

Development of 'Rasa' Character Building in Mobile Application-Based Project Citizen for Cyberbullying Prevention in Adolescents of Junior High School North Sumatera

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Abstract

Cyberbullying is a major issue facing adolescents in the digital age, with the use of social media and mobile applications that can negatively impact their mental and emotional health. The importance of cyberbullying prevention has become a major focus in various educational programmes to protect the well-being of adolescents. This research aims to develop a mobile application that facilitates 'RASA' character building to support cyberbullying prevention among adolescents. This research used the RnD research and development method with the ADDIE model (Analysis, Design, Development, Implementation, Evaluation). The population of high school students of SMPN 2 Medan and SMPS Gajah Mada with sampling technique using purposive sampling technique. Data analysis techniques include descriptive analysis, validity test, normality test, homogeneity, reliability and reliability and paired sample t-Test test. Based on the results of the expert validity test, it shows that the character-building mobile application 'RASA' is said to be valid. This is evidenced by the average media expert validation of 91.3%, the average material expert validation of 88.7%, and the average learning design expert of 86.9%. As well as in the practicality test which resulted in a practicality level of 90.52%. This shows that the character-building mobile application 'RASA' is valid for the prevention of Adolescent Cyberbullying in adolescents. This mobile application can increase adolescents' awareness, acceptance, support, and action towards cyberbullying, thus creating a safer and healthier online environment.

Keywords: character building, mobile project citizen, cyberbullying prevention, adolescent cyberbullying.

Adolescent cyberbullying is a pressing issue that requires thorough understanding and discourse. The global prevalence of cyberbullying among adolescents has raised concerns, with research demonstrating its

adverse impact on mental health, self-esteem and suicidal ideation (Zhu et al., 2021). Research shows that adolescent victims of cyberbullying often experience decreased self-esteem and increased suicidal ideation, highlighting the

importance of interventions that consider emotional intelligence as a protective factor (Extremera et al., 2018). Understanding the risk factors and impact of cyberbullying on adolescents requires a holistic approach that considers various aspects of their lives. Factors such as parental psychological control, family dynamics, and peer influence have been identified as significant contributors to cyberbullying acts and victimization (Geng et al., 2022). For example, adolescents whose parents are controlling may be more prone to engage in cyberbullying behavior's, illustrating the intricate relationship between parenting style and adolescent behavior (Katz et al., 2019). Moreover, the impact of peer rejection, emotional regulation and aggression in cyberbullying acts underscores the need for a different understanding of individual and interpersonal dynamics in addressing this issue (Wright & Wachs, 2019). The impact of cyberbullying on mental health, including depression and anxiety, underscores the need for urgent prevention and intervention measures (Agustiningsih et al., 2024). Moreover, the intersectionality of factors such as gender, moral disengagement, and deviant peer affiliation in influencing cyberbullying behavior underscores the complexity of this issue (Liang et al., 2022). Research suggests that adolescents' vulnerability to cyberbullying may be influenced by a combination of individual characteristics, social dynamics, and environmental factors, thus emphasizing the need for multifaceted interventions to address this complexity (Liang et al., 2022). Moreover, the role of affective functioning and family communication in preventing cyberbullying behavior further confirms the importance of familial relationships in shaping adolescents' behavior and attitudes towards online interactions (Sasson & Mesch, 2017).

Adolescent cyberbullying has become a significant global problem impacting millions of young people around the world. According to a UNICEF report by 2023, an estimated 33% of

adolescents in 30 countries have experienced some form of online bullying. This troubling trend is not unique to one region; in the United States, a study conducted by the Cyberbullying Research Centre found that 36.5% of middle and high school students have experienced cyberbullying at least once in their lifetime. Similarly in Europe, a survey conducted by the European Commission revealed that 27% of teenagers have experienced cyberbullying. The consequences of such experiences are immense, often leading to severe emotional distress, anxiety, depression, and in extreme cases, suicidal thoughts. Despite increased awareness, efforts to combat cyberbullying face challenges due to the anonymous nature of the internet and the rapid evolution of digital platforms (Tomczyk & Włoch, 2019). Addressing this widespread problem requires a concerted global effort involving educators, parents, policymakers and technology companies to create safer online environments and provide adequate support for victims.

