



NAZARBAYEV INTELLECTUAL SCHOOL OF PHYSICS  
AND MATHEMATICS IN ALMATY

# HOW DOES EXCESSIVE USE OF SMARTPHONE AMONG PRE-SCHOOL AGE CHILDREN (2-7) IMPACT THEIR SOCIAL COMMUNICATION SKILLS IN KAZAKHSTAN?

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# Outline

1. Aim and objectives of the research
2. Problem statement
3. Significance and Novelty of the study
4. Literature review
5. Methodology
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# Aim of the research

The main purpose of the research is to investigate the effect of addiction to smartphones among children in the age group 2-7 years old on their social and communication skills in Kazakhstan.



# Objectives of the study

1

Assess the extent of smartphone addiction among the children in Kazakhstan, including the start of their usage and daily screen time.

2

Analyze the causes of early smartphone usage

3

Investigate the effects of excessive use of smartphones on children's socialization processes

4

Evaluate the level of parents' concerns about their child's screen time

5

Analyze the methods of preventing excessive screen time



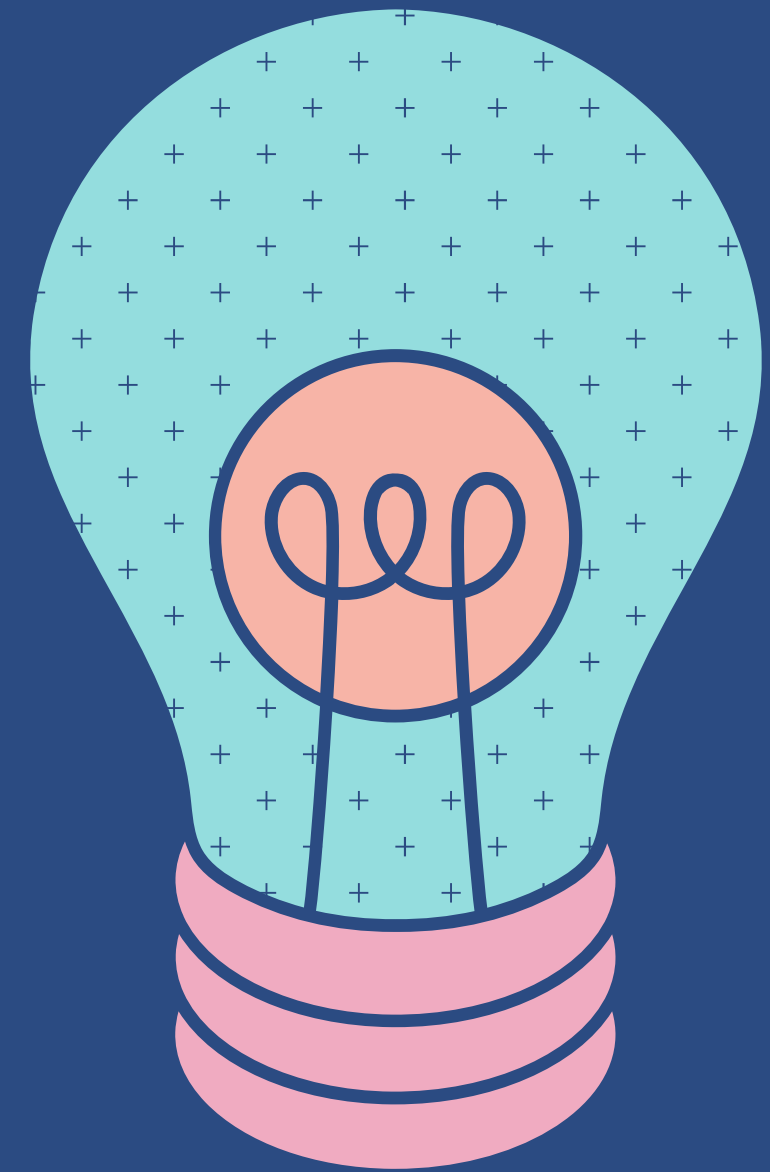
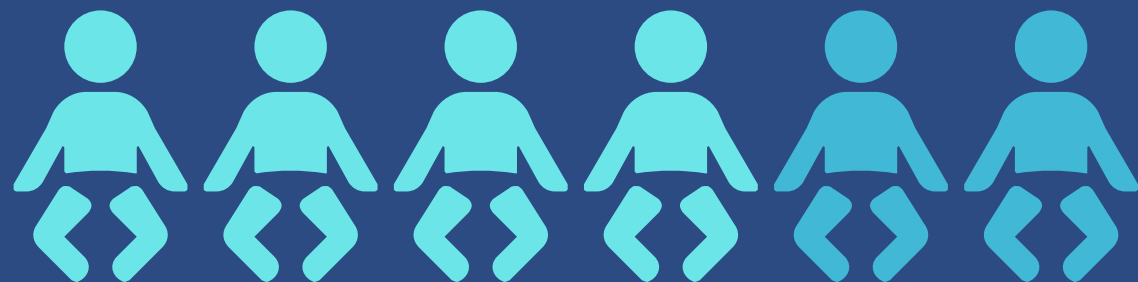
# Problem Statement

