



COLORS OF EMOTION GAME

DIPLOMA IN BUSINESS STUDIES

DEPARTMENT OF COMMERCE

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- 2. We hereby declare that this research submission is our own work and to the best of our knowledge it contains no plagiarism materials written by another person except where due references are made.**
- 3. We acknowledge the release of the project's intellectual properties to the above-mentioned polytechnic to fulfill the requirement of being awarded a Diploma in Business Studies.**

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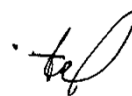
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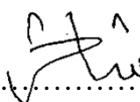
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ACKNOWLEDGMENT

With deep gratitude, we would like to begin this acknowledgement by thanking the Almighty God for His abundant grace, which has given us the strength and perseverance to complete this final project and report. The success of this project is the result of the collective efforts and hard work of all group members, who consistently demonstrated dedication and a strong commitment throughout.

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ABSTRACT

This article provides an in-depth exploration of the use of play as an effective tool to help children recognize, understand, and manage their emotions. Through interactive and enjoyable activities, children are actively engaged in various scenarios that allow them to learn and identify a range of emotions, such as joy, sadness, anger, fear, disgust, surprise, and confusion. The experience-based approach applied in these games offers children the opportunity to directly experience and explore their emotions, which not only enhances emotional awareness but also helps in building better social skills and empathy.

Moreover, studies have shown that children who actively participate in these activities exhibit a greater ability to recognize and understand emotions, both within themselves and in others. They are able to more accurately identify the feelings of those around them, which encourages them to engage in more positive and meaningful social interactions. This has a significant impact on how children interact with their social environment, making them more attuned to the emotional dynamics surrounding them and enabling them to respond in a more constructive and empathetic manner.

By using play as a medium, children are also taught to better manage their emotional responses, helping them build stronger and deeper interpersonal relationships. Additionally, the ability to recognize and understand emotions further strengthens their overall social skills, including the capacity to empathize, communicate, and collaborate with others. These games play a crucial role in fostering an environment that supports the holistic emotional development of children, helping them grow into emotionally stable individuals who are better equipped to handle social challenges in the future. Thus, play is not merely a form of entertainment but a vital tool in educating children to become more mature, empathetic, and prepared to navigate the complexities of social life.

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CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION

When Salovey and Mayer first used the term emotional intelligence in 1990, they described emotional intelligence as a form of social intelligence that involves the ability to monitor the feelings and emotions of oneself and others, to discriminate among them, and use this information to guide one's own thoughts and actions. Some of their initial studies produced some interesting results about the relationship between emotional clarity and intelligence. For instance, when an individual was able to identify and name a mood or feeling they were experiencing, they generally recovered more quickly from the condition. Similarly, individuals who can accurately perceive, understand and evaluate the emotions of others are better able to respond flexibly to changes in their social environment and build support networks.

The need for the promotion of children's social and emotional competence and well-being is particularly evident during the transition from childhood to adolescence (Hertzman and Power, 2006). We argue herein that it is during the early adolescent year particularly the ages between 9 and 12 in which a program that incorporates mindfulness practices may be particularly warranted. It is during this developmental period in which children's personalities, behaviors, and competencies may consolidate into forms that persist into adolescence and on into adulthood. (Eccles and Roeser, 2009) During this time, children both master academic skills such as reading, writing, and arithmetic and become more self aware, reflective, and planful. It is also during these years when individuals become less egocentric and are able to consider the feelings and perspectives of others they develop a sense of right and wrong and have the capacity to act in accordance with their higher levels of social understanding. This developmental period has been identified as a transitional or a "turning point" where an opportunity is present to promote positive psychological growth. (Graber and Brooks-Gunn, 1996) In the present study, therefore, we focused our research efforts on children ages 9 to 12 because we perceive that pre- and early adolescence is a developmental period with great opportunity to optimize health and promote development.

1.2 BACKGROUND OF PROJECT

Social and emotional learning (SEL) is an integral part of education and human development. SEL is the process through which all young people and adults acquire and apply the knowledge, skills, and attitudes to develop healthy identities, manage emotions and achieve personal and collective goals, feel and show empathy for others, establish and maintain supportive relationships, and make responsible and caring decisions.

SEL programs improved students' social-emotional skills, attitudes about self and others, connection to school, positive social behavior, and academic performance; they also reduced students' conduct problems and emotional distress. Several methods SEL use to educate the children such as relationship building, emotion regulation, positive reinforcement, collaborative problem-solving, and active listening.

Although many schools have adopted SEL programs to foster the development of students' social and emotional competencies, SEL programs are not always well implemented in schools. Research indicates that they are more effective when they involve a developmentally coordinated set of activities, active learning helps students master new skills, focus on program that intentionally develop personal and social skills, and the specific skills taught are clearly identified, taught, and practiced. To effectively deliver programs that have these four components, teachers usually require substantial training and support. Unfortunately, it is common for schools to adopt SEL programs without providing the essential initial training, ongoing coaching and mentoring, or technical support. Thus, one key aspect of successful SEL implementation is to improve instructional practices through the use of effective ongoing professional development.

Interactive tools, such as educational games, are now being explored as a way to make emotional learning more engaging and accessible for children. These tools encourage children to recognize and understand emotions in a fun and non-intimidating way, helping them build emotional regulation skills in both school and home environments. As the importance of SEL grows, so too does the demand for tools that can be used in various settings, with the flexibility to cater to children's individual needs.

1.3 PROBLEM STATEMENT

The significance of Social and Emotional Learning (SEL) competencies in education, highlighting their positive associations with academic performance, graduation rates, reduced behavioral issues, and improved relationships between students and teachers. (Catalano et al, 2004) , (Davis et al, 2014), (Durlak et al, 2011). However, it stresses that the effectiveness of SEL programs depends not just on their existence but on their implementation in schools. (Durlak, 2015), (Meyers et al, 2012).

A gap in understanding the factors influencing teachers' delivery of SEL programs, noting that variations in how teachers implement SEL can affect student outcomes. It points out that most research has concentrated on SEL implementation in preschool and elementary levels, with much less focus on middle and high school contexts, despite the unique SEL needs of older students. (Jones and Bouffard, 2012), (Williamson et al, 2015).

The Colors of Emotion Game is an example of the target activity, which fills the gap between traditional methods of teaching and using games as an effective learning tool. Unlike most conventional ways of teaching through which children need adult supervision all the time, this game educates children on how to handle emotions through scenarios they can solve on their own. Through the game children will be able to recognize their feelings and learn some of the most important emotional self-regulation skills without the help of an adult. As emotion self-regulation is gradually integrated as an essential component for long term competency, it is important to fill this gap with engaging, standalone instruments for children.

1.4 PROJECT OBJECTIVES

OB1: Develop games that can help children in knowing their own emotions.

OB2: Implement and evaluate the functionality of emotion game.

1.5 PROJECT QUESTION

Question 1: All children understand emotions at their age?

Question 2: This game can be used to foster awareness and understanding of children emotions?

1.6 SCOPE OF THE PROJECT

This project aims to design the Colour of Emotional Games in helping children improve their emotional awareness and management skills. Through the development of this game, children will be required to learn how to identify, analyze and control their feelings, offered in a fun and safe environment without the need of a teacher's assistance.

