International Journal of Innovation, Creativity and Change. www.ijicc.net
Volume 5, Issue 5, Special Edition: ICET Malang City, 2019

Evaluation of the Effectiveness of Smart-Resilience Interventions for Middle School Students: A Pilot Study

Kadek Suranata[1], Ketut Susiani[2], Eko Susanto[3], Yuni Novitasari[4]
[1]Department of Guidance and Counseling, Universitas Pendidikan Ganesha, Indonesia,
[2]Departmen of Elementary School Education, Universitas Pendidikan Ganesha, Indonesia,
[3]Department of Guidance and Counseling, Universitas Muhammadiyah Metro, Indonesia
Email:[1]kadek.suranata@undiksha.ac.id, [2]ketut.susiani@undiksha.ac.id,
[3]ekobk@ummetro.ac.id, [4]yunibk@ummetro.ac.id

This pilot study aims at evaluating the effectiveness and feasibility of the SMART-Resilience program for secondary school students. The *control trial experiment* design conducted involved a total of 72 secondary school students in the Province of Bali. Resilience data was obtained using the 14 items of Indonesian resilience scale. The six items of acceptability and feasibility questions on the Likert's model was used to conduct the experimental group participant perception to the program, and an interview with the counsellor facilitator of the program. Data of the effectiveness of the SMART-Resilience intervention were analysed with ANCOVA and was performed by the JASP program. The results of this study showed that: (1) the SMART-Resilience of psycho-education showed consistent effectiveness in increasing the students resilience in one week and for weeks after these sessions were terminated; and (2) the program was positive and high feasibility from students and counsellor facilitator.

Keywords: *resilience; strengths based CBT; school counselling; innovation in counselling.*

INTRODUCTION

The study of the factors that have contributed to student success in academia and life over the past few decades, has led to an understanding that in addition to preparing the students to be academically smart and to succeed optimally, students need skills beyond the academic substance learned in various subjects. During the previous decades, education in schools was considered too busy taking care of the cognitive side of students. Until finally several theories popped up and research results show the existence of other factors outside of cognitive or non-cognitive factors that contribute more to success (Glewwe, Huang, & Park, 2011; Goleman, 2001; Quieng, Lim, & Lucas, 2015). The cognitive aspects require students to acquire new knowledge, and the non-cognitive factors contribute significantly to student success in both life and academia (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011).

There are many of the various non-cognitive aspects that have been studied; resilience is one of them, whose existence is important for all students and young people (Boon et al., 2017; Campbell & Narayan, 2017; Castro-Olivo et al., 2013; Dray et al., 2011). Resilience basically over all aspects of social psychosocial and emotional is needed by students to develop healthy and have positive responses in dealing with various stressor situations (Suranata, Atmoko, Hidayah, Rangka, & Ifdil, 2017). Students are resilient at a good level, capable of dealing with all difficulties, stresses, even accustomed to turning difficulties into opportunities for success (Luthar, Cicchetti, & Becker, 2015; Mlcek & Pulla, 2014; Suranata, Atmoko, & Hidayah, 2017; Troy & Mauss, 2011). The concept of resilience that has developed over decades has provided a way to understand the positive development of children under difficulties, and the factors and processes that help children avoid dangerous, self-destructive or antisocial behaviour, mental disorders, and threats to welfare of their physicality (Ungar, 2015).

The world of education and life that develops rapidly has an impact on changing situations and environmental demands that put pressure on students. Research by Lewinsohn, Hops, Roberts, Seeley, & Andrews (1993) show that there has been an increase in cases of depression about ten times more than in the last decade. More than 20% of adolescents were experiencing depression. The rise of news coverage in various media about teenagers and students showing inappropriate and destructive behavior shows that this phenomenon also occurs in Indonesia. This fact is inversely proportional to the prediction based on greater access to a more established and developed environment, more food, transportation, school facilities, and availability of entertainment and more support the mental health of students (Mongrain & Anselmo-Matthews, 2012), these factors would help.

The highest prevalence for mental health problems tends to be among young people including the student population. Mental health problems which include depression, anxiety, and other emotional disorders can cause behavioural problems both at school and at home, increased risk behaviors, such as tobacco use, alcohol and drug use, underachievement at school, even criminal problems (Venkateswaran & Vincent, 2018). The low level of mental health shown

by students in schools is related to the low success of the school in developing resilience and helping the psychological well-being of students (Sagone & Caroli, 2013). Dray et al (2011) stated that one of the highest risks that could threaten students' academic success was stress and depression. In carrying out academic tasks, students often face various difficulties that cause psychological obstacles and stress. Cutuli et al (2013) found that students who failed to overcome these difficulties and obstacles were students who were unable to actualise their resilience. Jiboye, Salaudeen, Adejumo, & Aikomo (2019) found that psychological resilience has correlation with the creativity and achievement of students in middle schools.

The school program has a important role to support students developing the potential to achieve optimal self-development and independence in decision-making, overcome from stress and depression and to achieve resilience and well being (Ranatunga & Pagliano, 2017; Suranata, Atmoko, Hidayah, et al., 2017; Waters, 2011). The review of literature study by Moir, Yielder, Dixon, & Hawken (2018) noted that the model of developing well being in schools requires the support of all parties, from school administrators or principals, educators (teachers), including students as well as parents and the community. The study by Moir and his team suggested that collaboration between students and school staff was the key to the success of the well-being development program. In line with these findings, Mulloy (2011) in his study concluded that the fundamental thing that must happen in schools to develop resilience for students is to reduce the impact of risk on their lives, and to embed students in a supportive social network that increases their willingness to seek help from others, by growing students' self-awareness and ability to regulate their emotions, and by instilling students with self-confidence and intrinsic motivation to achieve academic and life success.

