

Original Article

Developing Adolescents' Attitudes Toward Seeking Psychological Help: A Quasi-Experimental Study

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Abstract

Objective: This study aimed to improve adolescents' attitudes toward seeking psychological help.

Materials and Methods: The study population consisted of adolescents from a girls' vocational high school in a district (n=294). The sample consisted of 224 participants. First of all, the classes were divided into strata using stratified sampling. A pretest was administered to all participants (n=224). Participants were randomly assigned to groups from each stratum: Group A (n=112) and Group B (n=112). One week later, Group A received two motivational interviewing and one digital movie screening per week, while Group B received one digital movie screening. All interventions took two weeks to complete. Seven weeks later, a posttest was administered to all participants.

Results: One in five participants knew enough about professional psychological help services (20.1%). Less than a quarter of the participants stated that they had received professional psychological help before (13.4%). One-third of the participants considered seeking psychological help (33.9%). The educational intervention moderately helped Group A participants develop positive attitudes toward seeking psychological help. While the interventions helped the participants develop psychological resilience to a limited extent, the educational intervention significantly reduced the stigmatization tendencies of Group A participants.

Conclusion: The results emphasize the importance of interventions applied to adolescents. We suggest that authorities conduct motivational interviewing with adolescents to help them improve their mental health and develop positive attitudes toward seeking psychological help. Digital stories also help adolescents to develop positive attitudes toward seeking psychological help.

Keywords: Adolescent, Attitude, Digital Movie, Seeking Psychological Help, Motivational Interviewing

Introduction

Adolescence is the transition period from childhood to adulthood. Adolescents acquire knowledge and develop skills and attitudes needed in adulthood. Adolescents must accomplish many developmental tasks while undergoing biological changes (Viner et al., 2012). However, they adopt health-disrupting behaviors along with biological changes and

experience mental health problems (Kieling et al., 2011).

Help-seeking for mental health problems involves seeking understanding, information, advice, treatment, and general support in response to a mental health problem or distressing experience (Rickwood et al., 2005). Help-seeking for mental health problems is determined by individual, sociocognitive, and

structural factors as well as social interactions and cultural routines (Lynch et al., 2018). Help-seeking is also an important step toward accessing mental health support and improving quality of life (Salaheddin and Mason, 2016). However, people often delay or avoid seeking help for mental health problems (Xu et al., 2018). Adolescents most in need of mental health care are reluctant to seek help (Aguirre Velasco et al., 2020). People who do not access formal and effective sources of help on time suffer from severe mental health disorders because their illnesses are detected and treated too late. If left untreated, mental health problems can lead to adverse health, academic, and social outcomes, drug use, self-harm, and suicidal behaviors. These severe problems continue into adulthood (Radez et al., 2021). We must better understand help-seeking attitudes to overcome this gap (Aguirre Velasco et al., 2020). Therefore, we need more research into adolescents' attitudes and barriers to help-seeking. Authorities should also formulate interventions to help adolescents develop positive attitudes toward help-seeking. To that end, researchers have developed numerous approaches, one of which is motivational interviewing.

Motivational interviewing (MI) is client-oriented and directive counseling that aims to resolve conflicting emotions so that one can make behavioral changes. Motivational interviewing helps people find their own solutions (Ozpulat and Emiroglu, 2020). It has been used in a variety of studies, including substance abuse (Brewer et al., 2017), alcohol use (Nyamathi et al., 2010), depression (Satre et al., 2016), and anxiety (Holt et al., 2017). It also helps to motivate individuals to seek help for mental health problems (Lawren et al., 2017). Short-term MI, which is as effective as long-term MI, increases mental health and treatment adherence (Lawrence et al., 2017). Syzdek et al. (2014) reported that MI was effective on stigma. However, no research has investigated whether MI increases psychological resilience, reduces stigmatization, or improves help-seeking attitudes in adolescents. Therefore, this study aimed to improve adolescents' attitudes toward seeking psychological help.

Research Question: Do motivational interviewing and digital stories help adolescents develop psychological help-seeking attitudes?

