is true and some is not.

(2) Some commercials, television shows, movies, and magazines make people and things look different or better than they really are.

(3) Some television programs, movies, and websites are not appropriate for young children.

In the development of card games for children's sex education, it's crucial to distill the comprehensive knowledge into key concepts that are appropriate for the target age group of 5 to 8 years. This refinement process involves selecting the most critical information and transforming it into a format that is not only accessible but also engaging for young learners. Given the sophisticated nature of the content, the direct presentation of such knowledge on the cards is not feasible. Instead, the essence of these themes will be encapsulated through storytelling and dialogue, approaches that resonate with the cognitive and emotional development of children in this age bracket. This method facilitates a deeper connection with the material, encouraging a more intuitive understanding of the subjects covered.

To achieve this, the professional terminology and concepts outlined in the thematic areas will be reimagined into narratives and conversations that mirror children's everyday experiences and language. For instance, the complex processes of human development and reproduction will be simplified into stories that highlight the wonder of life's beginnings in a respectful and age-appropriate manner. Similarly, topics concerning body image, relationships, and personal safety will be framed within scenarios that children can relate to, ensuring that the lessons are imparted with sensitivity and relevance. This approach not only makes the learning process more enjoyable but also enhances retention and comprehension. By weaving the educational content into stories and dialogues, the game aims to foster a positive and informed perspective towards sex education, laying a solid foundation for understanding and respect for oneself and others.

In essence, the adaptation of sex education knowledge into child-friendly language and formats underscores the commitment to providing a meaningful educational experience. This strategy ensures that the card game serves as an effective tool for introducing essential concepts of sex education to children, equipping them with the knowledge and understanding necessary for healthy development.

## 4.3 Visual design of the card

### 4.3.1 Card color design

In the visual design phase of the children's sex education card game, a strategic approach was taken to categorize and color-code the educational content. After meticulously curating the knowledge to be featured on the cards, the content was organized into four distinct groups, each representing a core aspect of sex education aimed at enlightening young learners.

To enhance the educational impact and facilitate intuitive learning, each group of cards was assigned a specific color, chosen for its psychological associations and the type of information it represents. The colors selected were red, green, yellow, and blue, with each hue serving a symbolic function in the context of the game's educational goals:

Red was chosen for its strong associations with warnings, prohibitions, danger, and emergency. This color is used for cards that deal with topics requiring caution or awareness of potential risks, effectively signaling content that discusses boundaries and safety measures (London Image Institute, 2020).

Green, symbolizing safety, comfort, nature, and health was selected for cards that convey information related to healthy practices, positive body image, and the natural aspects of human development. This color aims to create a sense of ease and acceptance around discussions of the body and its functions (London Image Institute, 2020).

Yellow, known for its capacity to evoke warmth and draw attention, is used for cards that highlight important concepts and provoke curiosity. This color is apt for introducing foundational knowledge that demands focus but is presented in an approachable manner (London Image Institute, 2020).

Blue, representing science, knowledge, truth, and wisdom, is assigned to cards that cover the scientific and factual aspects of sex education. This color choice underscores the educational validity and reliability of the information provided, fostering trust in the content's accuracy (London Image Institute, 2020).

By correlating these four colors with the different thematic areas of the sex education content, the design not only aids in the visual differentiation of the cards but also leverages color psychology to enhance the learning experience. This thoughtful integration of color into the game's design plays a crucial role in guiding children's engagement with the educational material, making complex concepts more accessible and understandable (London Image Institute, 2020).



Figure 4.3 Card content classification

Source: Researcher

#### 4.3.2 Illustration design

Because the card itself is designed with four background colors of red, green, yellow, and blue, the illustrations on the card are in the form of line painting, so

as to avoid the colors on the card being too messy, which will affect the experience and perception of children when reading the card.



Figure 4.4 Example of card illustration design (1)