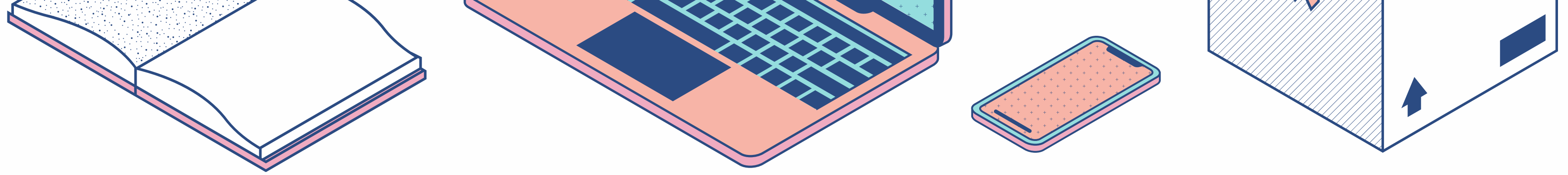


Nowadays, more children at the pre-school age are addicted to smartphones. Most parents use their phones to distract their children's attention and calm down to make parenting easier. But children become even more addicted to smartphones. For instance, one in five preschoolers who use smart devices may be addicted to them. This is because preschoolers' cognitive characteristics are less proficient than those of adults, making them more prone to be addicted to smartphones and tablets.

# Significance

The topic is relevant in modern world. Especially in Kazakhstan, with the rising number of children. The younger generations spend most of their time using smartphones: playing video games, watching YouTube and TikTok.





## Novelty of the study

### Theoretical significance

- By these findings, children healthcare workers may use literature sources to make notes and find more appropriate ways to limit children's screentime and help parents establish healthy parent-child relationship. This data may be helpful for parents and children healthcare workers to make an analysis of possible consequences of early smartphone addiction.

### Practical significance

- Conducted research paper provides survey and observation results, which might be useful for future research on national and global level. With that data specific educational seminars for parents and pre-school educators about early childhood smartphone addiction can be created and established by variety of educational centers.



# Literature review



- Xiaolin Zheng; Zhengzhou University, Zhengzhou, **China**
- Kyung-Seu Cho & Jae-Moo Lee; Department of Early Childhood Education in Eulji University, South Korea and School of Continuing Education in Dankook University, **South Korea**
- Jennifer Ihm; School of Communications, Kwangwoon University, Seoul, **South Korea**

*“Smart phone can help children understand society more comprehensively, cultivate calm personality, improve safety awareness, form correct communication concept, and clarify career ideal, At the same time, there are also some negative effects such as excessive use of mobile phones leading to children's personality loneliness, moral decline, social value distortion, Internet addiction and so on.” (Zheng, X., 2022)*