Materials and Methods

Participants: Calculation of the sample size and statistical power of the quasi-experimental design is very important because it affects the validity of the study results (Maciejewski, 2020). The sample size was calculated using G*power software (Faul et al., 2007). According to Titov et al. (2011), given the effect size of 0.64, with a statistical power of 0.8 and a confident level of 0.05, a sample of about 138 subjects is needed. G*Power 3.1.9.7 (a program developed by the G*Power Team) was used to calculate the minimum sample size to analyse the differences between two groups with two-tailed *t* test. The population of this quasi-experimental study consisted of 294 adolescents (9th, 10th, and 11th grades) from a girls' vocational high school in a district between April and June 2022. Twelfth-graders (*n*=70) were excluded because they were doing internships at the time of the study. The classes were stratified using stratified sampling. The sample consisted of 224 participants (74 ninth graders, 74 tenth graders, and 76 eleventh graders).

Instruments of Data Collection:

Data were collected using **A Personal Information Form (PIF)**, the **Child and Adolescent Psychological Resilience Scale (CAPRS)**, the **Self-Stigma of Seeking Psychological Help Scale (SSOSH)**, and the **Attitudes Toward Seeking Psychological Help Scale Short Form (ASPHS-SF)**.

A pretest (PIF, CAPRS, SSOSH, and ASPHS-SF) was administered to all participants. Then, adolescents were randomly assigned to groups from each stratum on the "randomizer.org" website: Group A (*n*=112) and Group B (*n*=112). One week later, Group A attended two MI sessions per week and watched one digital movie, while Group B watched one digital movie. Participation in each intervention was limited to 28 people. A total of 12 sessions were held. Each MI lasted 30 minutes, while the digital movie lasted 15 minutes. All interventions were completed in a total of two weeks during school hours. Seven weeks after

the interventions, all participants were administered a posttest (CAPRS, SSOSH, and ASPHS-SF).

The criteria for inclusion included: (1) Enrollment as a student at a girls' vocational school. (2) Participation on a voluntary basis.

The criteria for exclusion included: (1) withdrawing from the study and (2) failing to fill out the data collection tools.

Figure 1 shows the sampling process and the interventions.

Intervention

Motivational Interviewing (MI) Steps: The researcher attended a two-stage Motivational Interviewing Technique course before conducting motivational interviewing. She also has publications on "Motivational Interviewing Technique." Group A (MI+ Digital Story) received two MIs and one digital movie screening per week, while Group B (Digital Story) received one digital movie screening per week. In addition, the "Stage of Change Evaluation Form" (to be filled in both MIs) was administered to all participants.

Motivational Interviewing 1: The 30-minute motivational Interviewing 1 was applied to Group A (MI+ Digital Story) in four groups of 28 participants. The interviewing was about the importance of mental health, mental health problems in adolescence, and the importance of seeking psychological help. Participants were asked to reflect on the perceived consequences of their attitudes toward seeking psychological help and to write down the benefits of seeking psychological help. They were also asked to identify and reflect on the barriers that prevented them from receiving psychological help until the following interviewing.

Motivational Interviewing 2: The 30-minute motivational Interviewing 2 was applied to Group A (MI+ Digital Story) in four groups of 28 participants. Participants were asked to describe the barriers preventing them from seeking psychological help in times of need. They were again asked to explain the benefits of receiving psychological help. They were encouraged to find out how receiving psychological help in times of need could positively affect their health and make them happier. They were asked to identify the sources of support that could help them overcome the

barriers preventing them from receiving psychological help and how they could effectively use those sources. They were asked to reward themselves for receiving psychological help in times of need and to write down what they thought they gained from receiving psychological help and how they felt. They were told they could get the researchers' support by phone whenever needed. The interviewing was terminated after the entire program was evaluated with the participants.

Digital Story: A digital story was created using Plotagon. Permission was obtained to use the program. Four academics in nursing assessed the story for intelligibility and relevance. All participants viewed the story. The topic and content of the digital story were based on a literature review conducted by the researchers (Aguirre Velasco et al., 2020; Radez et al., 2021).