Source: Researcher

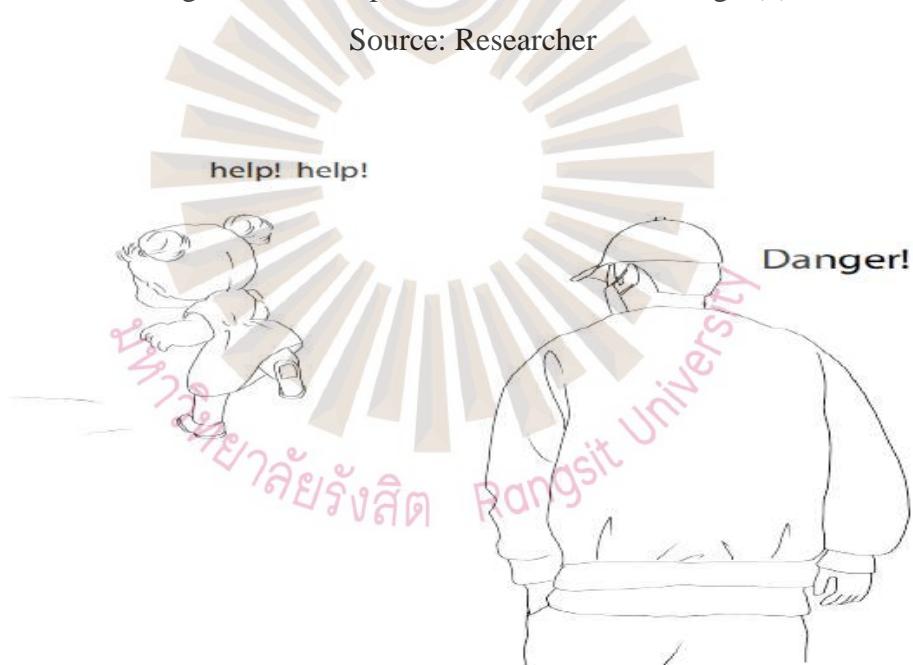
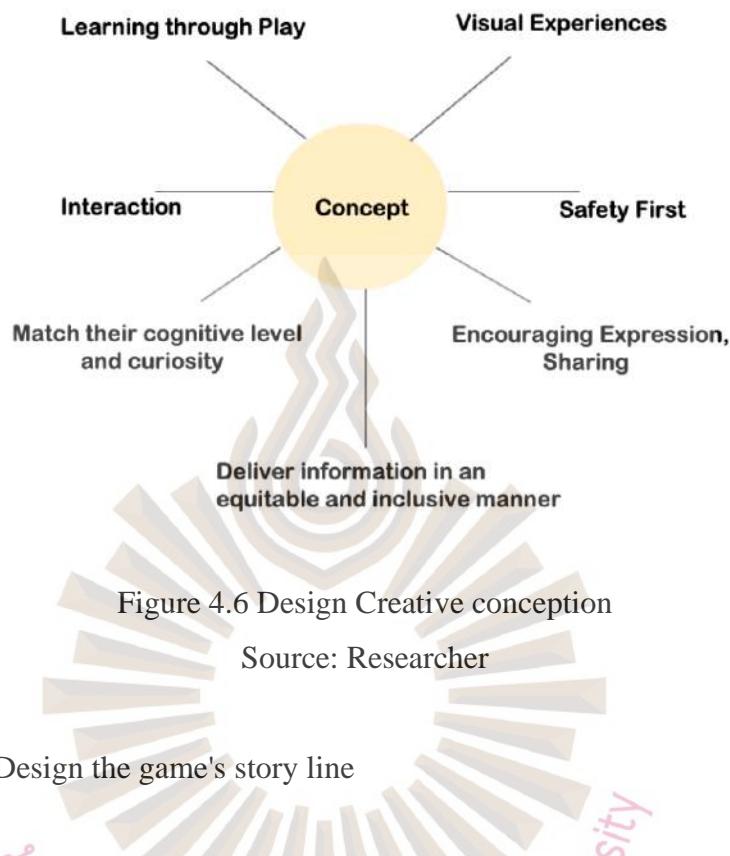


Figure 4.5 Example of card illustration design (2)

Source: Researcher

#### 4.3.3 Design Creative conception



#### 4.3.4 Design the game's story line

The little boy and the little girl had always heard about a treasure hidden in the mountains, but no one knew exactly where the treasure. One day, they suddenly came across an ancient map with clues to the treasure. So, they decided to embark on a treasure-hunting adventure together, beginning their quest for hidden riches. During their adventure, they faced various challenges and encountered problems. Through continuous learning and trying, they eventually solved all the puzzles and discovered the exact location of the treasure. When they finally reached the treasure island, they realized that their quest for treasure had not only rewarded them with material riches, but also with a treasure of knowledge. This knowledge helped them understand how to better protect themselves, gain a deeper understanding of their own bodies, recognize the importance of understanding, expressing, and communicating their emotions, and acquire knowledge about keeping themselves safe. Having this knowledge in their growing years was crucial! So, this was a truly worthwhile treasure-hunting journey.

What are you waiting for? Let's take action and embark on our treasure-hunting adventure.

#### 4.3.5 Design the game rules

After advancing according to the points rolled, based on the current position's color, randomly pick a card from the cards of the same color. Answer the question on the card; if correct, move forward the indicated number of steps as shown on the card, if incorrect, move backward the indicated number of steps as shown on the card, with forward and backward steps specified in the top right corner of the question card. After completing the forward or backward action, based on the current position's color, pick another card from the cards of the same color, continue answering questions. if the answer is correct, advance the number of steps indicated on the card; if incorrect, move backward the number of steps shown on the card, and so on. Reach the endpoint to achieve victory and obtain the treasure.