Several intervention models to improve mental health and wellbeing targeting adolescents and adults in the resilience paradigm have been developed. These models implemented in various countries in the world on a variety of interventions, excluded or integrated school curriculum education (Leppin et al., 2014; Waters, 2011). These interventions were focused on developing a variety of skills that could be used to avoid stress and depression to support students developing resilience and well-being. Empirical research summarised in a meta-analysis study found that resilience programs gained acceptance as part of the school curriculum to develop psychological resilience and well-being (VicHealth, 2015). This program is also used in overcoming problems with addiction to alcohol, tobacco, and cannabis (narcotics) among students (Hodder et al., 2011).

Cognitive behavioral therapy (CBT) is a model that dominates the resilience intervention in the latest research (Lee, Cheung, & Kwong, 2012; VicHealth, 2015). CBT is the counselling and psychotherapy that focuses on thoughts and experiences that emphasise changing negative thoughts and maladaptive beliefs, developed by Beck (Suranata, Atmoko, & Hidayah, 2017). There are several resilience programs that have been developed and implemented in schools based on the CBT, such as the PRP: Penn Resilience Program (Brunwasser, Gillham, & Kim, 2009a; Jane E Gillham, Brunwasser, & Freres, 2008a), through stress and depression

intervention; the READY: Resilience And Activity For Every Day (Burton, Pakenham, & Brown, 2010), based on Acceptance and Commitment Therapy (ACT), which is an empirically based third generation of CBT; that is oriented to promote subjective well-being, and reduce symptoms associated with depression and stress that obtain high effectiveness from a recent study. The other model, FRIENDS (Barrett & Turner, 2001; Iizuka, Barrett, Gillies, Cook, & Marinovic, 2015), is also a CBT-based resilience intervention, that focuses on overcoming anxiety in promoting the psychological well-being of students. The adaptation of PENN Resiliency, READY, and FRIENDS each shows consistent results about the feasibility of the intervention program in helping students develop social and emotional abilities and overcome emotional disorders and other psychological problems.

In contrast to the resilience interventions mentioned above, the SMART-Resilience Program evaluated in this study is a psycho-educational program that integrates CBT reliability with principles and procedures in strengths-based counselling. The development of SMART-Resilience was inspired by the paradigm of positive psychology (Seligman, Ernst, Gillham, Reivich, & Linkins, 2009), which calls for the paradigm of psychotherapy and counselling that focuses on the problem, is no longer relevant, because the importance of seeing that each individual has a positive side can be the basis and focus of intervention. The strengths based counselling model (E. J. Smith, 2006; Elsie J Smith, 1973), which formulates how to help individuals recognise and empower individual sources of strength and external sources of social support to be the focus of assistance, rather than starting from the side of individual problems. Contribution of thoughts about Positive based CBT (F. P. Bannink, 2014; Fredrike P Bannink, 2013), inspired the integration of CBT with the paradigm of positive psychology. Our previous research recommendations note that there are broad opportunities to combine CBT with strengths based counseling for resilience interventions in school settings (Suranata, Atmoko, & Hidayah, 2017). This pilot study aims to evaluate the effectiveness and feasibility of the SMART-Resilience program for middle school students.

METHOD

The subject of the study

A total of 435 high school students from four different schools were invited to fill in the resilience questionnaire. Using the matching sampling method, 72 students were selected to participate in the experiment; every 36 students were students at SMA N 4 Denpasar as a waiting list control group, and 36 students at SMA N 4 Singaraja as an experimental group.

Experimental Design

This pilot study conducted by the control trial experiment involved two groups, namely the experimental group that received treatment and the waiting list control was the group that waited for treatment after the experimental program was terminated. Involving a waiting list control in this design is related to the ethics of experimental research as mentioned by Elliott

& Brown (2002). The experimental group participated in a counselling activity using the SMART-Resilience model for 10 sessions and was facilitated by two trained counsellors. While students in the waiting list control group during the experimental program did not receive special treatment, they waited to attend the SMART-Resilience counselling program in the following school semester. One week after ten SMART-Resilience sessions, i.e. in the eleventh week, both the experimental group and the waiting list control group were invited back to fill out the resilience questionnaire. The completion of the questionnaire for the follow-up test was given again in the fifteenth week or 4 weeks after the SMART-Resilience session ended. The recruitment and retention of participants in this study are shown in Figure 1.