The subject of the digital story; Elif is a 16-year-old high school student. She is attending a course to prepare for the university exam. She wants to become a lawyer. She lost her father a year and a half ago due to a heart attack. She lives with her mother and elder brother. She is in a romantic relationship that started only a week ago. Her mother and elder brother describe her as sociable but a bit shy. She is academically well-adjusted and gets along well with her teachers, but she is not a hard worker. She is popular among her friends. She spends her free time playing computer games and texting her friends. She has been suffering from chest pain, palpitations, constriction, and a sense of suffocation for 1.5 years. She reported experiencing helplessness, fear, and anxiety when she was with her dad as he was dying. Therefore, she avoids and is afraid of being alone at home. She visited different cardiologists five times with complaints of chest pain, palpitations, constriction, and a feeling of suffocation as she believed that she might have a heart attack and that there might be something wrong with her heart. Her complaints persisted, although all cardiologists told her there was nothing wrong with her heart. She also visited the Family Health Center in her neighborhood several times due to the same complaints. She has not sought any psychological help before. She is very afraid and ashamed of seeking psychological help.

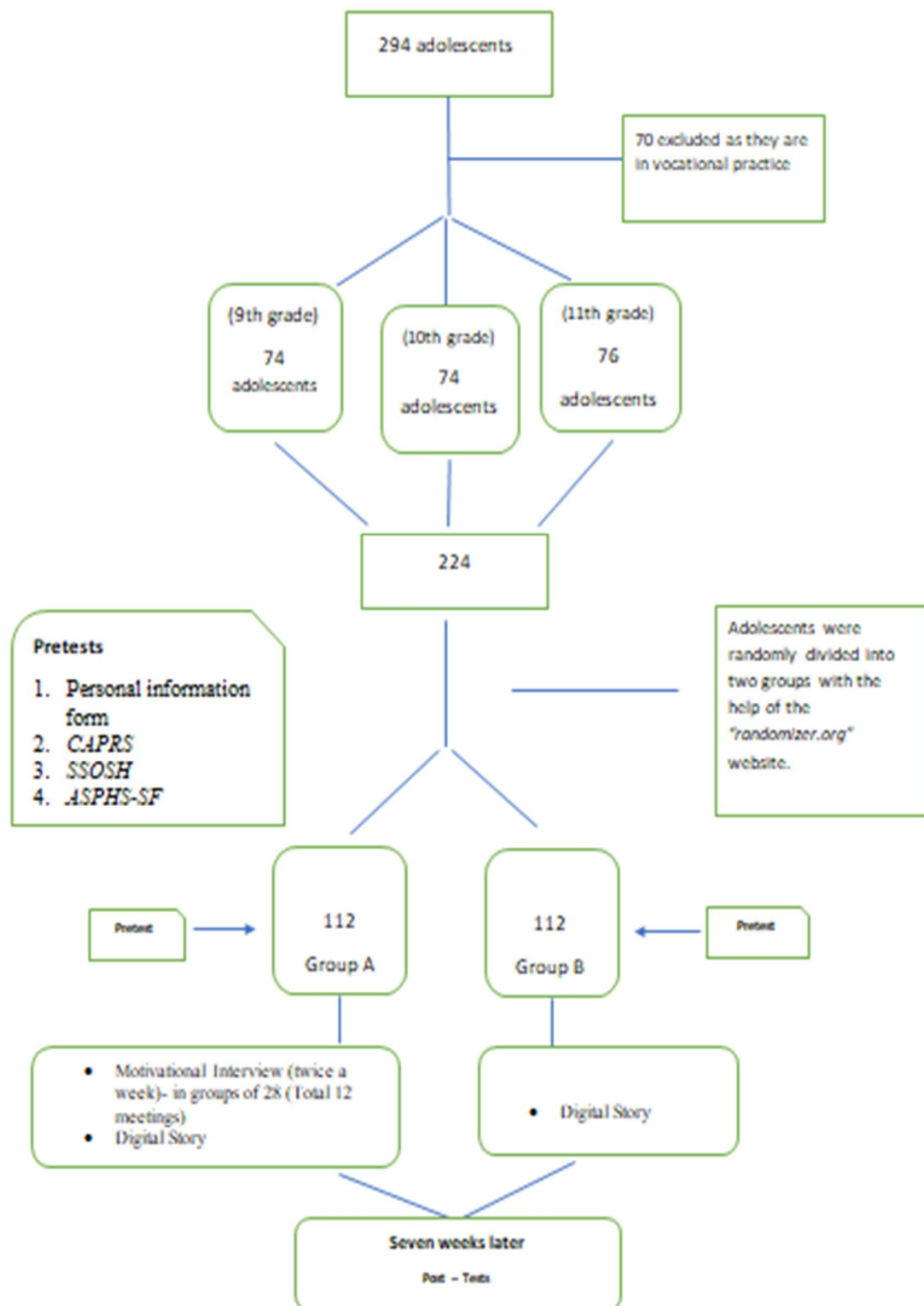


Figure 1. The Sampling Process and the Interventions

One day, she visited the Family Health Center with her mother because of chest pain, palpitations, constriction, and suffocation. There she had a consultation with a nurse named Ayse. Ayse wants Elif to conquer her fear and anxiety about getting psychological help and ensure that she gets it. Ayse played an active role in ensuring that Elif got psychological help. A significant part of the story consists of dialogues between Ayse and Elif. Ayse makes a consistent effort for Elif to seek psychological help. At the end of the story, Elif becomes more enthusiastic about seeking psychological help.

Data Collection Tools: The data were gathered using several assessment tools, including a Personal Information Form (PIF), the Child and Adolescent Psychological Resilience Scale (CAPRS), the Self-Stigma of Seeking Psychological Help Scale (SSOSH), and the Short Form of the Attitudes Toward Seeking Psychological Help Scale (ASPHS-SF).

Personal Information Form: The Personal Information Form (PIF) comprised 25 questions related to demographics, such as age, gender, parents' education and occupations, family structure, household income, health status, overall well-being, awareness of individuals with mental disorders, and previous experiences of receiving psychological assistance.