## 4.4 Project development

### 4.4.1 First edition model

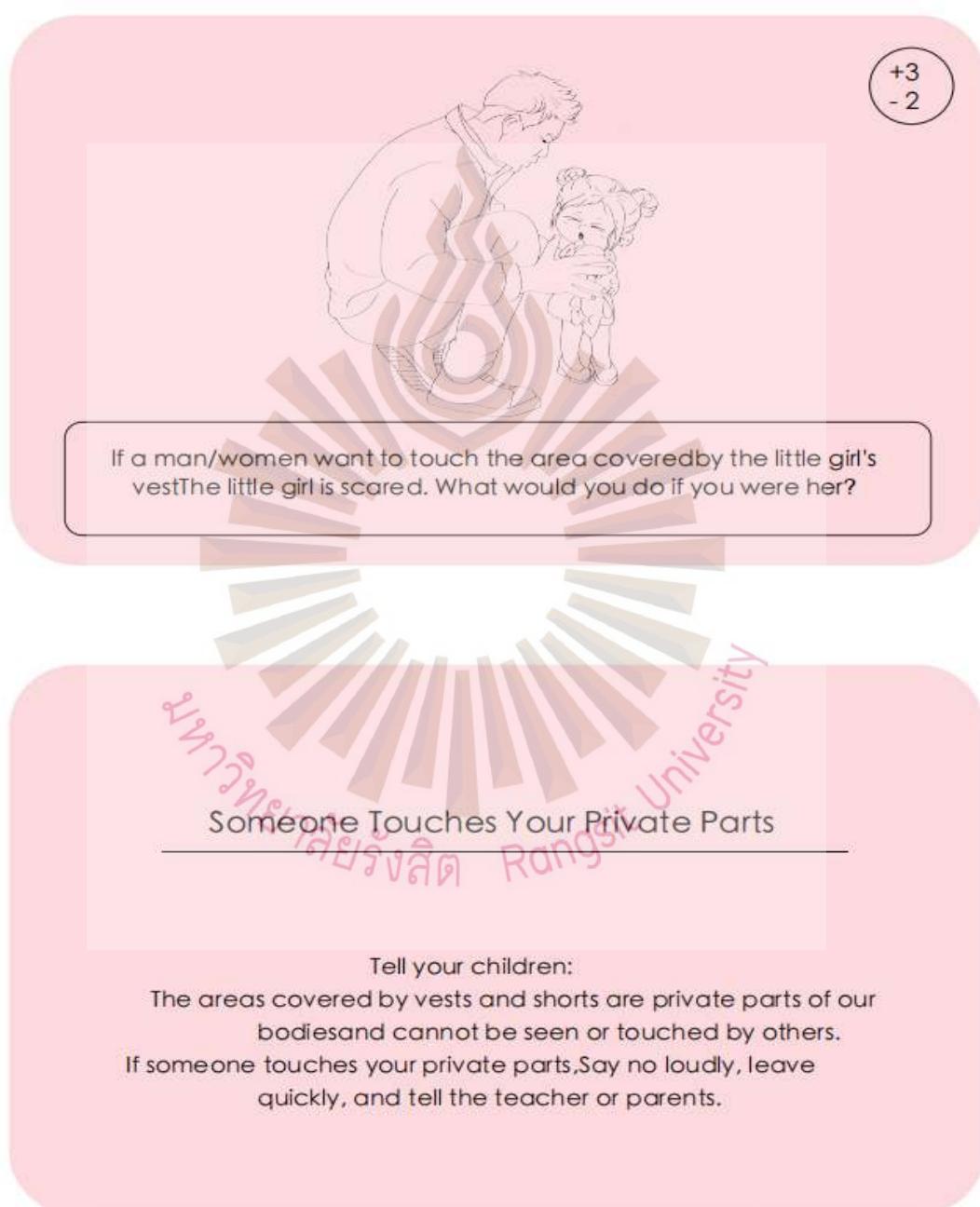


Figure 4.7 First edition card model (1)

Source: Researcher



Figure 4.8 First edition card model (2)