The targeted children include those in school and home environment, through the transition from childhood to early adolescence. The game is set to enhance the emotional well being of children during this sensitive stage because they are trained to cope with the feelings by themselves without much direction from the adults.

The project will assure that the game remain affordable in order to be used in various educational or home setting, thus making the emotional learning fun and easy for the kids.

1.7 SIGNIFICANCE OF THE PROJECT

SWOT analysis (or SWOT matrix) is a strategic planning and strategic management technique used to help a person or organization identify Strengths, Weaknesses, Opportunities, and Threats related to business competition or project planning. It provides a structured framework for assessing the current state of a specific project and helps in making informed decisions about future strategies.

STRENGTH	WEAKNESSES
<ul style="list-style-type: none"> - Giving children early exposure to emotions. - The game can be used as a tool for emotional intelligence development and self-awareness. - Can be used in various settings such as schools, therapy sessions, or even at home. 	<ul style="list-style-type: none"> - Products that are still new & unknown to many. - Limited target market. - Some users might struggle to grasp the concept if they are not familiar with emotional literacy or the game rules.
OPPORTUNITY	THREATS
<ul style="list-style-type: none"> - Innovative products that are not yet on the market. - This game concept can be used as a digital game in the future. - Potential to collaborate with related parties such as kindergartens, schools, educational program organizers, and others. 	<ul style="list-style-type: none"> - Shifts in popular culture or gaming preferences could affect the game's appeal

1.8 OPERATIONAL DEFINITION

The Colors of Emotion Game is a game designed to enhance emotional intelligence and self-awareness. It typically involves a spinning wheel with various emotional states. Players gonna shoot the board with gun and are presented with prompts or challenges related to the emotion that lands. These prompts may involve identifying emotions, expressing feelings, or reflecting on personal experiences. The game aims to foster understanding, recognition, and effective management of emotions.

1.9 SUMMARY

Thus, the objective of this project is to create the Colors of Emotion Game so that children may enhance their affective awareness and Emotional Self-Regulation (ESR). The game teaches the child feelings and empathy in an entertaining and independent manner, while enhancing their personal and social development in one of the most important stages of their lives. At the end of this project, we anticipate having developed a tool that is affordable and easily accessible for educational institutions as well as home environments in order to complete the current emotional learning approaches.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

This presentation explores the Colors of Emotion Game, a model that categorizes and illustrates various human emotions. Understanding these emotions is crucial for psychological well-being and interpersonal relationships. The literature review will highlight key findings and applications of this model in various fields.

The Wheel of Emotions was developed by psychologist Robert Plutchik in the 1980s. This model emphasizes the evolutionary significance of emotions and their adaptive functions. It categorizes emotions into primary and secondary types, providing a framework for understanding emotional responses.

2.2 PREVIOUS STUDIES / REVIEW / INVESTIGATIONS

2.2.1 EMOTION

Emotion has been defined as a "sudden trouble, transient agitation caused by an acute experience of fear, surprise, joy, etc or a "mental feeling or affection for example pain, desire, hope, etc. as distinct from cognitions or volitions". The Dictionary of Cognitive Psychology does not formally define emotion, but an operative definition emerges from its five pages devoted to emotion: emotion is a mental state. This is not trivial, since emotion has been merely a somatic response. Following Cannon, several authors see as being intrinsic of emotion the physiological responses that take place in emotionalized subjects. (Lafregeyre, 2002)

2.2.2 COLOUR

Color is a magical element that gives feeling and emotion to art and design. It is an exclusive subject, and yet one that has been here since the world began. Respecting the divergent messages sent by the opposite sides of the color spectrum will help you set an active or passive mood in your work. Reds and yellows are symbolic of blood, angry, battle, and bravery. They push, shout, warn, and command attention. Warm colors work in unison to bring us energy, passion, power, light, and joy. On the other hand, cool colors like green and blue persuade

viewers with reasoning, restraint, and wisdom. Greens and blues are fine when you already have your audience's attention and simply want to make a pleasant factual presentation. (Silva, 2018)

2.2.4 DESIGN THINKING

Design thinking is an integrative approach: This means that for problem-solving, the process of problem-solving is considered together with its framework conditions. The problem analysis and solution development are considered systematically and holistically in the form of a process (see below). The various experts necessary for problem analysis and solution development (see below) are involved and enter an exchange with each other. (Müller-Roterberg, 2018) This method consists of 5 stages which are Empathize, Define, Ideate, Prototype, and Test.

Empathize - In the first phase it is first about developing an understanding of the challenge/the problem/the need or the requirement. It must be clarified who has to be integrated into the process and, in particular, which technical perspective is necessary. (Müller-Roterberg, 2018)

Define - In this phase, detailed research and on-site observations are carried out on the customer's need/problem. Numerous methods can be used for this, such as interviews, written surveys, and observations with recordings through photos or even videos. (Müller-Roterberg, 2018)

Ideate - It is only in this phase that the actual brainstorming process takes place. Here the creativity techniques mentioned in chapter 5.3 can be used. Strictly separated from this, the ideas can then be analyzed in a customer-oriented manner to identify weak points, and a selection decision can be made based on an idea evaluation. (Müller-Roterberg, 2018)

Prototype - In this very important phase, ideas should be visualized as quickly as possible, made tangible, sketched, designed, modeled/simulated, etc. (Müller-Roterberg, 2018)

Test - In this final phase, the ideas are to be further developed and tested through further experiments and customer feedback. In addition, important development, production and market issues have to be clarified. (Müller-Roterberg, 2018)

2.4 SUMMARY

In conclusion, focuses on previous studies related to emotional development in children, utilizing the Colour of Emotion Game as a framework. It discusses how the model helps in understanding the complexity of children's emotional experiences, the link between emotional awareness and social skills, the influence of environment and parenting styles, and the challenges children face in emotional expression. The section concludes by emphasizing the importance of fostering emotional intelligence in children through tailored educational programs.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 INTRODUCTION

This methodology outlines the step-by-step approach used to develop the Colors of Emotion Game. It serves as a comprehensive guide that encompasses everything from gathering psychological insights to analyzing emotional responses, ensuring that the entire process of designing the Wheel is systematic and grounded in robust research.

3.2 PROJECT DESIGN

In this project, we use design thinking to detail the theories, frameworks, and processes that were pivotal in creating the ‘Colors of Emotion Game’. By adhering to a structured plan, we have ensured that each phase from conceptualization to final implementation is meticulously considered and contributes to the overall effectiveness of the tool. ‘Design Thinking’ was used as the framework for designing and developing the ‘Colors of Emotion Games’. This process consists of 5 stages which are Empathize, Define, Ideate, Prototype, Test

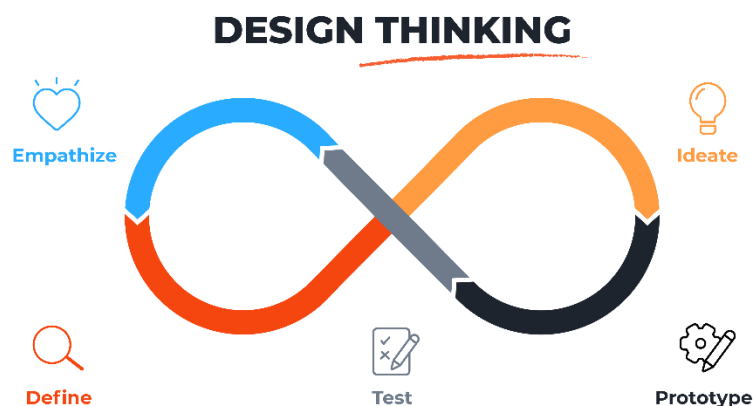


Figure 1: Design Thinking

3.3 DESIGN THINKING

Design thinking offers practical methods and tools that major companies like Google, Apple and Airbnb use to drive innovation. From architecture and engineering to technology and services, companies across industries have embraced the methodology to drive innovation and address complex problems.