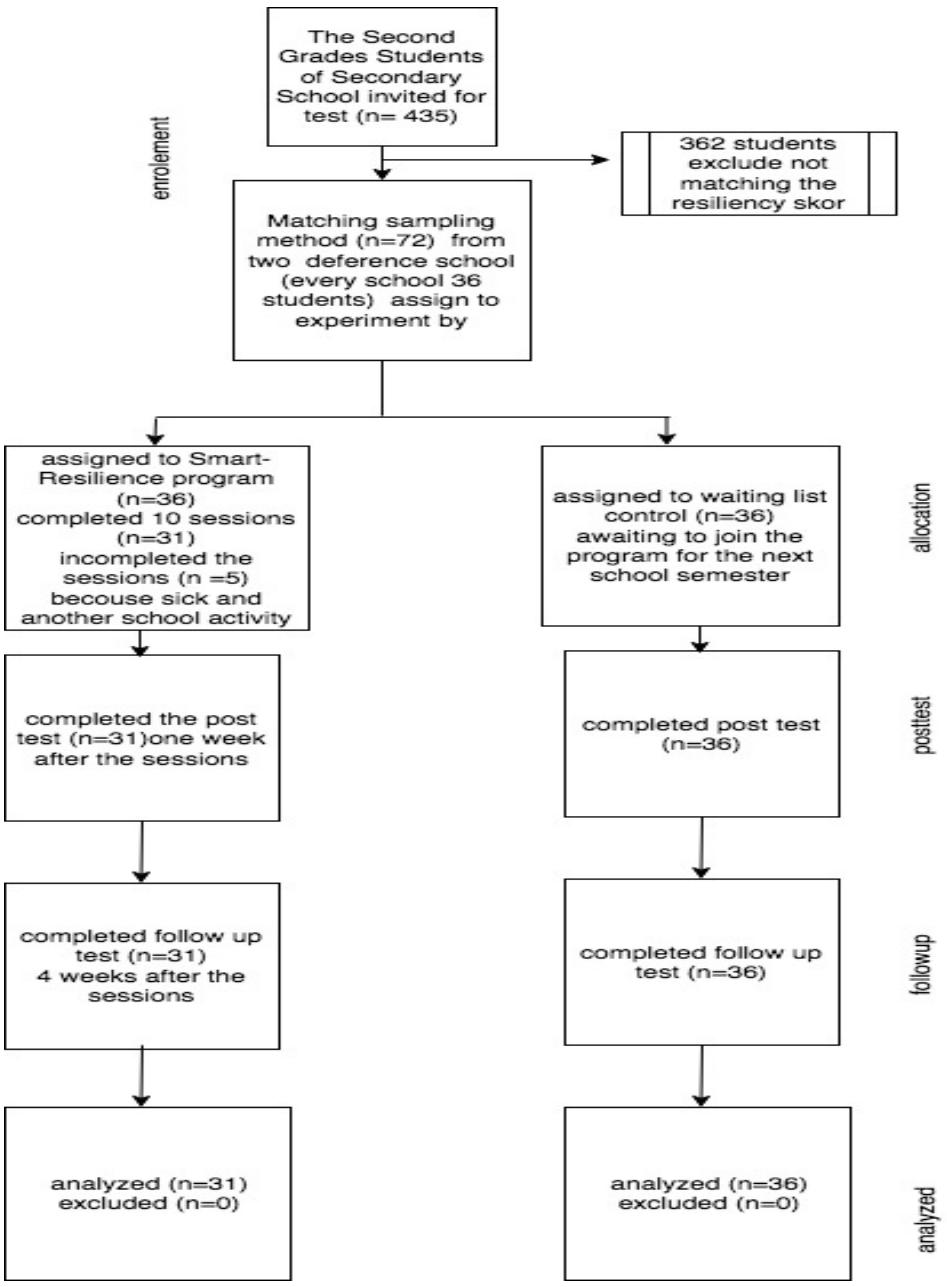

Figure 1. The experimental Procedure

Instrumentation

The assessment sessions were conducted in the classroom, in the week before, the week after for posttest, and the follow up test conducted in four week after the session, by the independent research assistants. Students are measured by 14 items of paper and pencil based on the Indonesian version of the resilience scale that is adapted from the Resilience Youth Development Module (Hanson & Kim, 2007). The property of the Indonesian version resilience scale reported by Suranata, Atmoko, & Hidayah (2017b) did well in validation and reliability for items and factors. There were five dimensions that were measured, namely: self-efficacy; self-awareness; problem solving skills; social skills; and goals. Respondents chose one of four alternative answers provided for each item, (1) absolutely not true, (2) slightly correct, (3) quite correct, and (4) very true.

The participants in the experimental group filled out a questionnaire about the acceptability and feasibility of the SMART-Resiliency at the end of the session in six questionnaire items, namely as many as three items evaluating the acceptability and the other three evaluating feasibility. The statement was used to measure acceptability, namely; (1) all stages and procedures of the program can be understood properly; (2) the stages and techniques of counseling in the program are easily implemented; and (3) the techniques trained in the program can be repeated without the guidance of the facilitator. While statements to measure program feasibility include; (4) I am able to develop a better mindset after participating in the program; (5) I am able to develop more comfortable feelings and emotions after participating in the program; and (6) I am able to develop more effective behaviour after participating in the program. This questionnaire was developed with a Likert's Scale model with five response choices; from strongly agree (5) to strongly disagree (1). At the end of the session, the counsellor who facilitated the SMART-Resilience program was involved in an interview to reflect on how the program responded to it, as well as the difficulties or constraints experienced during the program.

Intervention Procedure

The Smart Resiliency developed by integrating CBT and strengths-based counseling : The Smart-Resilience program is taken from five stages of implementation of this model, namely (1) Source your strength, which trains students to identify and find the resources they have (internal and external); (2) Manage yourself, which is a step to manage the resources of students including thoughts, time and so on; (3) Actuating Potential, is a step to implement the resources of students to achieve psychological well-being; (4) Remember The God, is steps to train students to improve their spiritual side; and (5) Take your dream, is the last step to develop optimism, hope, and motivation to achieve goals and aspiration.

The program contains 10 modules, and sessions including psycho-education, discussion, experiential exercises, and structured learning and practice activities. Session topics include an introduction to the SMART-Resilience model and the implementation of the technique. There

are seven techniques used in this model, which include: (1) drawing and stories, students paint themselves by highlighting their self-strengths or potential from inside and from their environmental social support; (2) the cognitive restructuring and positive affirmation, in which students manage their beliefs and emotions, through recognising and discovering negative thoughts and emotions, stopping negative thoughts and emotions, and replacing them with more adaptive forms of thoughts and emotions (Pelusi, 2016); (3) self-management, in which students manage themselves as a whole, from the time and facilities owned, including their social support and finance. Self-management is implemented by students with a personal logbook and they noted their activities, in use of time, infrastructure, social support and finance. The logbook was discussed and evaluated weekly with a peers group and their school counsellors; (4) the problem solving training is a technique intended to teach students to make the right decision based on the best solution they have; (5) the social skills training is a technique to improve the quality of problem solving related to social conflict. This technique is implemented using the socio-drama method; (6) the miracles questions, and success chair are techniques adapted from solution focused brief therapy (Dameron, 2016; Kim & Franklin, 2009); and (7) the mindfulness techniques was integrated in the tradition of cognitive behaviour therapy (Cherkin et al., 2016).