Child and Adolescent Psychological Resilience Scale: The Child and Adolescent Psychological Resilience Scale (CAPRS), developed by Liebenberg, Ungar, and Van de Vijver in 2012, includes 12 items scored on a five-point Likert scale. Scores can range from 12 to 60, with higher values reflecting greater psychological resilience. The Turkish adaptation of this scale was completed by Arslan in 2015, achieving a reliability coefficient (Cronbach's alpha) of .91, while the current study reported a value of .81.

Self-Stigma of Seeking Psychological Help Scale: The Self-Stigma of Seeking Psychological Help Scale (SSOSH), created by Vogel et al. in 2006, contains ten items

measured on a five-point Likert scale. The initial development involved four studies with college students, leading to the refinement of an original 28-item draft down to ten items focused on the stigma attached to seeking psychological help. The Turkish version was adapted by Arslan in 2015, with a Cronbach's alpha of .71 (Acun-Kapikiran and Kapikiran, 2013), and the present study recorded a reliability of .79.

Attitudes Toward Seeking Psychological Help Scale Short Form: The Short Form of the Attitudes Toward Seeking Psychological Help Scale (ASPHS-SF), initially developed in 1997 and later revised by Turkum in 2004, consists of 18 items evaluated on a five-point Likert-type scale. The total score ranges from 18 to 90, where higher scores indicate more favorable attitudes toward seeking psychological services. The reliability of this scale, according to Turkum (2004), is .87, and the current study yielded a Cronbach's alpha of .83.

Ethical Information: The study was approved by the Non-Invasive Ethics Committee of the Faculty of Medicine of Selcuk University (Decision No: 2022/08, E-70632468-050.01.04-261851). Approval was secured from the developers of the scales. The research protocol and approval processes were conducted in accordance with the principles outlined in the Declaration of Helsinki. Participants received information regarding the purpose of the research, the procedures involved, and confidentiality measures. Informed consent was obtained from individuals who chose to participate.

Data Analysis: The analysis of the data was conducted using the Statistical Package for Social Sciences (IBM SPSS Corp; Armonk, NY, USA, version 22.0). To assess normality, the Kolmogorov-Smirnov and Shapiro-Wilk tests were performed, revealing that the data followed a normal distribution. Descriptive statistics, including frequency, percentage, arithmetic mean, and standard deviation, were utilized. A dependent-groups t-test was employed to compare the scale scores from

the pretest and posttest. The effect size was calculated using Cohen's d.