3.3.1 EMPHASIZE

Before launching the Colors of Emotion Game, we conducted a feasibility study to assess children's current understanding of emotions and their parents' satisfaction with traditional methods of emotional education. We aimed to gain deep insights into the challenges children and parents face in recognizing and expressing emotions. This analysis helped us determine the viability of a game-based approach to emotional education and whether we could successfully develop, implement, and market the Colors of Emotion Game. We have constructed a questionnaire to gain a deep insight into the challenges children and parents face in recognizing and expressing emotions.

3.3.2 DEFINE

Once the challenges are identified, they are defined in a human-centric manner. This stage involves synthesizing the information gathered during the empathize phase to create a clear problem statement that guides the design process. A few challenges that have been identified are difficulty recognizing emotions, expressing emotions, and understanding the emotions of others.

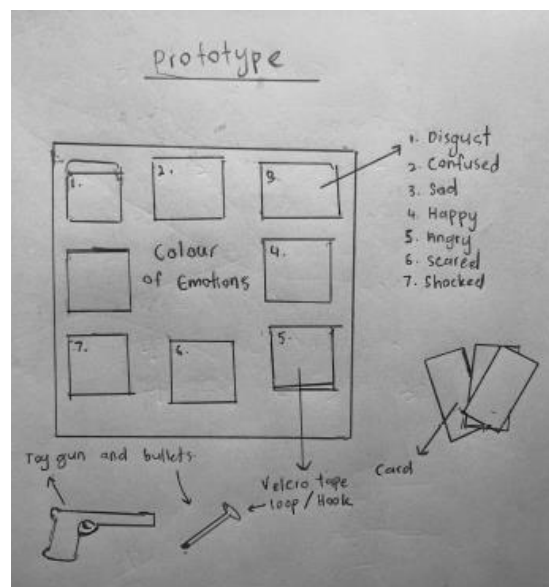
We conclude it as two problem statements. First, children struggle to effectively recognize, understand, and express their emotions, leading to potential emotional difficulties. Second, the most conventional ways of teaching through which children need adult supervision all the time, and emotional education methods are often ineffective in engaging and motivating young children.

3.3.3 IDEATE

The ideation stage was a catalyst for innovation, as we delved into a creative process of brainstorming and exploring diverse perspectives. This led to the conceptualization of several innovative features for the Colors of Emotion Game, such as emotion-recognition games to sharpen their perceptive abilities, personalized emotion-tracking tools to foster self-awareness, social-emotional learning activities to enhance social skills, and parent-child interaction tools to strengthen family bonds. By integrating these features, the Colors of Emotion Game aims to create a comprehensive and engaging platform that empowers children to develop a profound understanding of their own emotions and the emotions of others.

3.3.4 PROTOTYPE

Turning ideas into tangible solutions, the prototype stage involves creating simple representations of potential solutions. These can range from paper sketches to digital models, providing a hands-on way to test and refine concepts.



This is a prototype of the Colors of Emotion Game, which has been developed based on the identified problem statements and incorporates innovative features. The game includes interactive elements like a toy, emotion-recognition mini-games,



3.3.5 TEST


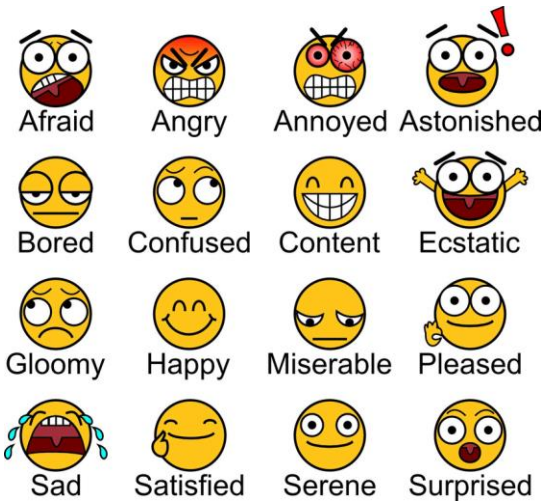
The final stage of the project involved the implementation of the Colors of Emotion Game. After rigorous testing, we introduced the game to a target group of children at Tabika Kemas, Politeknik Shah Alam. This pilot implementation aimed to assess the game's effectiveness in promoting emotional understanding, empathy, and self-regulation among young children. By introducing the Colors of Emotion Game in a real-world setting, we sought to gather valuable feedback from both children and educators. This feedback will be instrumental in further refining the game and ensuring its optimal impact on child development. We believe that by empowering children with emotional intelligence, we can contribute to their overall well-being and future success. The picture below prove that we have tested our product at polytechnic kindergarten.





3.4 MATERIALS AND EQUIPMENT.

A4 Cardboard Sheets	
	<p>Cardboard is an excellent material for making models, decorations, and art projects due to its lightweight and easy-to-cut nature.</p>
Toys Pistol	
	<p>Toy guns are toys which imitate real guns, but are designed for recreational sport or casual play by children</p>

Velcro Tape	
	<p>Velcro tape works by having two sides (a hook side and a loop side) that stick together when touching.</p>
Emotional Labels	
	<p>These are the words or phrases representing different emotions that will be displayed on the wheel.</p>

3.5 SUMMARY

The methodology section details the systematic approach and research techniques employed for the Colors of Emotion Game project. A qualitative research methodology was adopted to gain a deep understanding of children's emotional experiences and needs. The project is poised to capitalize on opportunities such as advancements in educational technology and the growing emphasis on emotional intelligence, while also navigating challenges like competition from existing educational tools and securing parental and educator buy-in. The Design Thinking Process, encompassing the stages of Empathy, Define, Ideate, Prototype, and Test, was instrumental in the development of the game. The report underscores the significance of empathy, collaboration, and innovation in creating engaging and effective educational solutions. Key materials and tools for the project include various digital and physical components such as A4 Cardboard Sheets, Toys Pistol, Velcro Tape, and Emotional Labels.

CHAPTER 4

DATA ANALYSIS RESEARCH FINDINGS

4.0 INTRODUCTION

In this chapter, an in-depth analysis of the collected data will be conducted with the aim of evaluating the effectiveness and quality of the produced product. This evaluation will be based on the feedback received from respondents through the conducted survey. Additionally, this chapter will cover the preparation of the product and the implementation of related innovations, ensuring that it meets the expected requirements. As part of this effort, we have also conducted a survey involving students as respondents. The purpose of this survey is to gather detailed information on their perceptions and acceptance of the product and innovations implemented. Through this approach, we aim to identify to what extent the product can provide insights into their emotions. The results of this analysis will also be used to improve the product in the future and ensure it meets the established objectives.