*“The greater the degree to which parents are self-evaluative of their smartphone usage, the lower is the influence of children's smartphone addiction proneness on their problematic behaviors. This study suggests that parents' self-reflective attitude towards smartphone usage can undermine the negative effects of smartphone overuse by young children.” (Cho, K.S., & Lee, J.M., 2017).*

*“Children’s lack of social networks may inhibit comfortable social interactions and feelings of support in the offline environment, which can heighten their desire to escape to smartphones. These children, unlike non-addicts, may not take advantage of the media to enrich their social lives and increase their level of social engagement.” (Ihm, J., 2018)*



# Methodology

## PART 1. SURVEY



### How many? Who?

70 participants: NIS students, NIS teachers and parents.

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### Where?

Public clinic for children in Almaty

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# Methodology

## PART 1. SURVEY



With the help of the survey, relevant quantitative, and qualitative data was gathered. The survey was sent to NIS students and teachers via Microsoft Outlook. Also, the QR code with link was placed at public Questions was mainly asked about respondent's view on digital devices usage among children and its effects on socialization, parent-child relationship etc. Afterward, a statistical analysis was conducted using infographics (tables, bar chart, pie chart, etc.)

☐ Әйел / Женская / Female

Сіздің отбасыңызда 7 жас дейінгі балалар бар ма? / Есть ли в вашей семье дети до 7 лет? / Do you have children under the age of 7 in your family? \*

☐ Иә, мен ата-анамын. / Да, Я - родитель. / Yes, I am a parent.

☐ Иә, іңілерім, қарындастарым, сіңлілерім бар./ Да, у меня есть младшие братья и/или сестра. / Yes, I have younger sibling/siblings.

☐ Жоқ/ Нет / No

☐ Другое: \_\_\_\_\_

Сіздің балаңыз күніне қанша сағат смартфонмен өткізеді? / Сколько часов в день Ваш ребенок проводит за использованием смартфона? / How many hours per day does your child spend using a smartphone? \*

☐ 1 сағаттан аз / Меньше 1 часа / Less than 1 hour

☐ 1-2 сағат/ 1-2 часа / 1-2 hours

☐ 2 сағаттан астам / Больше 2-х часов / More than 2 hours

☐ Мүлдем қолданбайды / Нисколько / Does not use a smartphone

Сіздің отбасыңыздағы бала смартфонды неше жасында пайдалана бастады? / В каком возрасте ребенок в Вашей семье начал использовать смартфон? / At what age did your child start using a smartphone? \*

# Methodology

## PART 2. OBSERVATION



### How many? Who?

6 children under 6 years old

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### Where?

The observation was performed throughout the day outdoor, and in the apartment of two families, whose children are around 6 years old.

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# Methodology

## PART 2.

### OBSERVATION

An observation determined how children behave with the presence of digital devices and without them. Participants of the observation had their smartphone throughout the one day. But on the next day, they did not. Instead, they had opportunities to choose various activities to do, such as physical activity, education, entertainment, etc.