Results

Participants had a mean age of 15.68 ± 1.09 years (min:13 – max:18). Most participants had mothers with primary (50.9%) or middle school degrees (38.4%). Most participants had fathers with middle (37.5%), high (35.7%), or primary school degrees (24.1%). Most participants had unemployed mothers (77.7%). More than half of the participants had

fathers who were self-employed (30.4%) or workers (31.3%). More than half of the participants had nuclear families (67%). A quarter of the participants had extended families (25.9%). Most participants had a neutral (income = expense) (45.5%) or negative income (income < expense) (43.3%). Eighteen participants had health problems (asthma, bronchitis, allergy, diabetes, Familial Mediterranean Fever, heart disease, etc.). More than half of the participants rated their general health status at least eight on a scale of 0 to 10 (57.6%).

Table 1. Characteristics Related to Receiving Professional Help

Do you know anyone with a mental disorder or illness? (n=224)	
Yes	100(44.6)
No	100(44.6)
No idea	24(10.8)
Who has a mental disorder or illness? (n=100)	
Himself/herself	7(7.0)
Friend	15(15.0)
Relative	20(20.0)
Acquaintance	58(58.0)
Do you know enough about professional psychological help services (n=224)	
Yes	45(20.1)
No	179(79.9)
Have you ever had professional psychological help? (n=224)	
Yes	30(13.4)
No	194(86.6)
From whom did you receive professional psychological support? (n=7)	
Psychiatrist	1(14.3)
Psychologist	4(57.1)
Psychological Counselor	2(28.6)
Did professional help work? (n=25)	
No	7(28.0)
A little	6(24.0)
A lot	6(24.0)
Other	6(24.0)
Would you consider seeking professional psychological help if you needed it right now? (n=215)	
Yes	76(33.9)
No	139(62.1)
Why would you not consider seeking professional psychological help? (n=133)	
I do not think it would be useful	60(65.9)
I do not know where to get help	4(4.4)

I do not trust healthcare professionals	1(1.1)
I am worried that everyone will find out that I am receiving help	11(12.1)
I am afraid of being stigmatized for receiving help	9(9.9)
Other	6(6.6)

More than half of the participants knew someone with a mental disorder (acquaintances, friends, or relatives) (58%). Seven participants had mental disorders but did not want to specify them. Less than a quarter of the participants stated that they knew enough about professional psychological help (20.1%). Thirty participants had sought professional psychological help before (13.4%). Most did not want to specify the occupational group from which they had received professional help. Only seven participants received professional psychological help from psychologists (n=4), psychological counselors (n=2), or psychiatrists (n=1). Three participants were on medication. Two-thirds of the participants considered getting psychological help (33.9%). More than half of the participants who did not consider seeking professional help did not think it would be helpful (65.9%). Eleven participants were

concerned that everybody would find out they were getting help (12.1%) (Table 1).

Group A did not have a significantly higher mean posttest CAPRS score (48.73 ± 8.32) than the pretest score (47.61 ± 8.43) ($p > .05$). Group B did not have a significantly higher mean posttest CAPRS score (45.47 ± 9.33) than the pretest score (44.40 ± 10.69) ($p > .05$) (Table 2).

Group A had a significantly lower mean posttest SSOSH score (20.30 ± 5.68) than the pretest score (27.05 ± 4.99) ($p < .05$). Group B also had a significantly lower mean posttest SSOSH score (24.54 ± 3.54) than the pretest score (27.13 ± 5.84) ($p < .05$) (Table 3).

Group A had a significantly higher mean posttest ASPHS-SF score (66.40 ± 11.54) than the pretest score (57.76 ± 17.57) ($p < .05$) (Table 4).