Data Analysed Procedure

A descriptive analysis of each questionnaire item about acceptability and feasibility is presented in a percentage, and the results of interviews with counsellor facilitators and students are presented with narratives. The description and narrative focus on the level of acceptability and feasibility of the SMART-Resiliency program based on the perceptions of students and the program facilitator counsellors. Testing the effect of the SMART-Resilience Intervention was done by comparing the results of the measurement of resilience variables in the experimental group that followed the SMART-Resilience program with the waiting list control. The impact was observed at two savings, or often referred to as repeated observations (Field, 2009), which was one week after the intervention session in the experimental group and was complete four weeks after the intervention. The test used the formulation of the General Linear Model (GLM) 2 x 2 repeated measures analysis of covariance. This RM-ANCOVA analysis used 2 groups (the experimental group and the waiting list control group) and 2 observation times (posttest and follow-up), while the pretest score was used as a control variable (covariate). The Sphericity correction value, through Greenhouse-Geisser, was seen to assess the impact of the treatment between time, posttest, and follow-up. As covariates, the effect of pretest interaction with groups was also considered in considering the homogeneity of regression slopes. The effective size of the partial eta squared was reported for each effect and each parameter estimate (Chien, 2008). Comparisons of adjusted mean resilience in the two groups were corrected by the Bonferroni test. All of the analysis was conducted using JASP V. 0.10. Analysis program (Goss-Sampson, 2019), and the significance level used was 0.05 (Hair, Black, Babin, & Anderson, 2010).

RESULTS AND DISCUSSION

The Acceptability and Feasibility

Of the 36 students assigned to take part in the SMART-Resilience program, only 31 students took part in full. Two students only took part in six out of ten sessions because of health care, and the other three only took part in seven activities because they took part in the competition to become a school representative. The response of students who filled the acceptability and feasibility questionnaires was very positive. As many as 29 out of 31 (93.50%) responded strongly agree on the first item about acceptability, which meant that all stages and procedures of the program could be understood very well. While the other two (6.50%) responded by agreeing, which means they understood all the stages and procedures of the program quite well. As many as 26 out of 31 (83.87%) students agreed strongly that the stages and counselling techniques in the program were easy to implement, two people (6%) stated that they were quite easy to implement, and three others (10%) stated that they were difficult to implement. In the third item, 25 (81%) students stated that they could repeat the techniques that were trained quite well without the facilitator, while six (19%) were unable to repeat themselves without the guidance of the facilitator (counsellor). While three other items about feasibility also received a positive response. In the fourth, fifth and sixth items in a row as many as 24 (77%) stated that they strongly agreed that after joining the SMART-Resilience program, thoughts, feelings, emotions and new behaviour were better and more effective. The other four (13%) stated that they had been able to obtain more positive thoughts and feelings or emotions, and the other three (10%) stated that they agreed after taking part in the program to get better thoughts. Two counsellors who became facilitators of the activity also gave positive responses. They stated that some technical procedures were quite complicated for high school students, such as cognitive restructuring and reframing techniques, mindfulness techniques, also miracle questions and success chairs that needed repeated explanation and simulation for each participant. The facilitator also stated that ten sessions for 45 minutes for the whole program, by implementing the seven techniques, was limited time. For better understanding for participants, they suggested the need for more sessions and longer periods.

The effect of SMART-Resilience to Psychosocial Resilience

The descriptive statistical results of the measurement in an overall group in table 1 showed a consistent increase in the experimental group, from measurement pretest, posttest and follow up test. While in the waiting list control group, their average resilience moved lucratively, increasing slightly from pretest to posttest, but returned to the follow-up test.

Table 1. Descriptive of Resilience before and after Intervention

Time	Group	M (Sd)
Pretest	Experiment (n=31)	29.77(3.02)
	Waiting list control (n=36)	29.08(1.71)
Posttest	Experiment (n=31)	45.77(3.06)
	Waiting list control (n=36)	31.81(2.90)
Follow up	Experiment (n=31)	47.97(1.33)
	Waiting list control (n=36)	29.83(1.83)

Table 2 showed the results of effect and interaction effect of every factor sources in this study. The between subject comparison results showed the main effect of group was significant F (1,64)=1363.01, p< .05, with very large effect size on Ƞ2partial= .96. The main effect of the pretest was also significant but really low in effect size. These results indicated that there are differences in resilience between groups of students who take the SMART-Resilience program and the waiting list control group. The difference in initial resilience scores turned out to be chaotic, but weak when seen from the size of the effect size. Nevertheless, the influence of the pretest score was still taken into account, so it was very appropriate to involve it as covariates. So that the bias of differences that occurred due to differences in pretest could be controlled (Field, 2009).

Table 2 also showed that the main effects of time (posttest and follow up test) was significant by F (1,64)=10.61, p<0.05, with effect sizes on Ƞ2partial =0.14 was medium. Interaction effect of time and group was also significant by F (1,64)= 37.99,p<0.05, with large effect size by Ƞ2partial = 0.37. The Interaction effect on time and pretest was also significant at F (1,64)= 10.52, p<0.05, with medium effect size Ƞ2partial=0.14. These results indicated that there were differences in resilience between groups of students who took the SMART-Resilience program and the waiting list control group. The difference in initial resilience scores turned out to be chaotic, but weak when seen from the size of the effect size. Nevertheless, the influence of the pretest score was still taken into account, so it was very appropriate to involve it as covariates. So that the bias of differences that occurred due to differences in pretest could be controlled.

Table 2. Repeated Measure ANCOVA Results on Within and Between Subjects Effects

Sources	Sum of Squares	df	MNSQ	F	p	η^2p
Within Subjects Effects						
Time	46.25	1	46.25	10.61	< .05	.14
Time*Group	165.66	1	165.66	37.99	< .05	.37
Time*Pretest	45.85	1	45.85	10.52	< .05	.14
Residual	279.06	64	4.36			
Between Subjects Effect						
Group	8255.98	1	8255.98	1363.01	< .05	.96
Pretest	32.46	1	32.46	5.36	< .05	.08
Residual	387.66	64	6.06			

Note. Type III Sum of Squares.