The issue of cyberbullying among adolescents in Indonesia can be viewed from various perspectives, including the increasing use of digital technology, the psychological impact, and the response of relevant institutions. In the growing digital era, the use of social media by teenagers in Indonesia has increased significantly. Data from the Ministry of Communication and Informatics (Kominfo) shows that by 2022, around 75% of teenagers in Indonesia access the internet regularly, with 85% of them using social media such as Instagram, Facebook, and Tik Tok. However, along with the increasing use of social media, cases of cyberbullying among teenagers are also increasing. Research by UNICEF in the same year revealed that 41% of the adolescents surveyed had experienced or witnessed some form of cyberbullying, whether in the form of negative comments, threats or unauthorized sharing of personal information. This phenomenon is all the more troubling because most victims of cyberbullying do not report the

incidents to adults or authorities, which makes it difficult to address these cases (PALAGHIA, 2019).

The impact of cyberbullying is significant and covers various aspects of teenagers' lives. Based on research from the Indonesian Internet Service Providers Association (APJII), around 30% of cyberbullying victims report experiencing serious psychological distress, such as anxiety, depression, and decreased self-esteem. They may also experience decreased academic performance due to emotional distress and persistent stress. In addition, cyberbullying can damage social relationships, making victims feel isolated and lonely, as they often withdraw from social interactions to avoid further harassment (Jattamart & Kwangsawad, 2021). These impacts not only affect individual victims but can also create an unsafe and unsupportive school environment, ultimately affecting the well-being of the entire school community. Not addressing these issues can exacerbate long-term negative impacts on adolescents' development and overall well-being (Yafie et al., 2021). In some extreme cases, cyberbullying has been linked to suicide among adolescents, which shows how serious this problem is.

Adolescent Cyberbullying in adolescents is interesting to study because this phenomenon is becoming increasingly common along with the increased use of technology and social media (Marengo et al., 2021). Cyberbullying, which includes teasing, threats, spreading false information, and misuse of personal data, has a serious impact on adolescents' mental, emotional, and physical health. Mbadugha et al. (2019) mentioned that adolescent victims often experience depression, anxiety, sleep disturbances, decreased self-confidence, and even suicidal thoughts or actions. The nature of cyberbullying that can happen anytime and anywhere, without the need for direct interaction, puts constant pressure on victims, making them feel unsafe both in the real world and online. Further research in this area is crucial to understanding the dynamics and mechanisms

behind cyberbullying, as well as developing effective prevention and intervention strategies (Lan et al., 2022). Understanding risk and protective factors can help create better educational programmes for adolescents and parents, to recognize and deal with the signs of cyberbullying.

The mobile application-based 'RASA' Character Coaching Technique is used as an alternative general solution to overcome the problem of cyberbullying in adolescents. 'RASA' is an acronym for Recognize, Accept, Support, and Act. The technique focuses on four main steps, namely Recognize, Accept, Support, and Act, which are designed to help adolescents face and handle cyberbullying situations in a positive and effective way. Through the Recognize step, teens are taught to recognize the signs of cyberbullying behavior, such as threatening or demeaning messages. The Accept step teaches them to accept their feelings towards the experience without feeling guilty or ashamed. Next, the Support step provides social support, both from peers and counsellors available in the mobile app, to help them manage their emotions and find appropriate solutions. Finally, the Act step encourages adolescents to take action, either by reporting cases of cyberbullying to parents or authorities, or by blocking the perpetrator from negative online interactions. Thus, the 'RASA' technique not only empowers teens to deal with cyberbullying situations, but also promotes a safer and more supportive online environment for all users of the app.

This approach not only provides a clear framework for dealing with cyberbullying situations, from recognizing the behavior to acting effectively, but also encourages users to develop empathy and engagement in addressing the problem (Redmond et al., 2020). With a focus on recognizing the signs of cyberbullying (Recognize), users are taught to identify behavior's such as harassment, insults or threats online (Fadillah et al., 2024). The ability to recognize and understand these types of

cyberbullying is a crucial first step in responding appropriately to such situations (Macaulay et al., 2021). Accept encourages users to accept their own feelings and those of others involved in the cyberbullying incident. This not only increases emotional understanding, but also builds skills in providing support to victims and reduces social isolation that often occurs in cyberbullying cases. Support, Users are taught to provide moral and practical support to victims of cyberbullying, both in person and through the help of the application platform. Finally, it refers to concrete steps that users or monitoring parties can take to address cyberbullying. These include reporting harmful behavior, seeking help from an adult or competent authority, or using safety features in the mobile app to protect themselves from further attacks.