Source: Researcher

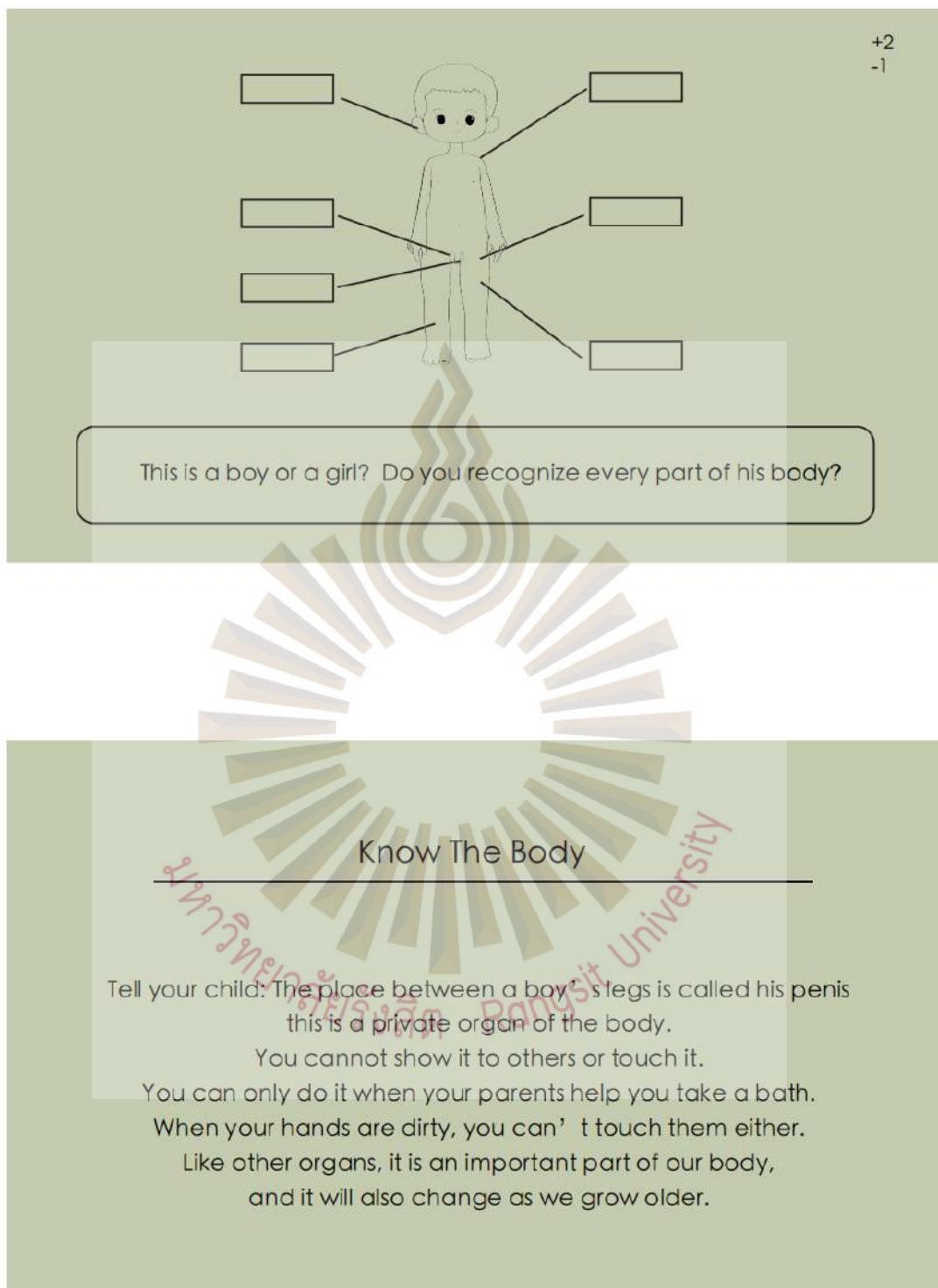


Figure 4.9 First edition card model (3)

Source: Researcher



Figure 4.10 First edition card model (4)