In table 3, the post hoc comparisons between posttest and follow up test of resiliency measurement was not significant by Bonferroni correction test, t = .10, >.05. But the comparison between the experiment and waiting list control group showed the significant difference, the mean deference = 15.91, on t = 36.92, p< .05, and effect size by Cohen's d = 4.51, was strengths (Goss-Sampson, 2019). The results of this comparison showed that after being controlled by the pretest, the experimental group that had participated in 10 SMART-Resilience sessions had a higher resilience rate than the waiting list control. The comparison of posttest and follow-up test was significant but with a very small effect size which showed that from the measurement (posttest), i.e. a week after the session ended until four weeks after the session ended (follow up test), the resilience of the experimental group students consistently increased, but not the groups' waiting list control. The analysis results in Tables 1, 2 and 3 proved that the SMART-Resilience intervention had the effect of increasing student resilience, both immediately after the session had ended and some time after the session had ended.

Table 3. Post Hoc Comparisons on Time and Groups

Comparisons sources	Mean Difference	SE	t	Cohens's d	P bonf	95% Confidence interval for Difference lower (upper)
Posttest Vs. Follow up test	.04	.46	.10	.01	> .05	-.88 (.96)
Experiment Vs. Waiting list control	15.91	.43	36.92	4.51	< .05	15.05 (16.77)

Before being implemented in a wider population, the effectiveness and feasibility of the SMART-Resilience program of this model needed to be evaluated, so it could be seen whether this technique was very important. By the points of this examination, the results confirmed that the Smart-Resilience program fulfilled it as a feasible and effective program. The results of this study proved that SMART-Resiliency showed the effectiveness and feasibility that was adequate for secondary school students. Students consistently maintained high resilience even after four weeks of school sessions under the guidance of a facilitator (counsellor). This happened because most of them continued to implement the techniques that had been trained during the session without the guidance of the facilitator. Most of the students who participated in the session stated that they were able to understand and apply the stages and techniques of SMART-Resilience, both during the session and after the session was ended. They could do the techniques themselves without the guidance of the counsellor facilitator. In terms of feasibility, most students had stated that they could obtain more positive thoughts, feelings, and emotions that were more comfortable and healthier, and have more productive behavior. Although some students, who were very small in number (around 10%), stated that there had been a change in thinking and emotional patterns. These students are those who were less than optimal in understanding and applying the stages and techniques of SMART-Resilience. This was in line with the statement of two counsellors who facilitated the activity and also gave a positive response, in line with the responses given by students. The facilitator provided some meaningful input on improving the implementation of this intervention program further. Among them, it was necessary to consider more time, as well as caution in providing simulations individually for participants.

The results of this study are consistent with several past investigations that have shown the adequacy of the psycho-education counselling model used to build strength among successful students or young people. Among them are studies of PRP in several countries which have generally been proven effective (Brunwasser & Gillham, 2016; Brunwasser, Gillham, & Kim, 2009b; Cardemil, Reivich, Beevers, Seligman, & James, 2007; Cutuli, Chaplin, Gillham,

Reivich, & Seligman, 2006; J E Gillham et al., 2007; Jane E. Gillham et al., 2012; Jane E Gillham, Brunwasser, & Freres, 2008b; Peng et al., 2014; Sankaranarayanan & Cycil, 2014) the efficacy of the READY Program (Burton et al., 2010), and efficacy of th Friends Program (Cooley-Strickland, Griffin, Darney, Otte, & Ko, 2011; Essau, Conradt, Sasagawa, & Ollendick, 2012; Matsumoto & Shimizu, 2016; Pereira, Marques, Russo, Barros, & Barrett, 2014; Ruttledge et al., 2016; Stallard, 2010). The series of studies have shown that socio-emotional oriented PRP, Ready and Friends psycho-education programs with a focus on handling stress, depression, and forms of emotional disturbances in students and youth as an established model, have been tested longitudinally in several years and with populations in some countries.

Instead of modifying established psycho-educational and socio-emotional learning programs, the SMART-Resilience program focuses on understanding the improvement of positive attributes of students' psychological conditions. Therefore the findings of this study can be used as support to build appropriate counselling or therapeutic models in the psychology of cognitive behavior that is strength-oriented. Compared with only managing psychological problems or difficulties, but also developing positive aspects of students, for example, resilience, happiness, and psychological well-being (F. P. Bannink, 2014; Padesky & Mooney, 2012; Seligman et al., 2009). The SMART-Resilience Model provides answers to questions that have arisen from the results of previous studies about comparing the effectiveness of cognitive-behavioral counseling and strengths-based counseling by Suranata et al. (Suranata, Atmoko, & Hidayah, 2017b). Although both models are equally effective, the study recommends integration between the two models as an eclectic model. Based on the recommendations of the research results, to complete each of the two limitations, both models need to be completed. This can be seen from the good acceptance of this SMART-Resilience model from participating students and also school advisors who facilitate students to implement the program. Involving a wider population with a more diverse distribution of characteristics and demographics needs further testing of the SMART-Resilience model. Future studies need to pay attention to some limitations of the results of this study, such as limited respondents, and with less diverse characteristics from demographic dimensions and age levels. Testing students in various levels of education, including in tertiary institutions, will be very useful in evaluating whether all the techniques used in the SMART-Resilience model are feasible at all levels of students. It also includes looking at gender factors that are very important in psychological interventions. It is very important and will be more beneficial for the development of this model if further studies are to test each procedure and technique separately, instead of evaluating only the whole program.