4.1 DATA AND ANALYSIS

The results of this study depend on the feedback received from the participants through a survey conducted among the subjects. Respondent demographic information is important to determine the characteristics of the participants in this study and to assess generalizability. This section is a study of feedback about this product to achieve.

The project's objectives are as follows:

1. Develop games that can help children in knowing their own emotions.
2. Implement and evaluate the functionality of emotion wheels game
3. To determine the products potential in market

Develop games that can help children in knowing their own emotions.

- This game can encourage children to share their emotions and build vocabulary around feelings. In this game players have to shoot on a special cardboard and read questions about the emotions they get after they shoot, they will share their feelings in each situation. There are different emotions and questions, prompting the player to recall the experience associated with each feeling. This setup not only helps children connect with their own emotions but also creates moments for empathy, as they listen to other people's experiences and reflect on various emotional states.

Implement and evaluate the functionality of emotion wheels game

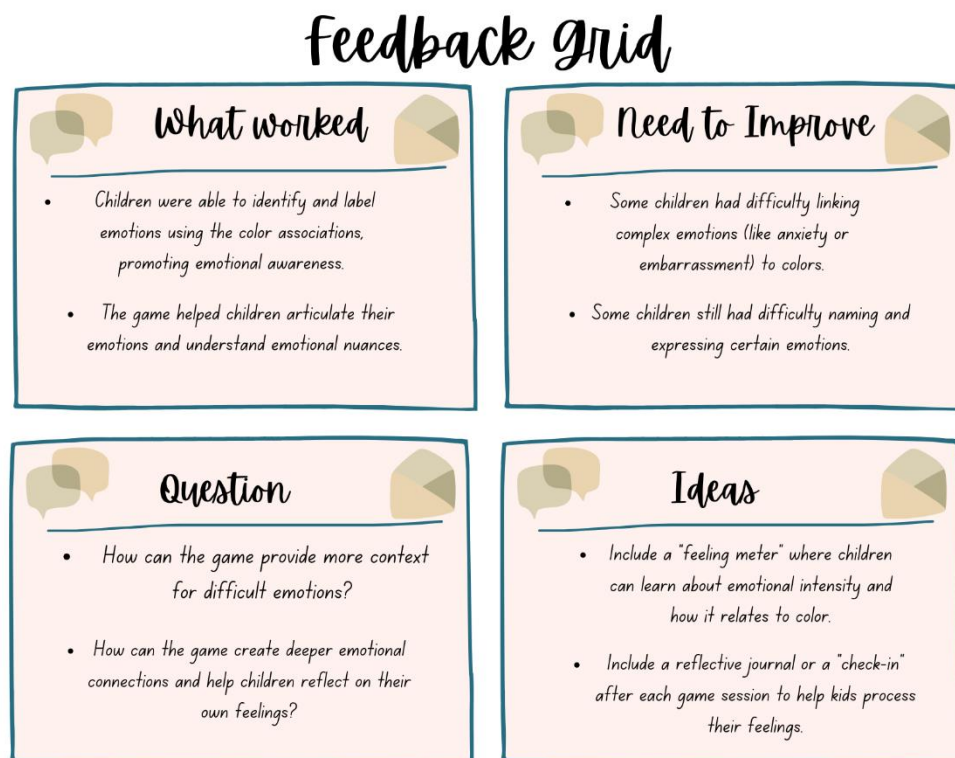
- The Colors Of Emotion Game is designed to help users understand and express emotions through an interactive system. The board features core emotions like joy, sadness, and anger, with subcategories for deeper exploration. Players engage by shoot the board, selecting an emotion, then completing tasks or answering prompts to encourage emotional awareness and communication. The game can be physical or digital, with interactive elements like animations or sound effects for engagement. Its functionality is evaluated through user feedback, usability testing, and pre- and post-assessments to measure its impact on emotional understanding and identify areas for improvement.

To determine the products potential in market

- Games focused on emotions have significant market potential, especially with the growing awareness of emotional intelligence's importance among children and adults. Such products are suitable for educational institutions, kindergartens, schools, and families, as they help users understand, recognize, and manage emotions in an engaging and interactive way. Additionally, emotional games can be utilized in therapy or counseling sessions, making them relevant for professional use. With the rising demand for innovative and interactive educational tools, this type of game has the potential to attract the market if marketed with the right strategy, offering uniqueness and meeting user needs effectively.

4.2 TESTING

The prototype testing phase of the ‘Colors of Emotion Games’ children was conducted with the aim of evaluating the usability, functionality, and overall user experience. The main purpose of this test is to get feedback from users and identify aspects that can be improved before the final development phase is carried out. This experiment involves several children as participants, with a variety of different backgrounds in emotional development.



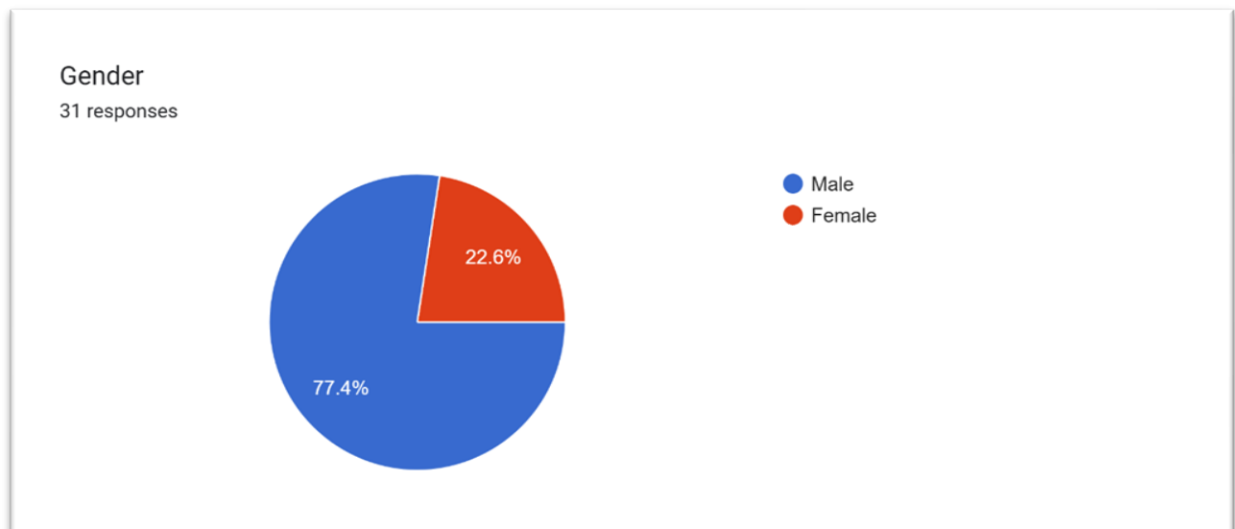
Prototype testing showed some useful insights into the user experience. Overall, users found the prototype fun and easy to use, but some areas needed improvement. Based on the feedback grid above, participants gave valuable feedback about this prototype, highlighting positive aspects as well as areas that needed improvement.