Source: Researcher

## 4.4.2 Second edition model

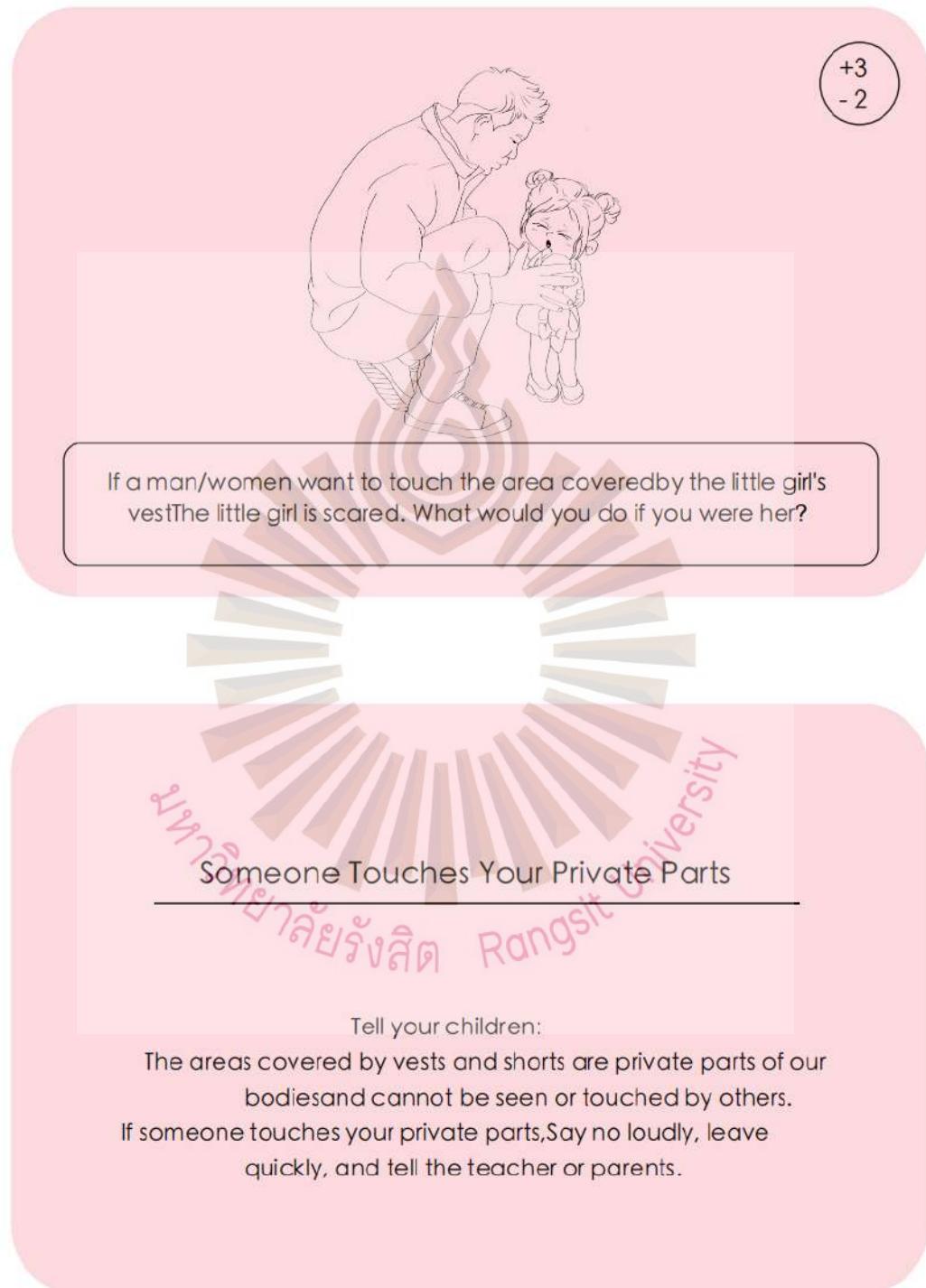


Figure 4.11 Second edition card model (1)

Source: Researcher

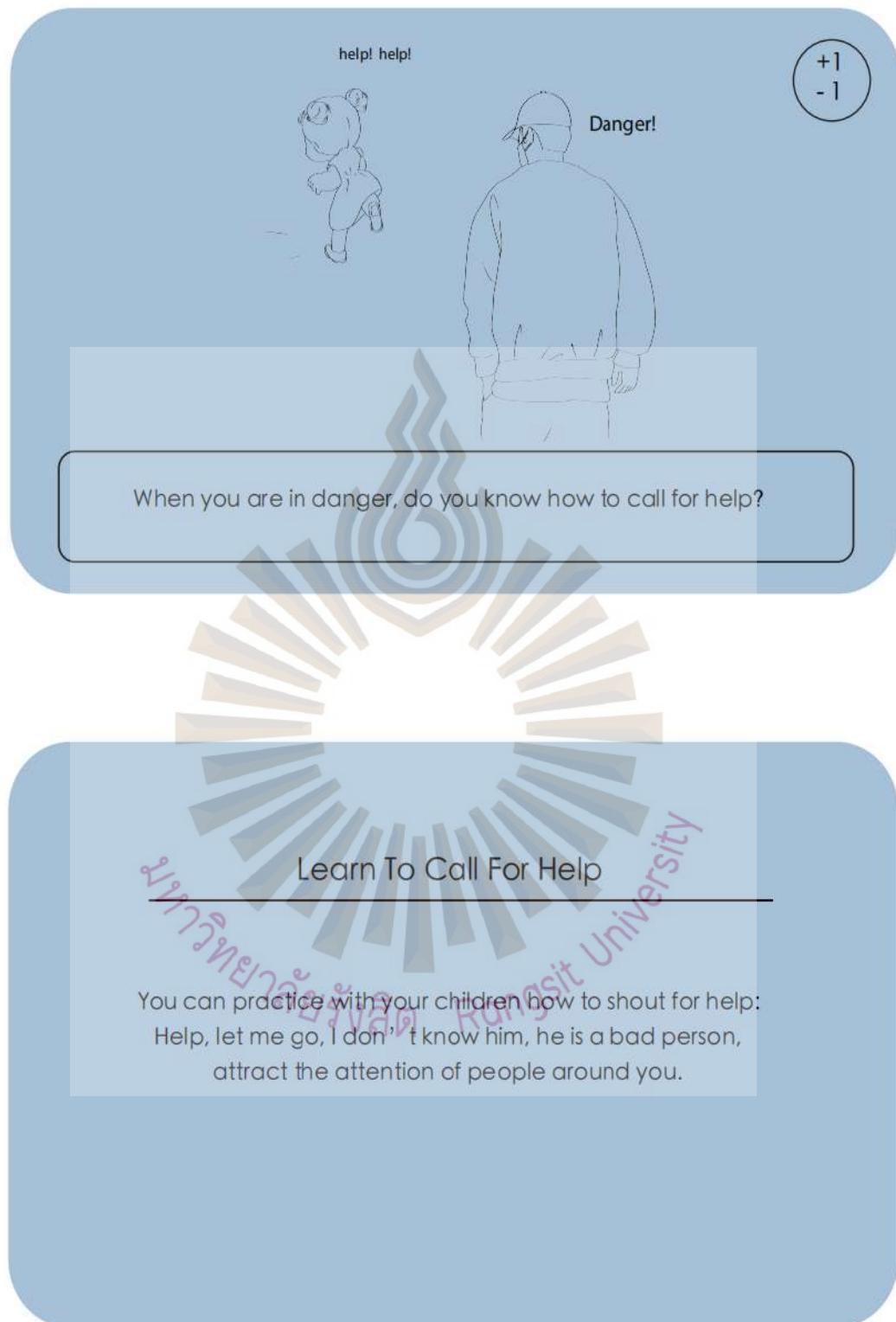


Figure 4.12 Second edition card model (2)