CONCLUSION

The results of this study indicate that SMART-Resilience is an effective model and receives positive acceptability and feasibility as a psycho-education model for students. The results of testing the impact of this program showed an effect, with a high and consistent effect size after

the session was terminated and four weeks after the session was terminated. Students participating in the program showed positive responses. Most of them stated that they were able to understand and implement the procedures and stages of the SMART-Resilience module during ten meeting sessions. Most of them also claimed to be able to independently practise the techniques in this model outside of session meetings. By joining the program, students state their ability to change less rational thinking into more positive ones and disturbed emotions into a more comfortable and healthier form of emotions, and patterns of positive and productive behaviour. The program facilitator counsellor also conveyed a response that was in line with that. To implement this program in other wider populations, it is important to note some findings related to obstacles in implementing the program experienced by the facilitator, which are related to the need for more time and sessions, as well as giving wider opportunities for each participant to simulate each technique being trained. Testing the impact of other factors that can affect the results also needs to be investigated in further research.

REFERENCES

Bannink, F. P. (2014). Positive CBT: From reducing distress to building success. *Journal of Contemporary Psychotherapy*, *44*(1), 1–8. https://doi.org/10.1007/s10879-013-9239-7

Bannink, Fredrike P. (2013). Are you ready for positive cognitive behavioral therapy? Pozitif bilişsel davranışçı terapiye hazır mısınız? *The Journal of Happiness & Well-Being*, *1*(2), 65–73. Retrieved from http://www.journalofhappiness.net/frontend/articles/pdf/v01i02/Are_youready_for_positive_cognitive_behavioral.pdf

Barrett, P. M., & Turner, C. M. (2001). Prevention of anxiety symptoms in primary school children: Preliminary results from a universal trial. *British Journal of Clinical Psychology*, *40*, 399–410. https://doi.org/10.1348/014466501163887

Boon, H. J., Kimhi, S., Sapountzaki, K., Parmak, M., Ryan, S., & Groh, A. (2017). Preliminary findings from an international study of subjective wellbeing in tertiary students. *International Journal of Innovation, Creativity and Change*, *3*(3), 26–42.

Brunwasser, S. M., & Gillham, J. E. (2016). Identifying Moderators of Response to the Penn Resiliency Program: A Synthesis Study. *Prevention Science*, 1–11. https://doi.org/10.1007/s11121-015-0627-y

Brunwasser, S. M., Gillham, J. E., & Kim, E. S. (2009a). A meta-analytic review of the Penn Resiliency Program's effect on depressive symptoms. *Journal of Consulting and Clinical Psychology*, *77*(6), 1042–1054. https://doi.org/10.1037/a0017671

Brunwasser, S. M., Gillham, J. E., & Kim, E. S. (2009b). A meta-analytic review of the Penn Resiliency Program's effect on depressive symptoms. *Journal of Consulting and Clinical Psychology*, *77*, 1042–1054. https://doi.org/10.1037/a0017671

Burton, N. W., Pakenham, K. I., & Brown, W. J. (2010). Feasibility and effectiveness of psychosocial resilience training: A pilot study of the READY program. *Psychology, Health & Medicine*, *15*(3), 266–277. https://doi.org/10.1080/13548501003758710

Campbell, K., & Narayan, B. (2017). First-generation tertiary students: Access is not the same as support. *International Journal of Innovation, Creativity and Change*, *3*(3), 43–60.

Cardemil, E. V., Reivich, K. J., Beevers, C. G., Seligman, M. E. P., & James, J. (2007). The prevention of depressive symptoms in low-income, minority children: Two-year follow-up. *Behaviour Research and Therapy*. https://doi.org/10.1016/j.brat.2006.03.010

Castro-Olivo, S. M., Tran, O. K., Begum, G. F., Arellano, E. M., Garcia, N. M., & Tung, C.

Y. (2013). A comprehensive model for promoting resiliency and preventing violence in schools. *Contemporary School Psychology*, *17*(1), 23–34. https://doi.org/10.1007/BF03340986

Cherkin, D. C., Sherman, K. J., Balderson, B. H., Cook, A. J., Anderson, M. L., Hawkes, R. J., … Turner, J. A. (2016). Effect of Mindfulness-Based Stress Reduction vs Cognitive Behavioral Therapy or Usual Care on Back Pain and Functional Limitations in Adults With Chronic Low Back Pain A Randomized Clinical Trial. *Original Investigation*, *315*(12), 1240–1249. https://doi.org/10.1001/jama.2016.2323

Chien, T.-W. (2008). Repeated Measure Designs (Time Series) and Rasch. *Rasch Measurement Transactions*.

Cooley-Strickland, M. R., Griffin, R. S., Darney, D., Otte, K., & Ko, J. (2011). Urban African American youth exposed to community violence: a school-based anxiety preventive intervention efficacy study. *Journal of Prevention & Intervention in the Community*, *39*(2), 149–166. https://doi.org/10.1080/10852352.2011.556573

Cutuli, J. J., Chaplin, T. M., Gillham, J. E., Reivich, K. J., & Seligman, M. E. P. (2006). Preventing co-occurring depression symptoms in adolescents with conduct problems: The Penn Resiliency Program. In *Annals of the New York Academy of Sciences* (Vol. 1094, pp. 282–286). https://doi.org/10.1196/annals.1376.035

Cutuli, J. J., Desjardins, C. D., Herbers, J. E., Long, J. D., Heistad, D., Chan, C.-K., … Masten, A. S. (2013). Academic achievement trajectories of homeless and highly mobile students: resilience in the context of chronic and acute risk. *Child Development*, *84*(3), 841–857. https://doi.org/10.1111/cdev.12013

Dameron, M. L. (2016). Person-Centered Counseling and Solution-Focused Brief Therapy: An Integrative Model for School Counselors. *Journal of School Counseling*, *14*(10).