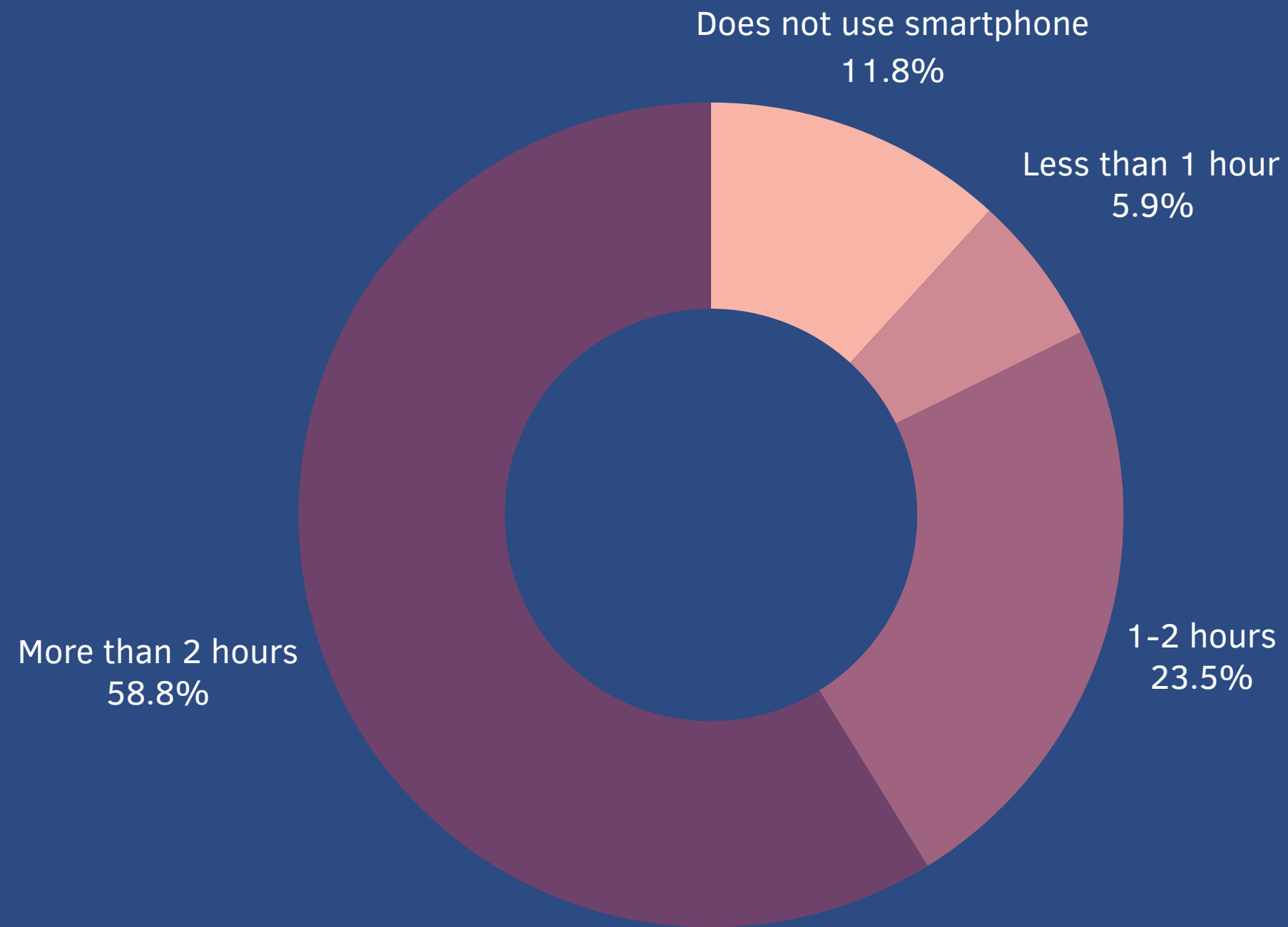




# Results

## SURVEY