Previous research on adolescent cyberbullying has highlighted its global prevalence and impact on adolescent mental health and well-being. Research has shown that cyberbullying behaviour among adolescents can manifest as perpetrator, victim, or both, with a significant percentage falling into each category (Fitria et al., 2023). Factors that influence cyberbullying behaviour include gender, age, peer influence, and social media use, while coping strategies such as emotionally focused coping have been identified as beneficial for victims (Hidayati et al., 2022). In addition, research has investigated cyberbullying perpetrators' reasons for their actions, with revenge, convenience, anger, and anonymity being key predictors of future cyberbullying perpetration (Wright, 2023). These findings underscore the complexity of cyberbullying in adolescents and emphasize the importance of interventions targeting attributions and coping mechanisms to reduce harmful effects and promote safer online environments for adolescents worldwide.

The study conducted by Hidayati et al., 2022 used variables from adolescent cyberbullying factors consisting of gender, age, peers and social media. This study provides innovation

with the Coaching Character Technique 'RASA' in a mobile application for cyberbullying in adolescents. Methodologically, the previous study by Hidayati et al., 2022 used the literature review method with a total of 20 articles that met the inclusion criteria, the research to be conducted uses the RnD development method with the ADDIE model. While in the context of the research by Wright (2023) using participants as many as 216 adolescents from the suburbs of a large Midwestern city in the United States. This research will be conducted at SMP Negeri 2 Medan and SMPS Gajah Mada, with a sample size of 60 students.

Cyberbullying has become an increasingly troubling issue among teenagers as technology develops and access to social media becomes easier. The negative impact is very significant, including stress, anxiety, depression, as well as decreased academic performance and social relationships, even to the risk of suicide. In this context, the development of a mobile application-based 'RASA' (Recognize, Accept, Support, and Act) character coaching technique is essential as an effective solution. This technique aims to build strong character and improve adolescents' ability to deal with and prevent cyberbullying. The use of mobile applications offers easy access and flexibility, allowing adolescents to be more prepared and resilient in dealing with various forms of cyber bullying. This research focuses not only on preventing cyberbullying, but also on improving adolescents' mental and emotional well-being in the digital age, as well as providing prevention strategies that can be adopted by educational institutions and communities, thus contributing to the creation of a safer and more supportive digital environment for adolescents. This research aims to develop a mobile application that facilitates 'RASA' character building to prevent cyberbullying among adolescents

Literature Review

Coaching Character Technique "RASA" in Mobile Application-Based

The mobile app-based ‘RASA’ (Recognize, Accept, Support, Act) Character Coaching technique has significant potential to address cyberbullying among adolescents. ‘Recognize’ helps teens understand and identify the signs of cyberbullying, which often go unreported due to fear or lack of knowledge. ‘Accept’ encourages teens to acknowledge their experiences and seek help, creating a sense of acceptance and reducing isolation. ‘Support’ emphasizes the importance of social support from peers, family and professionals, which can be provided through app features that connect teens with resources and counsellors. ‘Act’ provides guidance and tools for concrete actions to stop and report cyberbullying, including self-protection strategies and anonymous reporting. The integration of the ‘RASA’ technique in the mobile app offers a holistic approach that combines education, support, and action, thereby improving adolescents’ ability to face and cope with the negative impact of cyberbullying. Tables 1 and 2 below show the features and instructional design of the mobile app-based ‘RASA’.

Table 1. App feature

Application Features	Description
Introduction to cyberbullying	Educational modules on cyberbullying, including signs, effects, and how to recognise it.
Emotional recognition and support	An anonymous platform to share experiences and receive support from peers and counsellors
Incident reporting	Tools to anonymously report incidents of cyberbullying to authorities.
Self-protection strategies	Tips to protect yourself from cyberbullying, including a privacy settings tutorial.
Emotion map	A feature to track and record daily emotions, helping teens recognise emotional changes.
Peer support	A peer mentoring programme that provides additional support.
Educational resources	Access to articles, videos and educational materials on cyberbullying and mental health.
Notifications and reminders	Automatic reminders for emotional check-ins, counselling sessions, and daily tips for managing cyberbullying

Table 2. Instructional design

Instructional Design	Description
Videos, Infographics, and Interactive Quizzes	Used to improve user understanding
Discussion Forum	Used for experience sharing and support
Reporting Form	Used for reporting tools
Emotion Journal	Used to recognise emotional changes
Digital Library	Used to access articles, videos, educational materials