Dray, J., Bowman, J., Freund, M., Campbell, E., Wolfenden, L., Hodder, R. K., & Wiggers, J. (2011). Improving adolescent mental health and resilience through a resilience-based intervention in schools: study protocol for a randomised controlled trial. https://doi.org/10.1186/1745-6215-15-289

Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The Impact of Enhancing Students' Social and Emotional Learning: A Meta-Analysis of School-Based Universal Interventions. *Child Development*, *82*(1), 405–432. https://doi.org/10.1111/j.1467-8624.2010.01564.x

Elliott, S. A., & Brown, J. S. L. (2002). What are we doing to waiting list controls? *Behaviour Research and Therapy*, *40*(9), 1047–1052. Retrieved from

http://www.ncbi.nlm.nih.gov/pubmed/12296489

Essau, C. A., Conradt, J., Sasagawa, S., & Ollendick, T. H. (2012). Prevention of Anxiety Symptoms in Children: Results From a Universal School-Based Trial. *Behavior Therapy*. https://doi.org/10.1016/j.beth.2011.08.003

Field, A. (2009). *Discovering statistics using SPSS*. Sage publications.

Gillham, J E, Reivich, K. J., Freres, D. R., Chaplin, T. M., Shatt, A. J., Samuels, B., … Seligman, M. E. (2007). School-based prevention of depressive symptoms: A randomized controlled study of the effectiveness and specificity of the Penn Resiliency Program. *Journal of Consulting and Clinical Psychology*, *75*(1), 9–19. https://doi.org/10.1037/0022-006x.75.1.9

Gillham, Jane E., Reivich, K. J., Brunwasser, S. M., Freres, D. R., Chajon, N. D., Kash-MacDonald, V. M., … Seligman, M. E. P. P. (2012). Evaluation of a Group Cognitive-Behavioral Depression Prevention Program for Young Adolescents: A Randomized Effectiveness Trial. *Journal of Clinical Child & Adolescent Psychology*, *41*(5), 621–639. https://doi.org/10.1080/15374416.2012.706517

Gillham, Jane E, Brunwasser, S. M., & Freres, D. R. (2008a). Preventing depression in early adolescence: The Penn Resiliency Program. *Handbook of Depression in Children and Adolescents*. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2008-01178-013&loginpage=Login.asp&site=ehost-live&scope=site

Gillham, Jane E, Brunwasser, S. M., & Freres, D. R. (2008b). Preventing depression in early adolescence: The Penn Resiliency Program. *Handbook of Depression in Children and Adolescents*.

Glewwe, P., Huang, Q., & Park, A. (2011). Cognitive Skills, Non-Cognitive Skills, and the Employment and Wages of Young Adults in Rural China. https://doi.org/10.22004/AG.ECON.103407

Goleman, D. (2001). Emotional intelligence: Issues in paradigm building. *The Emotionally Intelligent Workplace*, *13*, 26.

Goss-Sampson, M. A. (2019). *Statistical analysis in JASP: A Guide For Students*.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). Multivariate Data Analysis. *Vectors*. https://doi.org/10.1016/j.ijpharm.2011.02.019

Hanson, T. L. ., & Kim, J. O. (2007). Measuring resilience and youth development: the psychometric properties of the Healthy Kids Survey . *Issues & Answers Report*, Issues

& Answers Report, REL 2007–No. 034. Retrieved from http://ies.ed.gov/ncee/edlabs/regions/west/pdf/REL_2007034_sum.pdf

Hodder, R. K., Daly, J., Freund, M., Bowman, J., Hazell, T., & Wiggers, J. (2011). A school-based resilience intervention to decrease tobacco, alcohol and marijuana use in high school students. *BMC Public Health*, *11*(1), 722.

Iizuka, C. A., Barrett, P., Gillies, R., Cook, C., & Marinovic, W. (2015). Preliminary Evaluation of the FRIENDS for Life Program on Students' and Teachers' Emotional States for a School in a Low Socio-Economic Status Area. *Australian Journal of Teacher Education*, *40*(40). https://doi.org/10.14221/ajte.2014v40n3.1

Jiboye, T. F., Salaudeen, G. O., Adejumo, O. O., & Aikomo, D. O. (2019). Mental ability, self-esteem and learning styles as correlate of creativity among high achieving secondary school students in Oyo State. *International Journal of Innovation, Creativity and Change*, *4*(4), 24–43.

Kim, J. S., & Franklin, C. (2009). Solution-focused brief therapy in schools: A review of the outcome literature. *Children and Youth Services Review*, *31*(4), 464–470. https://doi.org/10.1016/j.childyouth.2008.10.002

Lee, T. Y., Cheung, C. K., & Kwong, W. M. (2012). Resilience as a Positive Youth Development Construct: A Conceptual Review. *The Scientific World Journal*, *2012*, 1–9. https://doi.org/10.1100/2012/390450

Leppin, A. L., Bora, P. R., Tilburt, J. C., Gionfriddo, M. R., Zeballos-Palacios, C., Dulohery, M. M., … Montori, V. M. (2014). The efficacy of resiliency training programs: A systematic review and meta-analysis of randomized trials. *PLoS ONE*, *9*(10). https://doi.org/10.1371/journal.pone.0111420

Lewinsohn, P. M., Hops, H., Roberts, R. E., Seeley, J. R., & Andrews, J. A. (1993). Adolescent psychopathology: I. Prevalence and incidence of depression and other DSM-III—R disorders in high school students. *Journal of Abnormal Psychology*, *102*(1), 133.

Luthar, S. S., Cicchetti, D., & Becker, B. (2015). The construct of resilience: a critical evaluation and guidelines for future work. *Child Development*, *71*(3). https://doi.org/10.1111/1467-8624.00164

Matsumoto, Y., & Shimizu, E. (2016). The FRIENDS Cognitive Behavioral Program in Japanese schools: An examination of the treatment effects. *School Psychology International*, *37*(4), 397–409. https://doi.org/10.1177/0143034316649639

Mlcek, S., & Pulla, V. (2014). Knowledge building for practice: Resilience in social work student engagement. *International Journal of Innovation, Creativity and Change*, *1*(4),

57–74.

Moir, F., Yielder, J., Dixon, H., & Hawken, S. (2018). SAFE-DRS: Health and wellbeing in the curriculum in the Auckland Medical Programme. *International Journal of Innovation, Creativity and Change*, *4*(3), 49–64.