Children were found to be satisfied with the clean and visually appealing design, while there is a need for improvement in ‘Color of Emotion Game’ which may be misunderstood in some parts.

4.2 SURVEY ANALYSIS

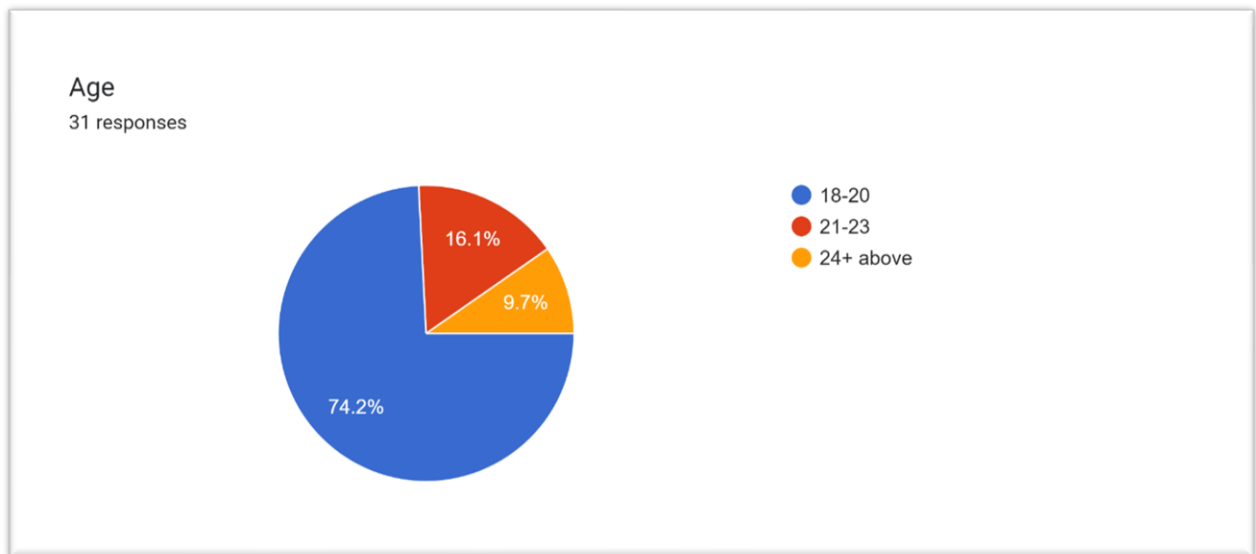
DEMOGRAPHY		PERCENTAGE (%)
Name	-	-
Gender	Male	77.4
	Female	22.6
Age	18-20 years old	74.2
	21-23 years old	16.1
	24 years old and above	9.7
Occupation	Student	83.9
	Employed	16.1
	Unemployed	0

Profile Of Respondent



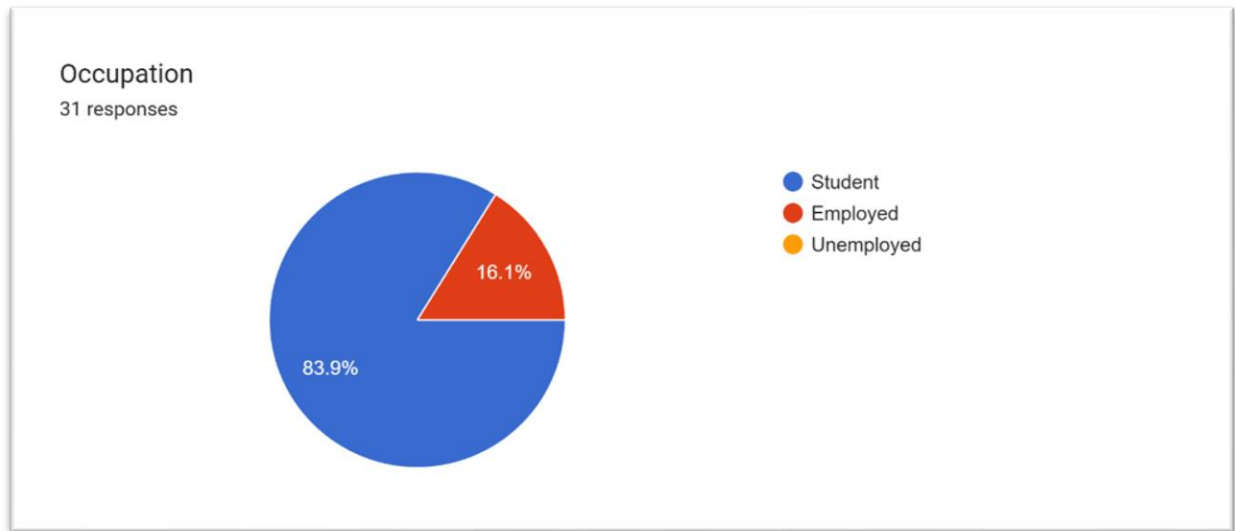
Pie Chart- Gender

The gender gap between men and women around, 77.4% is male and 22.6% female obtained from 31 respondents



