

# **From Overthinking to Understanding: Outbond as a Strategy to Improve Self-Awareness and Mental Health Literacy**

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## **ABSTRACT**

Adolescence is a critical developmental stage in which individuals often experience psychological challenges such as overthinking, stress, and emotional dysregulation. Limited self-awareness and low mental health literacy exacerbate these challenges, contributing to poor decision-making, heightened anxiety, and stigma. Innovative approaches are needed to promote adolescent mental health. This study aimed to examine the effectiveness of the “Outbond from Overthinking to Understanding” program in improving self-awareness and mental health literacy among adolescents. A quasi-experimental design with pre-test and post-test control groups was conducted among 120 students (60 intervention, 60 control) from senior high schools (SMA) and vocational high schools (SMK) in Kediri, Indonesia. Participants were selected using cluster sampling. The intervention group participated in a one-day outbound program consisting of six activity stations, while the control group received a leaflet on adolescent mental health. Self-awareness was measured using the Self-Reflection and Insight Scale (SRIS), and mental health literacy was assessed with the Mental Health Literacy Scale (MHLS). Data were analyzed using paired and independent t-tests. The intervention group showed significant improvements in self-awareness (Mean Difference = +13.4,  $p < 0.001$ ) and mental health literacy (Mean Difference = +17.7,  $p < 0.001$ ), while the control group demonstrated no significant changes. Post-test comparisons revealed higher mean scores in the intervention group compared to the control group for both self-awareness ( $78.6 \pm 7.9$  vs.  $66.3 \pm 8.6$ ,  $p < 0.001$ ) and mental health literacy ( $80.2 \pm 8.1$  vs.  $65.0 \pm 8.7$ ,  $p < 0.001$ ). The “Outbond from Overthinking to Understanding” program significantly enhanced self-awareness and mental health literacy among adolescents. Outbound-based experiential learning offers a promising, engaging, and practical strategy for promoting adolescent mental health and should be considered as a complementary approach to conventional school-based education.

**Keywords:** Adolescents; Experiential learning; Mental health literacy; Outbound program; Self-awareness

## **INTRODUCTION**

Adolescence is a critical developmental stage characterized by rapid physical, emotional, and social changes. During this period, many adolescents experience psychological challenges such as overthinking, stress, and difficulties in managing emotions. Prolonged overthinking has been associated with poor decision-making, heightened anxiety, and decreased self-confidence, all of which can negatively affect overall mental health. Inadequate self-awareness often prevents adolescents from recognizing their emotional states,

understanding personal strengths and weaknesses, and effectively managing stress (Nobre et al., 2021; Rahmawaty et al., 2022; Sarmini et al., 2023).

Globally, mental health problems among adolescents have become a major concern. The World Health Organization (WHO) estimates that one in seven adolescents, or about 13%, experience a mental disorder each year, equivalent to more than 160 million young people aged 10–19 years. A meta-analysis further reports that 34% of adolescents experience elevated depressive symptoms, while 8% meet the criteria for major depressive disorder. In Indonesia, findings from the Indonesia National Adolescent Mental Health Survey (I-NAMHS, 2021) revealed that one in three adolescents reported mental health symptoms in the past year, and one in twenty (5.5%) had a diagnosable mental disorder. The most common conditions were anxiety disorders (3.7%), followed by major depressive disorder (1.0%) and conduct disorder (0.9%). These statistics underscore the urgent need to strengthen preventive and promotive strategies to improve adolescent mental health (Eisenstadt et al., 2021; Praherso et al., 2020; Sarmini et al., 2023).

At the same time, low mental health literacy among adolescents remains a pressing issue worldwide. Many young people have limited knowledge about mental health concepts, the ability to identify signs of psychological distress, and awareness of available resources for help-seeking. This lack of literacy contributes to stigma, delayed treatment, and worsening outcomes for adolescents experiencing mental health problems. Strengthening both self-awareness and mental health literacy is therefore essential for promoting emotional well-being and resilience in this age group (Mancone et al., 2024; Nobre et al., 2021).

Outbond, or outdoor experiential learning, offers an innovative and interactive approach to address these challenges. Unlike traditional classroom-based education, outbond activities engage adolescents in real-life simulations, teamwork, and problem-solving tasks in outdoor settings. These activities not only foster communication and collaboration but also provide opportunities for reflection, emotional regulation, and self-discovery. By encouraging adolescents to confront challenges and reflect on their experiences, outbond can enhance self-awareness and promote a deeper understanding of mental health (Arifin et al., 2025; Cordero Jr, 2024; Latuapo et al., 2022).