Source: Researcher

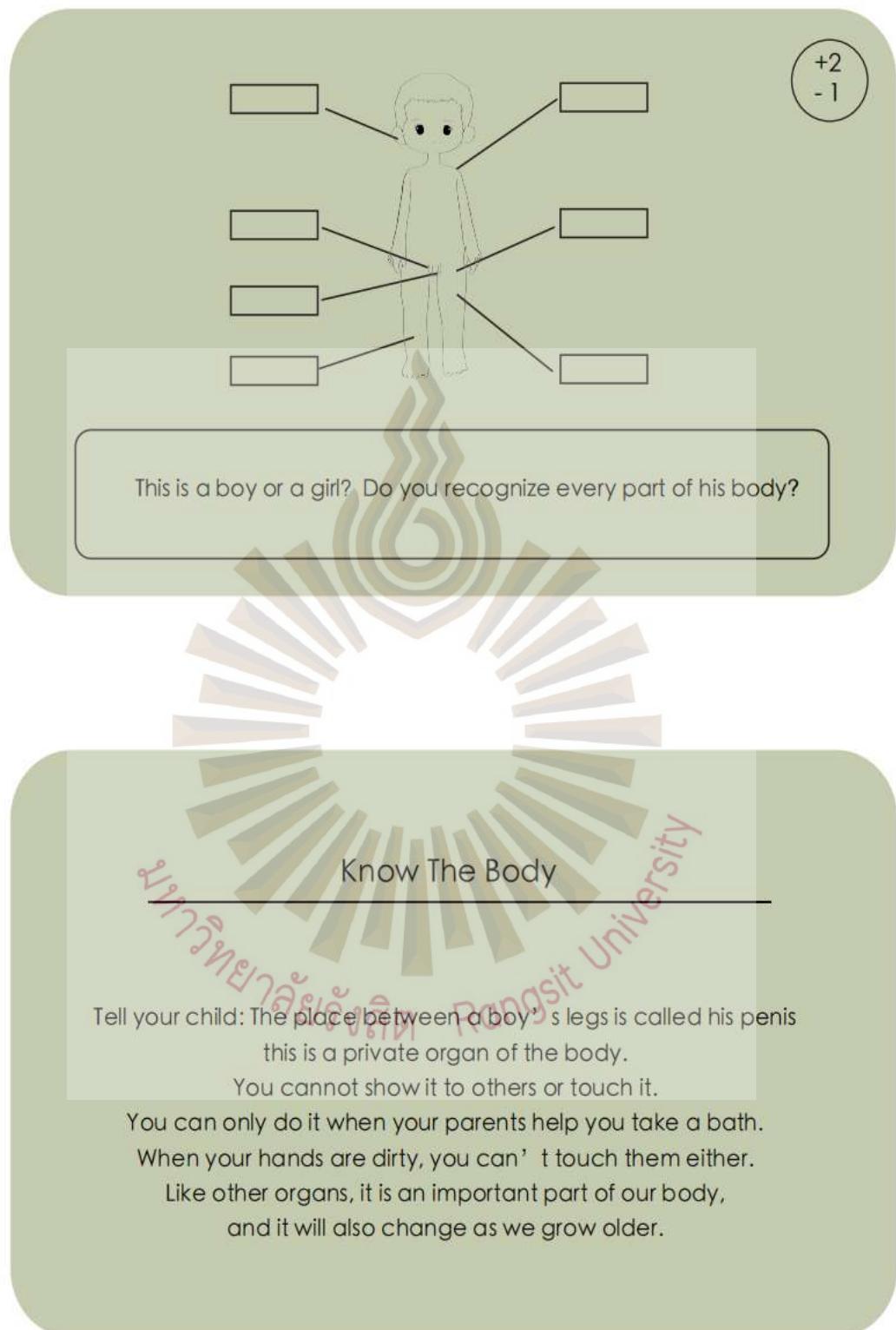


Figure 4.13 Second edition card model (3)

Source: Researcher



Figure 4.14 Second edition card model (4)

Source: Researcher

## 4.4.3 Third edition model



Figure 4.15 Third edition card model (1)

Source: Researcher

+2  
-1

This is a boy or a girl? Do you recognize every part of his body?

### Know The Body

Tell your child: The place between a boy's legs is called his penis  
this is a private organ of the body.

You cannot show it to others or touch it.

You can only do it when your parents help you take a bath.

When your hands are dirty, you can't touch them either.

Like other organs, it is an important part of our body,  
and it will also change as we grow older.

Figure 4.16 Third edition card model (2)

Source: Researcher



Figure 4.17 Third edition card model (3)

Source: Researcher

+1  
-1









Can you tell mom and dad what actions in the picture are wrong?

**Wrong Body Contact**

พัฒนาเด็กอย่างดี บูรีสิริ บูรีสิริ University

Tell your children:

The places covered by vests and shorts are our private parts.

We should not touch other people's private parts

when playing with other children.

In addition, for example:

pulling a girl's pigtails, pulling her ears, pulling her clothes,  
and other contact that can easily hurt other people are not.

Figure 4.18 Third edition card model (4)

Source: Researcher

## 4.5 Game props design

### 4.5.1 Game manual



Figure 4.19 Game manual

Source: Researcher

### 4.5.2 Game package



Figure 4.20 Game package

Source: Researcher

#### 4.5.3 Final product display



Figure 4.21 Product display (1)

Source: Researcher



Figure 4.22 Product display (2)

Source: Researcher

#### 4.6 Card board game children played experience feedback

In assessing the effectiveness and impact of the sex education card game, a practical approach was undertaken by distributing the game to six different family groups. Each family was instructed to have the parents lead their children through the

gameplay, ensuring that the experience was both guided and interactive. Following the gameplay session, a structured questionnaire survey was conducted with these family groups to gather comprehensive feedback on their experience.