Pie Chart – Age

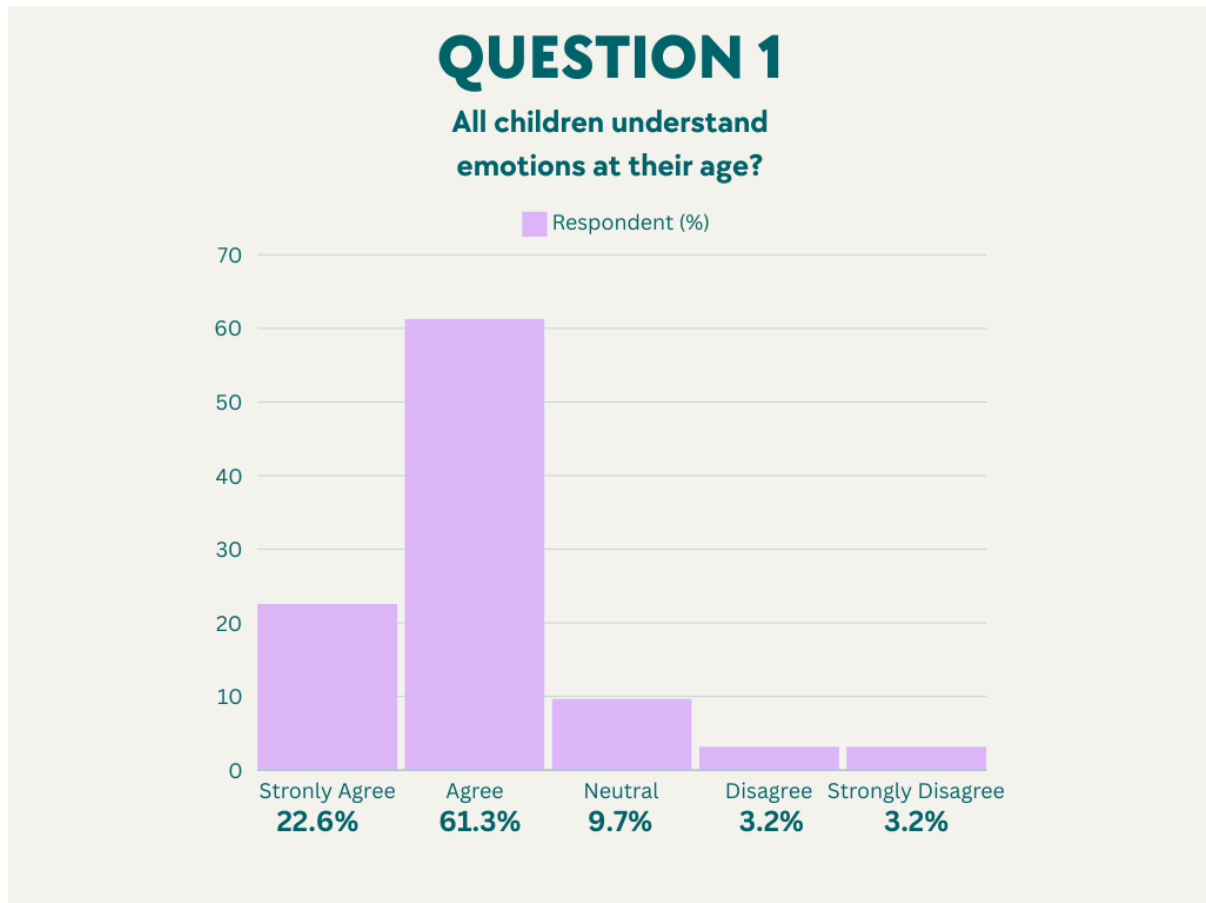
The largest age group among respondents is 18-20, making up 74.2% of the total responses. Respondents aged 21-23 account for 16.1% of the group, indicating a smaller but significant portion. Those aged 24 and above represent the smallest segment, comprising only 9.7% of respondents. Overall, the data shows that the majority of participants are within the 18-20 age range.



Pie chart – Occupation

The majority of respondents, 83.9%, are students. A smaller portion, 16.1%, are employed individuals. There are no respondents who identified as unemployed. This data suggests that most participants are currently pursuing studies rather than being in the workforce.

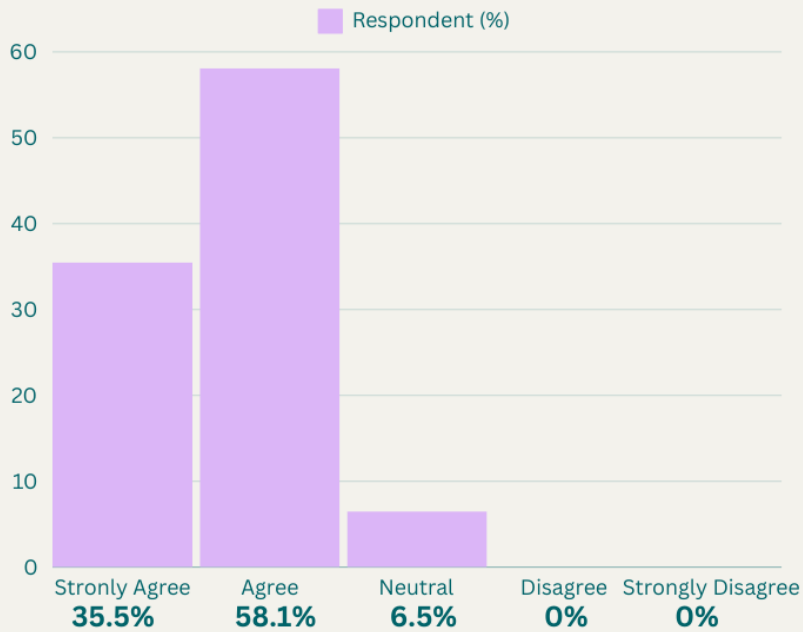
This chapter presents a comprehensive analysis of the outcomes derived from our innovative digital padlock project. A careful examination of the data gathered through Google Form surveys will be undertaken to evaluate the effectiveness of this groundbreaking solution.



We ask the respondents about their opinion about ‘is it all the children understand emotions at their age’. 7 (22.6%) respondents strongly agree that a ‘Colors of Emotion Game’ helps children to understand emotions better. 19 (61.3%) of the respondents agree with the statement. 3 (9.7%) of respondents were neutral about this statement and disagreed and strongly disagreed have the same number of respondents which is 1 (3.2%).

QUESTION 2

This game can be used to foster awareness and understanding of children's emotions?



We asked in the questionnaire about the 'awareness and understanding of children's emotions'. 11 (35.5%) respondents strongly agreed with the question. 18 (58.1%) of the respondents agreed with the question. 2 (6.5%) respondents were neutral about the question and disagreed and strongly disagreed have the same number of respondents.

QUESTION 3

Age appropriate consideration for using this game with children is 12 years and under

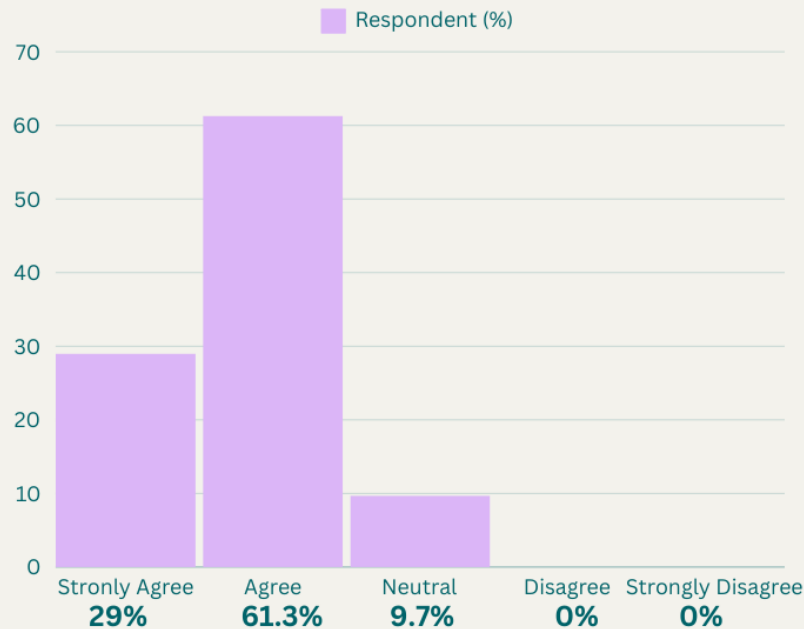
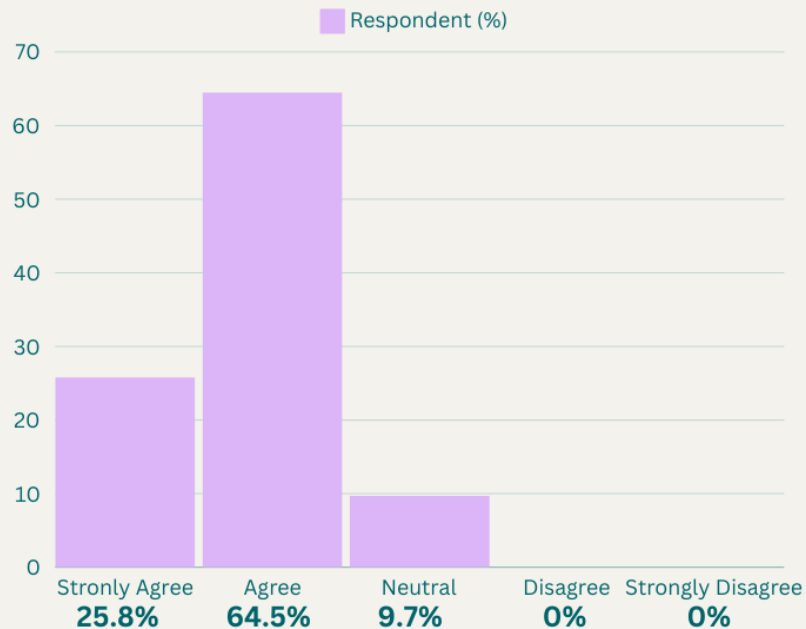