Table 2. CAPRS Scores

	<i>GROUP A (n=112)</i>				<i>GROUP B (n=112)</i>			
	<i>Pretest</i>	<i>Posttest</i>	<i>p</i>	<i>Cohen's d</i>	<i>Pretest</i>	<i>Posttest</i>	<i>p</i>	<i>Cohen's d</i>
	<i>M(SD)</i>	<i>M(SD)</i>						
CAPR	47.61(8.43	48.73(8.32	.285	0.134	44.40(10.6	45.47(9.33	.366	0.107
S	)	)			9)	)		

*Dependent groups t-test, **The effect size value corresponding to each is shown as Cohen's d. Effect size Cohen's d (0.2–0.5 small effect, 0.5–0.8 moderate effect, > 0.8 large effect, > 1.2 very large effect and > 2.0 huge effect)

Table 3. SSOSH Scores

	<i>GROUP A (n=112)</i>				<i>GROUP B (n=112)</i>			
	<i>Pretest</i>	<i>Posttest</i>			<i>Pretest</i>	<i>Posttest</i>		
	M(SD)	M(SD)	p	Cohen's d			p	Cohen's d
SSOSH	27.05±4.	20.30±5.6	<.00	1.263	27.13±5.	24.54±3.	<.00	0.536
	99	8	1		84	54	1	

*Dependent groups t-test, **The effect size value corresponding to each is shown as Cohen's d. Effect size Cohen's d (0.2–0.5 small effect, 0.5–0.8 moderate effect, > 0.8 large effect, > 1.2 very large effect and > 2.0 huge effect)

Table 4. ASPHS-SF Scores

	<i>GROUP A (n=112)</i>				<i>GROUP B (n=112)</i>			
	<i>Pretest</i>	<i>Posttest</i>			<i>Pretest</i>	<i>Posttest</i>		
	M(SD)	M(SD)	p	Cohen's d			p	Cohen's d
ASPHS-SF	57.76±17.	66.40±11.	<.00	0.581	53.45±15.	55.29±6.	.248	0.160
	57	54	1		07	09		

*Dependent groups t-test, **The effect size value corresponding to each is shown as Cohen's d. Effect size Cohen's d (0.2–0.5 small effect, 0.5–0.8 moderate effect, > 0.8 large effect, > 1.2 very large effect and > 2.0 huge effect)

Discussion

Knowledge and understanding of mental health problems are prerequisites for seeking help (Roskar et al., 2017). However, insufficient knowledge and stigmatization make adolescents reluctant to seek help for their mental health problems (Lanfredi et al., 2019). Less than a quarter of our participants knew enough about professional psychological help services (20.1%). Only thirty participants stated that they had sought professional psychological help before (13.4%) (Table 1). These results indicate that very few adolescents know enough about professional psychological help services and get psychological help. Radez et al., (2021) also found that adolescents had limited mental health knowledge and narrow perceptions of help-seeking. Mental problems emerge during childhood or adolescence (Radez et al., 2021). However, adolescents know little about mental health (Radez et al., 2021), causing them to underutilize professional psychological help

services (Lanfredi et al., 2019). All in all, authorities should formulate interventions that help adolescents learn about mental health problems. Moreover, research should conduct further research on mental health problems and professional psychological help services. We think that their results will help adolescents seek more professional psychological help for their mental problems.

Adolescents are more likely to experience stress, anxiety, and failure than their older counterparts. Therefore, the growing number of adolescent mental health problems has reached alarming levels. However, they are often reluctant to seek help for their mental health problems. We can change this trend for the better if we understand their help-seeking attitudes (Aguirre Velasco et al., 2020; Radez et al., 2021) and encourage health professionals to develop appropriate interventions. Our results showed that Group A had a significantly higher mean posttest ASPHS-SF score (66.40±11.54)