The survey aimed to capture a range of insights, including the game's overall appeal, the clarity and appropriateness of the content for children aged 5 to 8, the ease of understanding the game rules, and the perceived educational value of the game. Additionally, feedback was solicited on the visual design aspects, such as the effectiveness of color coding and illustrations, and the engagement level of the various card categories.

This feedback process is crucial for several reasons. Firstly, it provides direct observations on how children interact with the game and absorb the educational content, offering invaluable insights into the game's pedagogical strengths and areas for improvement. Secondly, parental perspectives on the game's educational value and suitability for their children contribute to understanding the game's effectiveness in facilitating family discussions on sensitive topics. Lastly, this feedback loop is instrumental in refining the game's design and content, ensuring that it remains engaging, informative, and appropriate for its target audience.

The outcomes of this questionnaire survey are expected to highlight the game's impact on children's understanding of sex education topics, their engagement with the educational content, and the game's role in promoting meaningful conversations within families about sexual health and safety. This feedback will guide further adjustments to the game, aiming to enhance its educational efficacy and user experience.

#### 4.6.1 Children feedback

Have you ever played a game like this before?



Figure 4.23 Questionnaire survey data (1)

Source: Researcher

Do you like playing this game?

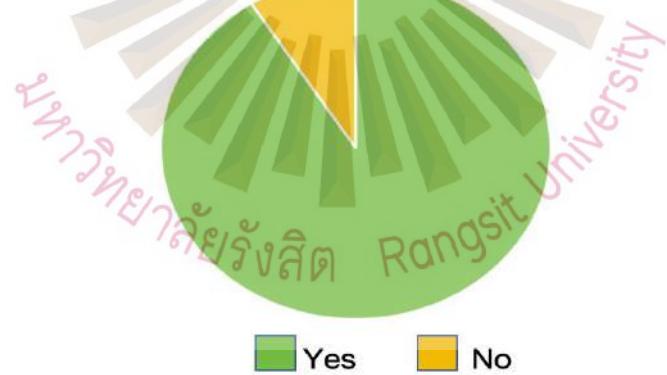


Figure 4.24 Questionnaire survey data (2)

Source: Researcher

Do you learn anything new by playing games?

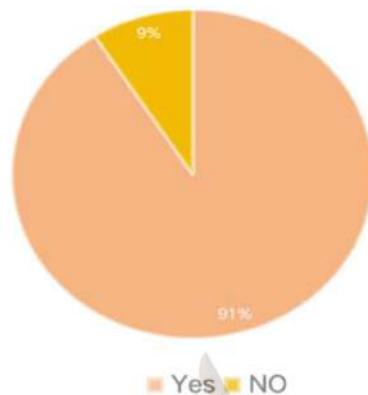


Figure 4.25 Questionnaire survey data (3)

Source: Researcher

#### 4.6.2 Parents feedback

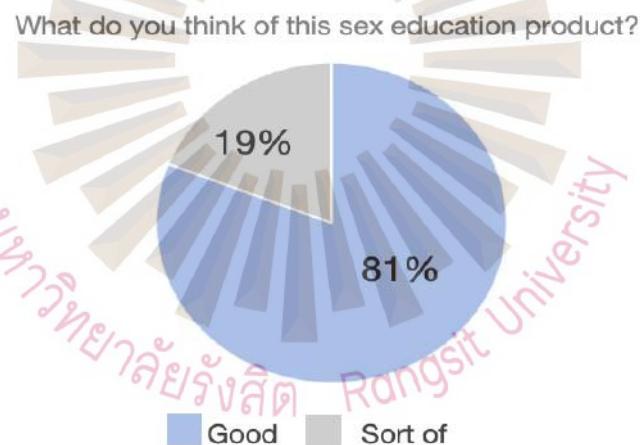


Figure 4.26 Questionnaire survey data (4)

Source: Researcher

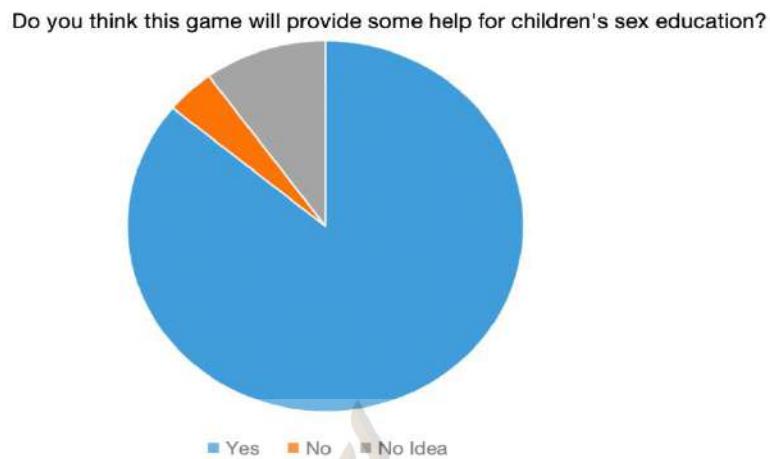


Figure 4.27 Questionnaire survey data (5)

Source: Researcher

Through the data of the questionnaire survey on children, it can be seen that this method has a significant effect in helping children learn the knowledge related to sex education and attracting children's attention the effect is also very good, effectively improve the enthusiasm of children to learn.