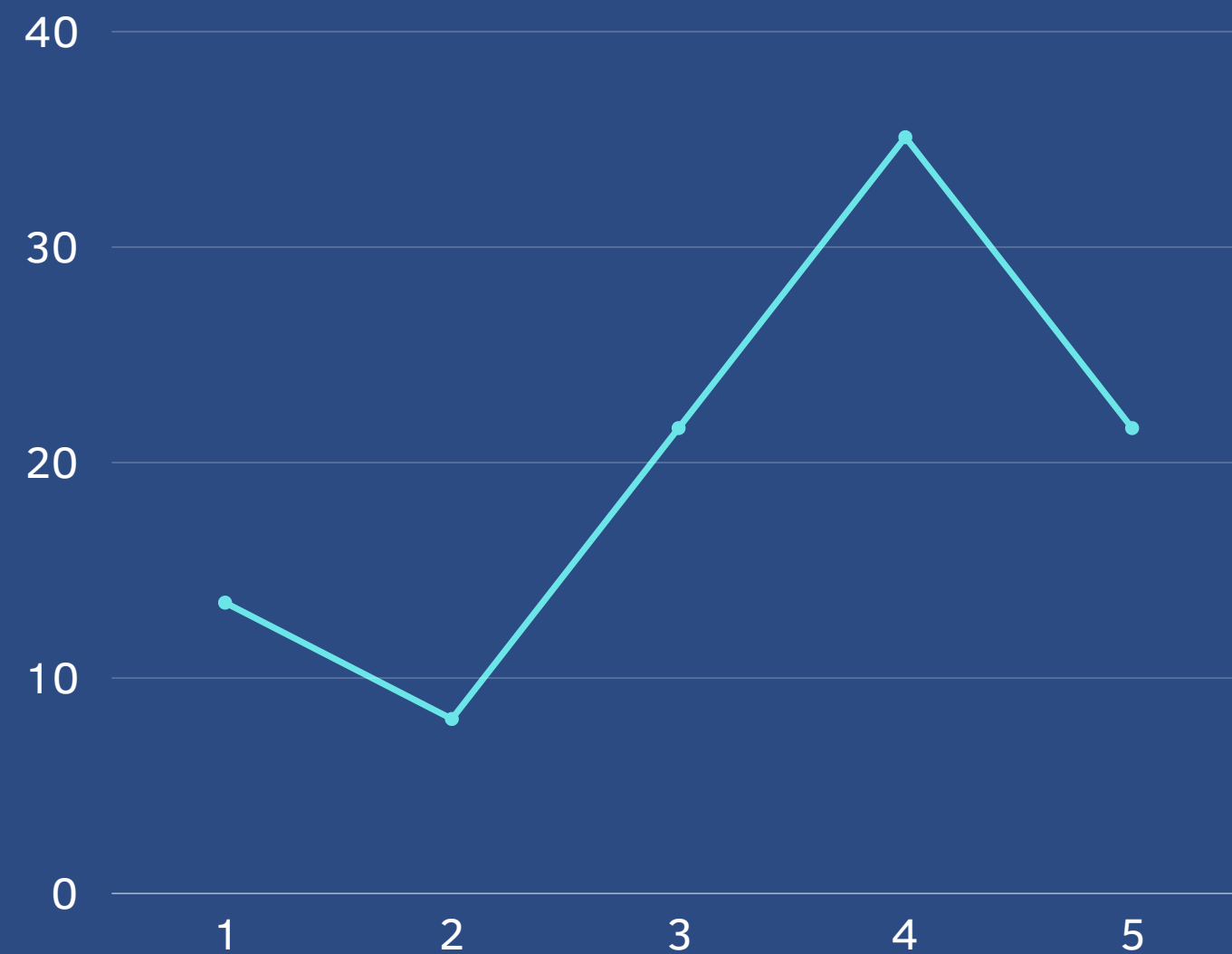
### AVERAGE SCREEN TIME



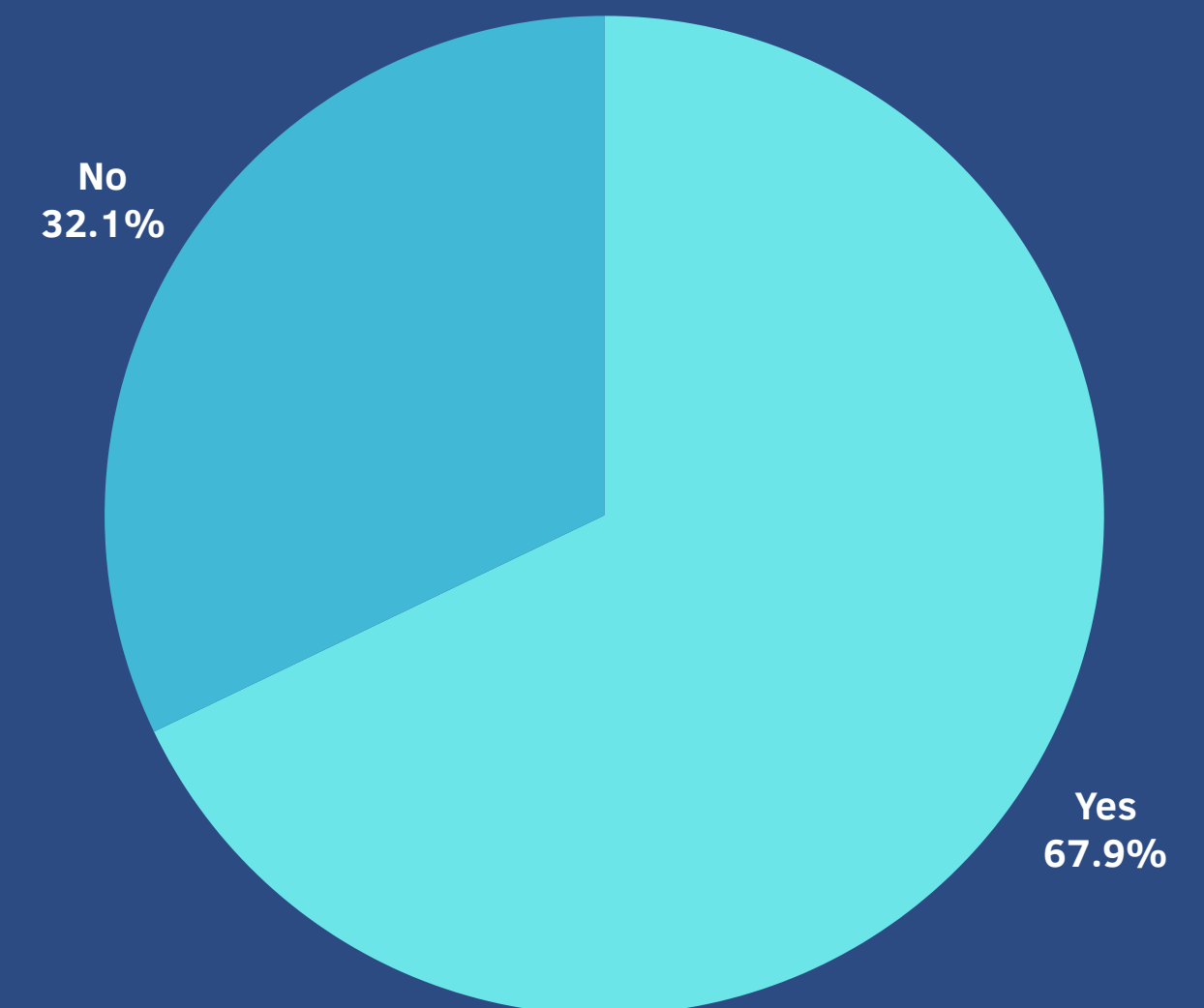
# Results

## SURVEY

Rate how concerned you are about this problem.