Adolescent Cyberbullying

Torres et al. (2020) explains cyberbullying is one of the four categories of bullying, which includes verbal, physical, indirect (relational bullying), and social media bullying. Kintonova et al. (2021) define cyberbullying as aggressive behavior carried out repeatedly by a person or group using social media, so that the victim cannot defend themselves. Whiting et al. (2019) concur, stating that deliberate and repeated aggression using social media makes victims unable to protect themselves. Hellsten (2017) added that cyberbullying is characterized by a power differential between the perpetrator and the victim. Cyberbullying often occurs among adolescents on social media using cell phones and involves cruel actions such as sending or posting harmful material (Abaido, 2020). Franco & Ghanayim (2019) also mentioned that cyberbullying includes the act of hurting others through communication technology, such as bad comments, harassment messages, inappropriate images, and threats made repeatedly. Table 3 below shows the scale of cyberbullying behavior according to Willard (2005):

Table 3. Dimensions and indicators adolescent cyberbullying

Instructional Design	Description
Flaming	1. Sending hateful comments 2. Using abusive language 3. Engaging in heated online arguments
Harassment	1. Intimidating 2. Making continuous threats through social media 3. Spreading rumors to harass someone

Denigration	<ol style="list-style-type: none"> 1. Spreading false information 2. Creating content that demeans others 3. Using manipulated photos/videos to mistreat someone
Impersonation	<ol style="list-style-type: none"> 1. Pretending to be someone else online to make that person look bad 2. Creating a fake account to cheat 3. Using someone else's identity without permission to cause harm
Outing	<ol style="list-style-type: none"> 1. Sharing someone's personal or confidential information without permission 2. Posting personal photos or videos without consent 3. Forcibly revealing someone's sexual orientation
Trickery	<ol style="list-style-type: none"> 1. Tricking someone into giving out personal information 2. Tricking others to gain access to their personal accounts. 3. Exploiting someone's trust for negative purposes.
Exclusion	<ol style="list-style-type: none"> 1. Intentionally excluding someone from an online group 2. Creating a closed forum that intentionally excludes certain individuals 3. Organizing online activities and deliberately not inviting someone
Cyberstalking	<ol style="list-style-type: none"> 1. Excessively following someone's online activities 2. Sending persistent messages of a threatening nature. 3. Using someone's personal information to scare them.

Research Method

Figures and Tables (Subsection Level 2)

This study uses the RnD research and development method with the ADDIE model (Analysis, Design, Development, Implementation, Evaluation). This model was chosen with the intention of developing a mobile application-based "RASA" character coaching technique in preventing cyberbullying among adolescents. The steps in this research can be seen in Figure 1 below. Insert figures in a high resolution especially when they contain small details.

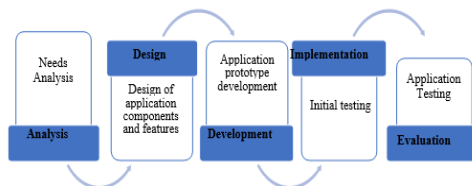


Figure 1. Research procedures

This study uses a research and development (RnD) method with the ADDIE model which consists of several stages. The analysis stage included identification of the prevalence of cyberbullying, data collection through observation and needs analysis of adolescents and educators. At the design stage, the 'RASA' technique framework was designed with Recognize, Accept, Support, and Act components, as well as the flow and features of the mobile application. The development stage includes the development of application prototypes. The implementation stage is carried out by initial testing of the application for adolescents, as well as monitoring the use of the application. The evaluation stage includes testing the application and assessing it through questionnaires and behavior change analysis, as well as improving the application based on the evaluation results.

The research design used is a one group pre-test post-test design. Before giving treatment, students were first given a pre-test question (initial test) and at the end of learning students were given a post-test question (final test). The research design can be seen in Figure 2.

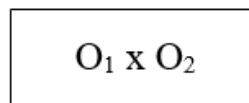


Figure. 2. One group pre-test post-test design

Description:

O1 : Pre-test score before treatment

O2 : Post-test score after treatment

X : Treatment applied using the mobile application-based ‘RASA’ character coaching technique.