Several studies have highlighted the effectiveness of experiential learning methods in improving psychosocial skills and emotional regulation among adolescents. However, limited research has specifically examined the role of outbond activities in strengthening self-awareness and mental health literacy. This study aims to investigate the effectiveness of outbond-based interventions in enhancing self-awareness and mental health literacy among adolescents, providing evidence for experiential learning as a preventive and promotive strategy in adolescent mental health.

## **METHODS**

### **Study Design**

This study employed a quasi-experimental design with a pre-test and post-test control group. The intervention group participated in the “Outbond from Overthinking to Understanding” program, while the control group received a mental health leaflet containing educational information.

### **Participants**

The study was conducted among students from several senior high schools (SMA) and vocational high schools (SMK) in Kediri City, Indonesia. A cluster sampling technique was applied to select schools, followed by random selection of participants within each cluster. The minimum required sample size was calculated using a power analysis for intervention studies, ensuring a confidence level of 95% and a power of 80%. A total of 240 students were recruited, with 120 students in the intervention group and 120 in the control group.

### **Inclusion and Exclusion Criteria**

Inclusion criteria were: (1) adolescents aged 15–18 years, (2) active students at selected schools, (3) willingness to participate with parental consent. Exclusion criteria included students with known severe mental health disorders or those currently undergoing psychiatric treatment.

### **Intervention**

The intervention group participated in the “Outbond from Overthinking to Understanding” program, which consisted of six activity stations (posts) designed to improve self-awareness and mental health literacy. Each station included structured games, reflection sessions, and facilitated discussions on managing emotions, identifying overthinking patterns, communication, problem-solving, and resilience-building. The program lasted one full day (approximately 6 hours).

The control group received a leaflet on adolescent mental health, which covered basic information about stress, overthinking, emotional regulation, and available support resources.

### **Data Collection**

Data were collected at baseline (pre-test) and two weeks after the intervention (post-test). Two validated instruments were used Self-Reflection and Insight Scale (SRIS) for measuring self-awareness and Mental Health Literacy Scale (MHLS) for measuring mental health literacy.

### **Data Analysis**

Data were analyzed using SPSS. Descriptive statistics were performed to describe participant characteristics. Normality was tested with the Kolmogorov–Smirnov test. Differences between groups were analyzed using independent t-tests (for between-group comparisons) and paired t-tests (for within-group comparisons). A p-value <0.05 was considered statistically significant.

## **RESULTS**

### **Participant Characteristics**

A total of 120 students participated in the study, consisting of 60 students in the intervention group and 60 students in the control group. Table 1 presents the demographic characteristics of the respondents.

**Table 1. Demographic Characteristics of Respondents (N = 120)**

<b>Characteristics</b>	<b>Intervention Group (n=60)</b>	<b>Control Group (n=60)</b>	<b>p-value</b>
Age (Mean ± SD)	16.8 ± 1.2	16.6 ± 1.3	0.42
Gender			
Male	28 (46.7%)	30 (50.0%)	0.72
Female	32 (53.3%)	30 (50.0%)	
School Type			
SMA	35 (58.3%)	33 (55.0%)	0.68
SMK	25 (41.7%)	27 (45.0%)	

No statistically significant differences were found in age, gender, or school type between groups, indicating baseline comparability.

### **Self-Awareness and Mental Health Literacy Outcomes**

The comparison of pre-test and post-test scores in both groups is shown in Table 2. Paired sample t-tests were used to assess within-group changes, while unpaired t-tests compared differences between groups.

**Table 2. Pre-test and Post-test Scores of Self-Awareness and Mental Health Literacy**

Variable	Group	Pre-test (Mean ± SD)	Post-test (Mean ± SD)	Mean Difference	p-value (within-group)
<b>Self-Awareness</b>	Intervention (n=60)	65.2 ± 8.4	78.6 ± 7.9	+13.4	<0.001*
	Control (n=60)	64.7 ± 9.1	66.3 ± 8.6	+1.6	0.09
<b>Mental Health Literacy</b>	Intervention (n=60)	62.5 ± 7.6	80.2 ± 8.1	+17.7	<0.001*
	Control (n=60)	63.1 ± 8.3	65.0 ± 8.7	+1.9	0.07

The intervention group showed a significant increase in both self-awareness and mental health literacy ( $p < 0.001$ ), while the control group demonstrated no significant changes.