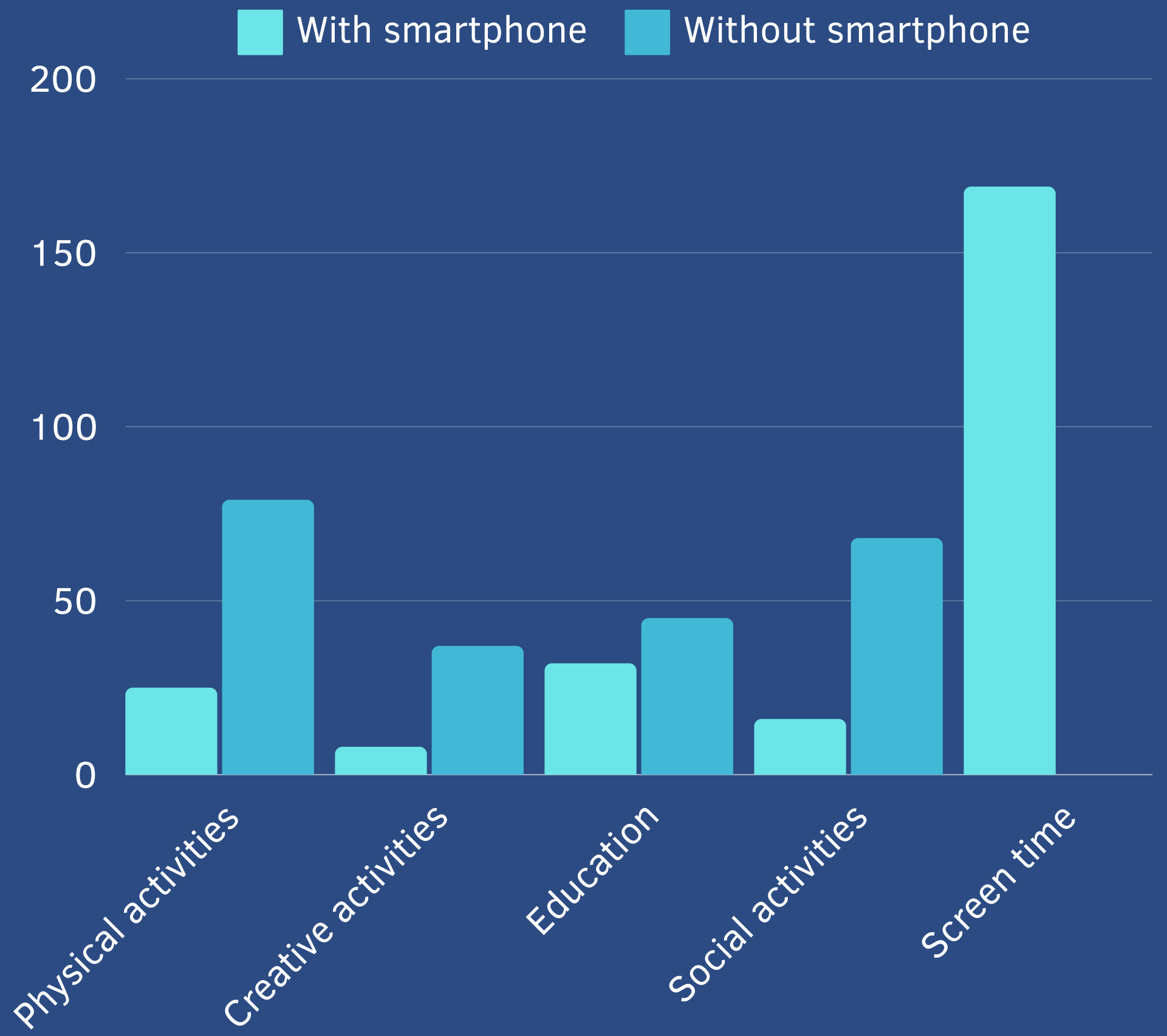


Did you face situations when children do not listen to you because they used smartphone?