than the pretest score (57.76 ± 17.57) ($p < .05$) (Table 4) (Cohen's d : 0.581) (Table 4). Lanfredi et al., (2019) argue that high school teachers and administrators should provide anti-stigmatization interventions to help students learn about mental health and develop positive attitudes. The researchers believe that the more positive attitudes adolescents develop, the more positive behaviors they adopt, encouraging them to seek help for their mental health problems (Lanfredi et al., 2019). Xu et al., (2018) maintain that interventions encourage adolescents to seek help for their mental problems and develop mental health literacy. They also state that interventions help reduce stigmatization. Research, in general, shows that interventions were effective in encouraging adolescents to seek help for their mental problems (Amsalem and Martin, 2022). There is limited research on the effectiveness of digital storytelling (Petty et al., 2020). Moreover, no researchers have investigated whether motivational interviewing (MIs) help adolescents develop positive attitudes. However, the current literature suggests that appropriate approaches are critical to helping adolescents learn more about mental problems and develop positive attitudes toward seeking help. However, our results showed that the MI+ Digital Story intervention applied to Group A was moderately effective. Moreover, only thirty participants had sought professional psychological help before. However, they did not specify from whom they received professional psychological help. Only three participants were on medication. Most participants never considered seeking professional psychological help for their mental problems (62.1%). More than half believed professional psychological help would be useless (65.9%). We can state that the interventions were not as effective as we anticipated, probably because numerous barriers prevent adolescents from seeking professional psychological help. The curriculum lacks courses or content that could help students develop positive attitudes toward seeking psychological help. However, we think interventions in line with school courses can be much more helpful in changing adolescents' attitudes toward seeking psychological help.

Psychological resilience enables one to respond to stress, trauma, or negative experiences (Ran et al., 2020), remain positive, and adapt to unexpected conditions and situations (Dursun and Ozkan, 2019). Our participants had a moderate level of psychological resilience. Group A did not have a significantly higher mean posttest CAPRS score (48.73 ± 8.32) than the pretest score (47.61 ± 8.43) ($p > .05$). Group B did not have a significantly higher mean posttest CAPRS score (45.47 ± 9.33) than the pretest score (44.40 ± 10.69) ($p > .05$) (Table 2). Research also shows that Turkish adolescents have a moderate level of psychological resilience (Dursun and Ozkan, 2019). Linz et al., (2022) conducted a qualitative study and found that digital stories helped nursing students develop psychological resilience. However, this is the first study to investigate whether digital stories or MIs help adolescents develop psychological resilience.

We must first understand the barriers adolescents face to help them develop positive attitudes toward seeking psychological help. Adolescents avoid seeking psychological help because they distrust healthcare professionals, worry that others will find out, fear stigmatization, believe that psychological help is ineffective, or worry about the financial burden of mental health services (Aguirre Velasco et al., 2020). However, positive experiences with services and good mental health literacy make it easier for them to seek help for their mental health problems (Aguirre Velasco et al., 2020). We must also tackle stigmatizing attitudes to improve help-seeking behavior (Roskar et al., 2017). Stigma is directly related to negative attitudes toward seeking psychological help. Both self-stigma and social stigma are significant barriers to seeking psychological help (Dinar and Yalcinkaya-Alkar, 2021). Group A had a significantly lower mean posttest SSOSH score (20.30 ± 5.68) than the pretest score (27.05 ± 4.99) ($p < .05$). Group B also had a significantly lower mean posttest SSOSH score (24.54 ± 3.54) than the pretest score (27.13 ± 5.84) ($p < .05$) (Table 3). Research also shows that appropriate interventions help reduce stigma (Lanfredi et al., 2019). These

results suggest that we need more stigma-reducing interventions tailored to adolescents

Conclusion: Adolescents experience many health problems. Although mental problems adversely affect the health of adolescents, they seek professional psychological help in later periods. Therefore, they cause bigger problems in adulthood. Adolescents with positive attitudes toward seeking psychological help are likely to suffer fewer mental problems, get psychological help from more accurate sources, and lead healthier lives in adulthood. Therefore, we must help adolescents develop positive attitudes toward seeking psychological help. However, our results showed that the MI+ Digital Story intervention applied to Group A was moderately effective. While the interventions were limited in increasing psychological resilience, the educational intervention applied to Group A was highly effective in reducing stigmatization. Our results emphasize the importance of stigma-reducing interventions tailored to adolescents. Motivational interviewing are used in many fields. We think we should use MIs and digital stories to improve adolescents' mental health and help them develop positive attitudes toward seeking psychological help. However, more research is warranted to better understand the effect of MIs and digital stories on adolescents' mental health and attitudes toward seeking psychological help. Researchers should recruit both male and female adolescents to determine the effectiveness of MIs and digital stories.

Limitations: This study faced two main limitations. Firstly, the findings are specific to the sample and may not be applicable to all adolescents. Secondly, the research was conducted in a rural school setting, which could pose additional challenges for adolescents seeking professional psychological assistance

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