Mongrain, M., & Anselmo-Matthews, T. (2012). Do Positive Psychology Exercises Work? A Replication of Seligman et al. *Journal of Clinical Psychology*, *68*(4), 382–389. https://doi.org/10.1002/jclp.21839

Mulloy, M. (2011). School-based resilience: How an urban public high school reduced students' risk exposure and promoted their social-emotional development and academic success. *Advances in School Mental Health Promotion*, *4*(1), 4–22. https://doi.org/10.1080/1754730X.2011.9715619

Padesky, C. A., & Mooney, K. A. (2012). Strengths-Based Cognitive-Behavioural Therapy: A Four-Step Model to Build Resilience. *Clinical Psychology and Psychotherapy*, *19*(4), 283–290. https://doi.org/10.1002/cpp.1795

Pelusi, N. (2016). Rational emotive behavior therapy. In *The professional counselor's desk reference (2nd ed.).* (pp. 207–210). Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2015-45834-034&lang=de&site=ehost-live

Peng, L., Li, M., Zuo, X., Miao, Y., Chen, L., Yu, Y., … Wang, T. (2014). Application of the Pennsylvania resilience training program on medical students. *Personality and Individual Differences*, *61–62*, 47–51. https://doi.org/10.1016/j.paid.2014.01.006

Pereira, A. I., Marques, T., Russo, V., Barros, L., & Barrett, P. (2014). Effectiveness of the friends for life program in portuguese schools: Study with a sample of highly anxious children. *Psychology in the Schools*. https://doi.org/10.1002/pits.21767

Quieng, M. C., Lim, P. P., & Lucas, M. R. D. (2015). 21st Century-based Soft Skills: Spotlight on Non-cognitive Skills in a Cognitive-laden Dentistry Program. *European Journal of Contemporary Education*, *11*(1), 72–81. https://doi.org/10.13187/ejced.2015.11.72

Ranatunga, J. B., & Pagliano, P. J. (2017). Wellbeing research in education: A critical realist perspective. *International Journal of Innovation, Creativity and Change*, *3*(3), 153–172.

Ruttledge, R., Devitt, E., Greene, G., Mullany, M., Charles, E., Frehill, J., & Moriarty, M. (2016). A randomised controlled trial of the FRIENDS for Life emotional resilience programme delivered by teachers in Irish primary schools. *Educational and Child Psychology*, *33*(2), 69–89.

Sagone, E., & Caroli, M. E. De. (2013). Relationships between Resilience, Self-Efficacy, and Thinking Styles in Italian Middle Adolescents. *Procedia - Social and Behavioral Sciences*, *92*(Lumen), 838–845. https://doi.org/10.1016/j.sbspro.2013.08.763

Sankaranarayanan, A., & Cycil, C. (2014). Resiliency training in Indian children: A pilot investigation of the Penn Resiliency Program. *International Journal of Environmental Research and Public Health*, *11*(4), 4125–4139. https://doi.org/10.3390/ijerph110404125

Seligman, M. E. P., Ernst, R. M., Gillham, J., Reivich, K., & Linkins, M. (2009). Positive education: positive psychology and classroom interventions. *Oxford Review of Education*, *35*(3), 293–311. https://doi.org/10.1080/03054980902934563

Smith, E. J. (2006). The Strength-Based Counseling Model. *The Counseling Psychologist*, *34*(1), 13–79. https://doi.org/10.1177/0011000005277018

Smith, Elsie J. (1973). The Strength-Based Counseling Model: A Paradigm Shift in Psychology My rationale for using a strength-based counseling model with an integrative, common-factor approach is well grounded in both historical and current. https://doi.org/10.1177/0011000005282364

Stallard, P. (2010). Mental health prevention in UK classrooms: the FRIENDS anxiety prevention programme. *Emotional and Behavioural Difficulties*, *15*(1), 23–35. https://doi.org/10.1080/13632750903512381

Suranata, K., Atmoko, A., & Hidayah, N. (2017). Validation of Psychological Resilience Scale and Implication for Guidance and Counseling Practice. In *2nd ICET Theme:"improving the quality of education and training through strengthening networking* (Vol. 1, p. 467).

Suranata, K., Atmoko, A., & Hidayah, N. (2017). Enhancing Students' Resilience: Comparing The Effect of Cognitive-Behavior And Strengths-Based Counseling. https://doi.org/10.2991/icirad-17.2017.20

Suranata, K., Atmoko, A., Hidayah, N., Rangka, I. B., & Ifdil, I. (2017). Risks and resilience of students with hearing impairment in an inclusive school at Bengkala, Bali, Indonesia. *Specialusis Ugdymas*, *2*(37), 165–214. https://doi.org/10.21277/se.v2i37.328

Troy, A. S., & Mauss, I. B. (2011). Resilience in the face of stress: Emotion regulation As a Protective Factor. *S. M. Southwick, B. T. Litz, D. Charney & M. J. Friedman (Eds.) Resilience and Mental Health: Challenges Across the Lifespan*, 30–44. https://doi.org/10.1017/CBO9780511994791.004

Ungar, M. (2015). Practitioner review: Diagnosing childhood resilience - A systemic

approach to the diagnosis of adaptation in adverse social and physical ecologies. *Journal of Child Psychology and Psychiatry and Allied Disciplines*. https://doi.org/10.1111/jcpp.12306

Venkateswaran, C., & Vincent, A. S. (2018). A community model of mental health promotion - Its relevance in education - The story of MEHAC in India. *International Journal of Innovation, Creativity and Change*, *4*(3), 117–124.

VicHealth. (2015). *Interventions to build resilience among young people A literature review*. *VicHealth*. Melbourne: Victorian Health Promotion Foundation. https://doi.org/10.1.1.45.1447

Waters, L. (2011). A Review of School-Based Positive Psychology Interventions. *The Australian Educational and Developmental Psychologist*, *28*(02), 75–90. https://doi.org/10.1375/aedp.28.2.75