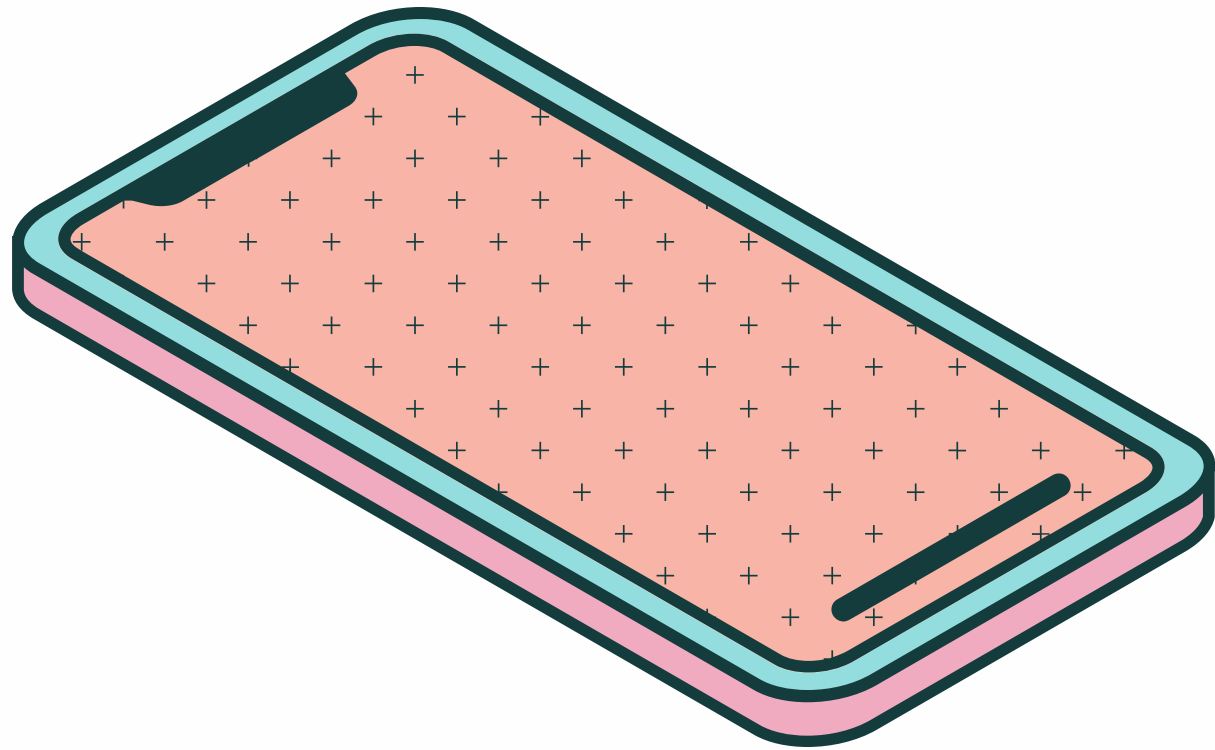
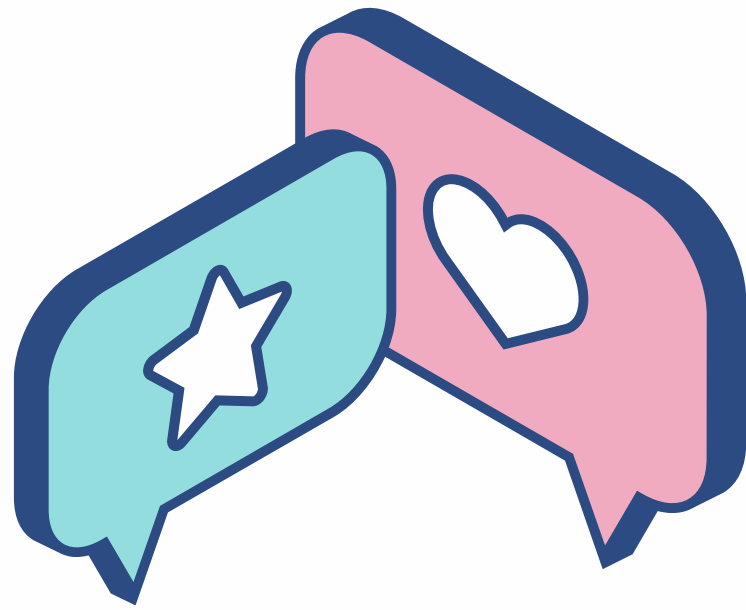
# Results

## OBSERVATION



# CONCLUSION

- Excessive smartphone use negatively impacts pre-schoolers' social skills and mental well-being.
- Factors such as early exposure to smartphones and parental concern contribute to addiction.
- Collaboration among psychologists, educators, and families is recommended to manage addiction and promote healthier technology habits.
- These insights aim to guide educators, healthcare workers, and parents in supporting children's healthy development.



# References

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