Figure 4.14 shows the response to the question that we asked in the questionnaire about the Age appropriate consideration for using this game with children is 12 years and under. 9(29%) respondents strongly agree that they prefer age 12 years children are suitable to use this game. 19 (61.3%) of the respondents agree that 'Colors of Emotion Games' is suitable for 12 years and above. 3 (9.7%) of respondents were neutral about this questionnaire. Disagree and strongly Disagree have the same respondents.

QUESTION 4

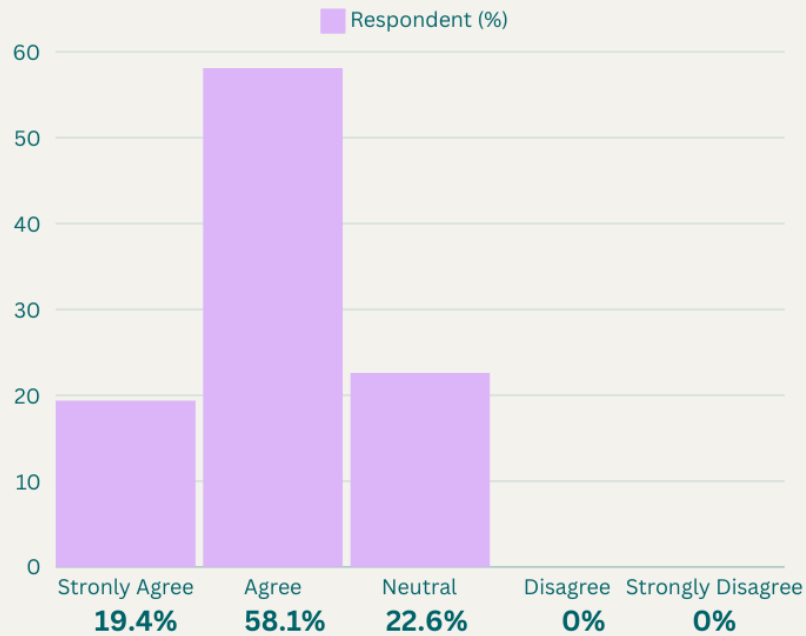
This game be beneficial if played in a classroom environment?



We asked in the questionnaire about ‘game be beneficial if played in a classroom environment’. 8 (25.8%) respondents strongly agree with the question. 20 (64.5%) of the respondents agree with the question. 3 (9.7%) of respondents were neutral about the question and disagree and strongly disagree have the same number of respondents.

QUESTION 5

**Children need to have stable emotions
at their age?**



We asked in the questionnaire about ‘game be beneficial if played in a classroom environment’. 8 (19.4%) respondents strongly agree with the question. 20 (58.1%) of the respondents agree with the question. 3 (22.6%) of respondents were neutral about the question and disagree and strongly disagree have the same number of respondents.

QUESTION 6

"Emotions can happen if someone doesn't get what they want". Do you agree with his statement above?

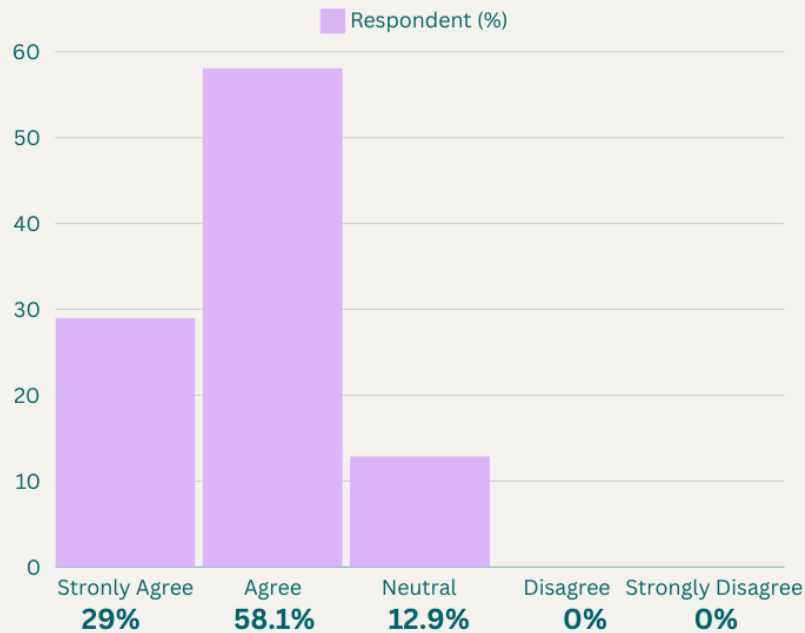


Figure 4.14 shows the response to the question that we asked in the questionnaire about the Age appropriate consideration for using this game with children is 12 years and under. 9(29%) respondents strongly agree that they prefer age 12 years children are suitable to use this game. 19 (58.1%) of the respondents agree that 'Colors of Emotion Games' is suitable for 12 years and above. 3 (12.9%) of respondents were neutral about this questionnaire. Disagree and strongly Disagree have the same respondents.

4.3 QUESTIONNAIRE STATISTIC DATA

Section A

No	Question	Frequency		Mean	Std. Deviation
		Male	Female		
1	Gender	77.4%	22.6%	1.37	.486

Table 4.2 Demographic Question - Gender

No	Question	Frequency			Mean	Std. Deviation
		18 - 20	21 - 23	24+ above		
1	Age	74.2%	16.1%	9.7%	2.20	1.022

Table 4.3 Demographic Question - Age

No	Question	Frequency			Mean	Std. Deviation
		Student	Employed	Unemployed		
1	Occupation	83.9%	16.1%	-	2.00	1.042

Table 4.4 Demographic Question - Occupation

Section B

No	Question	Frequency					Mean	Std. Deviation
		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree		
1	All children understand emotions at their age.	22.6% (7)	61.3% (19)	9.7% (3)	3.2% (1)	3.2% (1)	1.87	.72
2	This game can be used to foster awareness and understanding of children's emotions.	35.5% (11)	58.1% (18)	6.5% (2)	-	-	1.71	.59
3	Age-appropriate consideration for using this game with children is 12 years and under	29% (9)	61.3% (19)	9.7% (3)	-	-	1.81	.60
4	This game be beneficial if played in a classroom environment?	25.8% (8)	64.5% (20)	9.7% (3)	-	-	1.81	.60
5	Children need to have stable emotions at their age.	19.4% (6)	58.1% (18)	22.6% (7)	-	-	2.03	.66
6	"Emotions can happen if someone doesn't get what they want" Do you agree with his statement above?	29% (9)	58.1% (18)	12.9% (4)	-	-	1.84	.64

4.4 SUMMARY

We received some answers from children about this game based on the testing done. We found that most of them received the 'Colors of **Emotion** games' product because we saw that these children enjoy doing these game activities. We hope that this game gets a lively response not only among children but also adults, we will also try our best to provide the best quality and reasonable prices.