Population, Sample, and Sampling Technique

The population in this study were students of SMPN 2 Medan. H.M. SAID NO. 19, Gaharu, Kec. Medan Timur, Medan City and and SMPS Gajah Mada Jl. Brigjend. Katamso, Medan Maimun, Medan City The population in this study were all students who were in grade 3. The sampling technique used purposive sampling technique. So that the sample used was 60 respondents from the entire population.

Data Collection Process

The instrument used to collect information in data collection in this development research is a questionnaire or questionnaire. The instrument used is a cyberbullying behavior scale with dimensions consisting of a Flaming dimension of 3 items, a Harassment dimension of 3 items, a Denigration dimension of 3 items, an Impersonation dimension of 3 items, an Outing dimension of 3 items, a Trickery dimension of 3 items, an Exclusion dimension of 3 items, and a Cyberstalking dimension of 3 items.

Data Analysis

The data analysis technique in this study uses descriptive analysis which aims to describe the results of validation from experts. Validity, normality, homogeneity, reliability and paired sample t-Test tests were used to ensure the accuracy and consistency of the data obtained. The paired sample t-test was used in an effort to develop the feasibility of the mobile application-based ‘RASA’ character coaching technique for cyberbullying prevention for adolescents.

Result and Discussion

Result

Expert Validity Test Result

Table 4. Media expert validation

No	Dimension	Percentage	Notes
1	Design	95%	Valid
2	Content Accuracy	88,85%	Valid

3	Clarity and Ease of Use	89,50%	Valid
4	Technology Needs	92%	Valid
Overall Media Expert		91,3%	Valid

Table 4 above provides a brief overview of the assessment of several aspects of media products conducted by professionals. Design achieved the highest score of 95%, followed by content accuracy with a score of 88.85%, clarity and ease of use with a score of 89.50%, and technological needs with a score of 92%. The media product achieved an overall score of 91.3%, with all aspects considered ‘valid’.

Table 5. Material expert validation

No	Dimension	Percentage	Notes
1	Coaching Character Technique	86%	Valid
2	Adolescent Cyberbullying	91,25%	Valid
Overall Material Expert		88,7%	Valid

Table 5 presents the assessment of two dimensions by the material expert. The Coaching Character Technique dimension scored 86% in the ‘valid’ category, while the Adolescent Cyberbullying dimension scored 91.25% in the ‘valid’ category. Overall, the material expert assessment averaged 88.7% and was classified as ‘valid’.

Table 6. Learning design expert validation

No	Dimension	Percentage	Notes
1	Learning Objectives	84%	Quite Valid
2	Learning Strategy	89,60%	Valid
3	Learner Assessment	87%	Valid
Learning Design Expert Overall		86,9%	Valid

Table 6 summarizes the evaluation of various dimensions of learning design. Learning objectives scored 84% in the ‘quite valid’ category. The learning strategy scored 89.60%, categorized as ‘valid’. Learner assessment scored 87% in the ‘valid’ category. Overall, the learning design expert evaluation averaged 86.9%, and was classified as ‘valid’.

Table 7. User practicality test

No	Dimension	Percentage	Notes
1	Usability	88%	Very Practical
2	Reliability	93%	Very Practical
3	Functionality	89,6%	Very Practical
4	User Satisfaction	91,6%	Very Practical
Learning Design Expert Overall		90,52%	Very Practical

Table 7 presents the evaluation of various design dimensions by learning experts. Usability scored 88%, Reliability 93%, Functionality 89.5%, and User Satisfaction 91.6%, with all dimensions classified as ‘very practical’. Overall, the design scored an average of 90.52% and was categorized as ‘very practical’.

Instrument Validity and Reliability Test

Table 8. Validity and reliability test results

Dimension	Indicator	r-count	r-table	Description	Alpha Cronbach	Description
Flaming	Item 1	0.820	0.300	Valid	0.876	Reliable
	Item 2	0.682	0.300	Valid		
	Item 3	0.716	0.300	Valid		
Harassment	Item 4	0.697	0.300	Valid		
	Item 5	0.703	0.300	Valid		
	Item 6	0.710	0.300	Valid		
Denigration	Item 7	0.691	0.300	Valid		
	Item 8	0.781	0.300	Valid		
	Item 9	0.729	0.300	Valid		
Impersonation	Item 10	0.736	0.300	Valid		
	Item 11	0.742	0.300	Valid		
	Item 12	0.749	0.300	Valid		
Outing	Item 13	0.807	0.300	Valid		
	Item 14	0.723	0.300	Valid		
	Item 15	0.768	0.300	Valid		
Trickery	Item 16	0.775	0.300	Valid		
	Item 17	0.762	0.300	Valid		
	Item 18	0.788	0.300	Valid		
Exclusion	Item 19	0.794	0.300	Valid		
	Item 20	0.801	0.300	Valid		
	Item 21	0.755	0.300	Valid		
Cyberstalking	Item 22	0.814	0.300	Valid		
	Item 23	0.678	0.300	Valid		
	Item 24	0.827	0.300	Valid		