### Between-Group Comparison

An independent t-test was conducted to compare the post-test scores between the intervention and control groups. Results are presented in Table 3.

**Table 3. Between-Group Comparison of Post-test Scores**

Variable	Intervention Group (n=60)	Control Group (n=60)	Mean Difference	p-value
Self-Awareness	78.6 ± 7.9	66.3 ± 8.6	12.3	<0.001*
Mental Health Literacy	80.2 ± 8.1	65.0 ± 8.7	15.2	<0.001*

Post-test scores for both self-awareness and mental health literacy were significantly higher in the intervention group compared to the control group ( $p < 0.001$ ), confirming the effectiveness of the Outbond from Overthinking to Understanding program.

## DISCUSSION

This study demonstrated that the outbound program “Outbound from Overthinking to Understanding” was effective in improving both self-awareness and mental health literacy among adolescents in Kediri. The intervention group showed a significant increase in mean scores from pre-test to post-test, while the control group, which only received leaflets, exhibited only minor improvements. This indicates that experiential learning activities such as outbound training can be a powerful strategy for enhancing psychological and emotional competencies in adolescents.

The findings are consistent with previous studies reporting that experiential learning, group-based outdoor activities, and structured reflection can foster self-awareness, emotional regulation, and coping strategies among adolescents. Unlike passive information delivery, outbound activities engage participants physically, cognitively, and emotionally, thereby facilitating deeper learning and internalization of concepts related to self-awareness and mental health (Arifin et al., 2025; Cordero Jr, 2024; Latuapo et al., 2022).

Furthermore, the outbound program addressed common adolescent mental health challenges, such as overthinking, anxiety, and difficulties in expressing emotions, which have been widely reported in both global and Indonesian contexts. By incorporating six interactive posts designed to stimulate teamwork, problem-solving, and reflection, participants were able to translate abstract concepts of mental health into practical experiences. This process likely contributed to the higher post-test gains observed in the intervention group (Chan et al., 2021; Năstasă et al., 2023).

In contrast, the control group that received leaflets showed only marginal improvements. While leaflets can raise basic awareness, their impact may be limited because adolescents often prefer interactive, engaging, and peer-supported learning approaches. This

aligns with research suggesting that passive health education methods are less effective in fostering behavioral and cognitive changes compared to active interventions (Cordero Jr, 2024; Frank, 2009).

The significant differences found in both self-awareness and mental health literacy highlight the potential of outbound-based interventions as an innovative complement to conventional school-based mental health education. Importantly, this approach may also reduce stigma by promoting open discussion and collaborative learning in a safe environment (Arifin et al., 2025; Chan et al., 2021; Frank, 2009).

However, this study has several limitations. First, the follow-up period was short, and thus, long-term effects on behavior and mental health outcomes could not be assessed. Second, the study was limited to selected high schools and vocational schools in Kediri, which may restrict the generalizability of the findings. Future research should include longitudinal designs and broader participant samples to confirm the sustainability and scalability of outbound interventions for adolescent mental health promotion.

Overall, this study provides evidence that outbound-based experiential learning can effectively enhance self-awareness and mental health literacy among adolescents. These findings suggest that incorporating interactive and experiential strategies into school mental health programs may contribute to more effective mental health promotion efforts.

## CONCLUSION

This study demonstrated that the “Outbond from Overthinking to Understanding” intervention was effective in significantly improving both self-awareness and mental health literacy among adolescents. Compared to the control group, which only received leaflet-based education, the outbound-based experiential learning approach fostered greater engagement, reflection, and peer interaction, leading to measurable improvements. These findings highlight the potential of interactive, outdoor, and team-based activities as innovative strategies for addressing adolescent mental health challenges. Incorporating outbound programs into school-based mental health promotion initiatives may provide a practical, engaging, and sustainable method to strengthen adolescents’ psychosocial resilience and equip them with essential mental health knowledge and self-awareness skills. Future research with larger samples, diverse settings, and longer follow-up periods is recommended to further validate and expand the generalizability of these results.

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