Through the data of the questionnaire survey on parents. Most parents believe that it is feasible to present the knowledge related to children's sex education in this way, and it will have a certain positive impact on children's sex education, and they recognize and support this way. They think that they usually choose the content of the child's sex education is not comprehensive enough, many aspects of knowledge will be ignored, the lack of systematic education, and in the child's sex education, the child's enthusiasm is sometimes not high, but when using this game, the efficiency has been greatly improved.

## Chapter 5

### Conclusion and Prospect

The thesis concludes the investigation into the development and application of a sex education board game tailored for children aged 5 to 8. This research has illuminated the potential benefits and the critical need for such educational tools in addressing the unique cognitive and sexual development stages of young children, while also fostering parent-child interaction. Through a detailed case analysis, this study has identified prevailing gaps in the current design of children's sex education materials. Addressing these gaps, the research proposes design strategies aimed at overcoming these challenges, culminating in the practical execution of a design project focused on creating an effective sex education board game. Key insights derived from this research include:

- 1) According to the survey, the time of children's sex education is mostly concentrated in preschool, and the content of sex education mainly includes birth education, gender education, and understanding of private parts. After entering primary school, both parents and schools mostly ignore children's sex education, blindly avoid, thinking that children grow up naturally know, resulting in today's children's poor self-protection awareness, lack of sex education knowledge.
- 2) Children's cognitive and aesthetic characteristics are different at each stage, and their needs and understandings of sex are also different, so children's cognition and needs should be considered when designing products. In addition, due to the differences in children's concentration and learning habits, recreational activities, etc., the design of the product took into account the teaching method and adopted the form of games that are more acceptable to children.

3) Compared with the traditional book way, this board game can present the boring sex knowledge in a more interesting form, so that children can participate in and interact with each other in an immersive manner, attract children's interest in learning, and narrow the distance between children and parents. So, it is feasible to apply this board game to children's sex education.

4) At present, although the existing child sex education products meet part of the demand to a certain extent, there are also certain shortcomings, such as lack of innovation, interesting and interactive, the sense of experience is weak, there is a lot of room for development and progress.

In conclusion, the research synthesized a comprehensive analysis on the implementation of a sex education board game designed for children aged 5 to 8. This investigation was rooted in the understanding of the cognitive characteristics and sexual development of children within this age group, coupled with an emphasis on enhancing parent-child interactions. Through the examination of existing sex education practices and the innovative application of interactive learning tools, several pivotal insights have emerged including;

**Early Education and Content Gaps:** The research illuminated that sex education is predominantly initiated during the preschool years, focusing on birth education, gender education, and the understanding of private parts. However, a significant reduction in sex education engagement is observed as children transition into primary school, with a prevailing tendency among parents and educational institutions to sidestep this crucial topic. This reluctance largely stems from misconceptions that children will acquire this knowledge naturally, culminating in a pronounced deficiency in children's self-protection awareness and sex education knowledge.

**Tailored Content for Developmental Stages:** A critical finding of this study is the necessity of creating sex education content that aligns with the developmental and cognitive stages of the target age group. The design of the sex education board game specifically caters to these needs, employing gameplay as an effective pedagogical

method. This approach not only facilitates engagement but also ensures that the educational content is both accessible and meaningful, significantly enhancing learning outcomes.

**Interactive Learning Advantages and Parent-Child Communication:** Compared to traditional methods, the board game format offers a more engaging and interactive medium for sex education, effectively capturing children's interest and fostering a deeper understanding of the subject matter. This interactive learning tool also acts as a catalyst for open discussions between parents and children, offering a structured yet adaptable framework for navigating complex topics together.

**Inclusive and Sensitive Design:** The research underscores the importance of inclusivity and sensitivity in sex education materials, advocating for content that respects diverse family structures, orientations, and cultural backgrounds. Such inclusivity ensures that all children find representation within the educational content, promoting a comprehensive and equitable learning experience.

**Innovation and Future Prospects:** Despite the partial fulfillment of educational needs by existing products, there exists a notable gap in innovation, engagement, and interactivity within sex education materials. This thesis not only addresses these gaps through the proposed design strategy but also sets the stage for future developments in the field. The journey of this research project has highlighted the designer's commitment to continuous learning and improvement, with an aspiration to inspire further innovation in sex education product design.

As we look toward the future, the overarching goal remains to elevate the quality and accessibility of sex education in China, ensuring that every child receives timely and appropriate instruction. This endeavor aims not only to arm children with the knowledge necessary for self-protection but also to cultivate an environment of openness and informed dialogue around sex education. Ultimately, this research contributes to the broader objective of enhancing the well-being and safety of the next generation, paving the way for a more informed and respectful society.

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