Table 8 shows the results of the validity test of all dimensions show the value of r-count > r-table, so that all dimensions are categorized as valid. While in the reliability test, all dimensions have a Cronch alpha value of 0.876, so that all dimensions are categorized as reliable.

Descriptive Analysis

Table 9. Descriptive analysis results

Dimension	Pretest		Posttest		Gain
	Mean	Stdev	Mean	Stdev	
Flaming	3.24	0.351	2.25	0.278	0.99
Harassment	3.25	0.367	2.32	0.294	0.93
Denigration	2.99	0.405	2.56	0.332	0.43
Impersonation	3.89	0.416	2.67	0.343	1.22
Outing	3.77	0.372	2.75	0.299	1.02

Trickery	3.93	0.384	2.11	0.311	1.82
Exclusion	3.10	0.395	2.45	0.322	0.65
Cyberstalking	3.27	0.426	2.56	0.353	0.71
Average	3.43	0.39	2.46	0.32	0.97

Table 9 shows the results of descriptive statistical analysis which can be described the results of the pretest of students, obtained the average score of students 3.43. While the results

of the posttest of students, obtained the average score of students 2.46.

Hypothesis Test

Table 10. Hypothesis test results

		Paired Samples Test					
		Paired Differences			t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean			
Pair 1	Pretest - Posttest	0.97111	0.39546	0.13182	7.367	8	0.000

Based on the results of the paired sample t-test test above, the Sig (2-tailed) value is $0.000 < 0.05$, it can be concluded that there is a difference in the average learning outcomes of students for the experimental class pre-test and the experimental class post-test (Coaching Character Technique ‘RASA’). Thus, it can be concluded that there is an effect of Coaching Character Technique ‘RASA’ in Mobile Application-Based Project Citizen on Adolescent Cyberbullying in adolescents.

Discussion

Based on the results of the expert validity test, it shows that the character-building mobile application ‘RASA’ is said to be valid. This is evidenced by the average media expert validation of 91.3%, the average material expert validation of 88.7%, and the average learning design expert of 86.9%. And in the practicality test resulted in a practicality level of 90.52%. This shows that the character-building mobile application ‘RASA’ is valid for the prevention of adolescent cyberbullying in adolescents.

Prevention of cyberbullying in adolescents is very important because the negative impacts can affect their mental, emotional, and social health (Khairi et al., 2022). Cyberbullying often occurs through social media and online platforms that can cause stress, depression, anxiety, and even suicidal thoughts in victims. In addition, adolescents involved in cyberbullying, both as perpetrators and victims, tend to experience

decreased academic performance and social isolation. Prevention should include raising awareness about the importance of empathy and responsibility in online interactions, to help shape a generation that is more aware and concerned about the impact of their actions online. The prevention of cyberbullying also requires active roles from various parties, including families, schools and communities (Criado et al., 2021). Parents should supervise their children's online activities and provide an understanding of internet etiquette. Education on the impact of cyberbullying and how to deal with it should start early at home. Schools need to integrate anti-cyberbullying programmed into their curriculum, engaging students in discussions and activities that teach the values of empathy, mutual respect, and the importance of maintaining one's own and others' privacy online (Yafie et al., 2021). Collaboration between teachers, counsellors and students is essential to create a supportive school environment free from digital violence.

The importance of using the mobile application-based ‘RASA’ (Recognize, Accept, Support, Act) Character Coaching technique in the prevention of adolescent cyberbullying is significant in the context of the current digital era. This mobile application implementing the ‘RASA’ technique provides an innovative and accessible approach to support adolescents in recognizing the signs of cyberbullying,

accepting the situation at hand, getting the necessary support, and taking appropriate action to address the problem. The Recognize technique helps adolescents recognize the signs of cyberbullying more effectively. The study found that adolescents who were able to recognize the early symptoms of cyberbullying were more likely to seek help and take preventive measures (Pyżalski et al., 2022). Mobile applications can provide information and education on the various forms of cyberbullying and the symptoms that may arise (Méndez et al., 2020). As a result, adolescents become more aware of situations that they are experiencing or that may happen to their friends. This awareness is a crucial first step in the prevention and treatment of cyberbullying, as it allows for early and appropriate intervention.