CHAPTER 5

CONCLUSION AND RECOMMENDATION

5.1 INTRODUCTION

In this chapter, we reflect on the Colors of emotion games project by revisiting the primary objectives that guided the study, specifically examining how well each aim was met, and providing a summary of the findings related to enhancing emotional awareness, empathy, and self-regulation skills among children through a structured, interactive game-based approach.

5.2 CONCLUSION

The 'Colors of emotion game' has served our purpose effectively, providing a highly engaging and interactive tool for children to improve their emotional intelligence and awareness. Throughout the development and testing phases, the children offered very positive feedback about this permanent concept. They expressed enthusiasm not only for the game's interactive elements but also for its unique approach to helping them identify, express, and manage their emotions. In addition to learning how to recognize and communicate their feelings, children also report increased self-awareness and a deeper sense of empathy for others, marking significant developmental benefits.

These games are not only entertaining for children but are also reasonably priced to remain accessible, making them an attractive choice for families and educational settings. By addressing several design and functional challenges that arose during the development process, we were able to refine and improve the Colors of Emotion game table, making it user-friendly and highly effective for its educational purpose. The well-structured game design can be adapted to accommodate various age groups, allowing children of various developmental stages to engage with emotional concepts in a meaningful and age-appropriate way.

Overall, the affordable price point and clear benefits of the Colors of Emotion game have positively influenced user perception, leading to increased interest and motivation to purchase the game for home and classroom use.

5.3 RECOMMENDATION

The "Colors of Emotion Games" aims to help children recognize and manage emotions through interactive learning. Key recommendations include expanding the target market to schools, therapy centers, and parents, promoting it as a versatile tool for both home and educational use. Collaborations with educational institutions can enhance acceptance, while prototypes should be improved based on feedback from initial testing. The launch strategy should focus on affordable pricing and online promotion. In the future, a digital version of the game and adaptations for different age groups and cultural contexts can ensure broader appeal and global relevance.

5.4 LIMITATIONS OF THE STUDY

The Colors of Emotion Games project faced several limitations that may have impacted its outcomes. One key challenge was the limited sample size, which may not fully represent diverse cultural, social, and economic backgrounds, reducing the generalizability of the findings. Additionally, children's understanding of emotions varies with age and developmental stages, making it difficult to measure the game's effectiveness consistently. The controlled testing environment may not reflect real-world use, where external distractions or lack of adult guidance could influence the user experience. Some children were hesitant to engage with the game, as discussing emotions can be uncomfortable due to cultural or social norms. Limited resources and time also constrained the development and refinement of the prototype, which may have affected its overall quality. The game's reliance on visuals and language poses challenges for children with learning difficulties or those unfamiliar with the language used. Furthermore, as a new product, the game faces the challenge of introducing its value to the market, particularly among those less familiar with the importance of emotional literacy. Addressing these limitations in future research will help enhance the game's effectiveness and accessibility for a broader audience.

5.5 SUMMARY

In conclusion, the ‘Colors of emotion games’ have shown the value of playful and interactive learning in improving children's emotional intelligence. Play's focus on fostering emotional literacy and self-regulation highlights its importance as a tool for children's social and emotional growth. Through engagement with play, children learn to express their emotions, develop empathy, and build resilience, equipping them with essential skills to navigate social challenges. Project findings underscore the importance of emotional learning tools and support the inclusion of such resources in educational curricula and at home. As emotional intelligence continues to gain recognition as an important component of childhood development, resources such as the ‘Colors of Emotion games’ will play an important role in promoting emotional well-being and interpersonal success for young learners.

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APPENDIX

APPENDIX 1

GANTT CHART

No.	Activity	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12	W13
1	Discussion for the project to be developed													
2	Discuss with supervisor													
3	List all item													
4	Create prototype													
5	Testing													




PERTANDINGAN PROJEK AKHIR PELAJAR

SESI 1:2024/2025

‘RESILIENCE AND SUSTAINABILITY IN EDUCATION’



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BIN ABDUL HAMID**
08DPM22F1231

COLORS OF EMOTION GAME

CHILDREN AGED 4 - 6 2 - 4 PLAYERS 15 - 30 MIN

1 Background of Project

- Social and emotional learning (SEL) is crucial for both education and personal growth.
- SEL programs help students improve their emotional skills, feel better about themselves, connect with their school, behave positively, and perform better academically.
- These programs are most effective when they include practical activities that are suited to students' ages and clearly focus on teaching specific personal and social skills.

2 Statement of Problem

There's a gap in understanding what influences how teachers deliver social and emotional learning (SEL) programs. Differences in teaching methods can impact student results.

3 Objective

- Develop games that can help children in knowing their own emotions.
- To determine the products potential in market

4 Methodology

- Design thinking



5 Findings

- Feedback showed enthusiasm among users, indicating the game's effectiveness as a tool for social-emotional development.
- The game's interactive and educational approach is designed to be accessible, with affordability as a priority

6 Significance of Project

- Supports emotional and social development
- Promotes fun and engaging emotional learning
- Enhances emotional awareness

7 Conclusion

The Color Of Emotion Game is a fun, interactive board game that uses cards to explore emotions. It helps players understand emotional intelligence and build key social skills like empathy and communication.

Product Image



APPENDIX 3

COLOR OF EMOTION GAMES

B *I* U  

This project is built to help children to recognize emotions, this project is simply a game that will be played by 3 to 5 players and a moderator. From this game they will get to know more about how a person's emotions happen.

Gender

- ☐ Male
- ☐ Female

Age

- ☐ 18-20
- ☐ 21-23
- ☐ 24+ above

Occupation

- ☐ Student
- ☐ Employed
- ☐ Unemployed

All children understand emotions at their age?

- ☐ Strongly Agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly Disagree

This game can be used to foster awareness and understanding of children's emotions?

- ☐ Strongly Agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly Disagree

Age appropriate consideration for using this game with children is 12 years and under

- ☐ Strongly Agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly Disagree

This game be beneficial if played in a classroom environment?

- ☐ Strongly Agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly Disagree

Children need to have stable emotions at their age?

- ☐ Strongly Agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly Disagree

...

"Emotions can happen if someone doesn't get what they want"

do you agree with his statement above?

- ☐ Strongly Agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly Disagree