The Accept technique encourages adolescents to accept situations that occur without feeling ashamed or afraid. Research by Eigenhuis et al. (2021) emphasizes the importance of acceptance in dealing with cyberbullying situations. This research shows that adolescents who accept and acknowledge their experiences tend to have better emotional well-being and are more open to receiving help (Cotney & Banerjee, 2019). The app provides a safe and anonymous space for teens to talk about their experiences without fear of judgement. Through features such as moderated chat rooms or online counselling, teens can feel heard and understood. This acceptance is important so that teens do not feel alone and realize that cyberbullying is a serious issue and must be addressed (Florang, 2019). In addition, the app includes testimonials from other teens who have experienced and successfully overcome cyberbullying, providing hope and a sense of solidarity. The support provided through the 'RASA' technique can help adolescents deal with the impact of cyberbullying. Studies found that strong social support, both from peers and professionals, is crucial in helping adolescents cope with the stress and trauma caused by cyberbullying (Yafie et al., 2022). Mobile apps

can provide access to counsellor contacts and guidance on coping with stress. In addition, these apps can offer features such as guided meditation, breathing exercises, or self-help programmed to help adolescents build emotional resilience. This ongoing support helps adolescents build the necessary coping skills to deal with the challenges they face online (Bhattacharya et al., 2019). With the right support, adolescents can recover from the negative impact of cyberbullying and refocus on their personal development.

As well as on the action (Act) taken by adolescents is a key step in breaking the chain of cyberbullying. research by Yurdakul & Ayhan (2023) the effectiveness of action (Act) taken by adolescents to overcome cyberbullying. The study found that adolescents who took proactive measures, such as reporting incidents and protecting their privacy, were better able to reduce the frequency and impact of cyberbullying (Kaluvarachchi et al., 2020). The app can provide practical guidance on reporting cyberbullying incidents to authorities or social media platforms, steps to protect online privacy, and ways to advocate for oneself and others. It also provides simulations that help teens practice appropriate responses to cyberbullying. With this guidance, adolescents are encouraged to not only act for themselves but also become agents of change in their communities. Overall, the 'RASA' Character Coaching approach has great potential in preventing and addressing adolescent cyberbullying (Yafie et al., 2023). By utilizing mobile technology, this approach can provide the education, support, and guidance needed to help adolescents overcome challenges in the digital world. The integration of 'RASA' techniques in mobile applications can increase adolescents' awareness, acceptance, support, and action towards cyberbullying, thereby creating a safer and healthier online environment.

Conclusion

The character-building mobile application 'RASA' is declared valid based on the results of

the expert validity test. The average validation of media experts is 91.3%, the average validation of material experts is 88.7%, and the average learning design expert is 86.9%. And the average practicality test was 90.52%. By implementing the 'Recognize, Accept, Support, Act' technique, the findings are a reliable tool to increase adolescents' awareness, acceptance, support, and action towards cyberbullying. The Recognize technique helps adolescents recognized the early signs of cyberbullying, increasing their awareness of the situation at hand. The Accept technique encourages teens to accept the situation without shame, by providing a safe and anonymous space to talk about their experiences. The Support technique provides strong social support, both from peers and professionals, helping adolescents cope with the stress and trauma of cyberbullying. The Act technique provides practical guidance for taking proactive measures such as reporting incidents and protecting online privacy. The app is essential in

the digital age to protect adolescents' mental, emotional and social health, by involving families, schools and communities in prevention efforts. The use of the 'RASA' app can create a safer and healthier online environment, helping teens overcome challenges in the digital world and forming a generation that is more aware and caring of the impact of their actions.

Conflict of Interest

The authors declare no conflict of interest.

Author Contributions

Deny Setiawan conducted the research and wrote the paper; Halking analyzed the data; Helminsyah proofread and finalized the article. All authors have approved and approved the final version.

Acknowledgment

We would like to thank the principals, teachers, and administrative staff who have given permission and support to conduct this research at SMPN 2 Medan and SMPS Gajah Mada.

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