

## Analyzing the Impact of Psychological Factors on Youth Resistance to Drugs in the Tabuk Region and the Effectiveness of Psychological Interventions and Education in Enhancing Awareness and Prevention

Mohammed Ahmad Zoghaibi <sup>1</sup>

<sup>1</sup> Department of Basic Sciences, College of Haql, University of Tabuk, Tabuk, KSA. Email: mzghebi@ut.edu.sa

### KEYWORDS

Youth drug resistance, Psychological factors, Tabuk region, Drug abuse prevention, Psychological interventions, Mental health.

### ABSTRACT

The youth drug abuse issue in the Tabuk region poses a multifaceted challenge that demands attention. This study seeks to examine how psychological factors impact youth resistance to drug use in Tabuk, while also assessing the effectiveness of counseling interventions, including behavioral counseling, educational counseling, social counseling, and self-directed education, in preventing drug abuse. Conducted via survey methodology, data will be collected from a random sample of Tabuk's youth (n = 840). Questionnaires will gauge psychological factors related to drug resistance, including self-awareness, self-regulation, social support, curiosity, depression, and anxiety. Statistical techniques, including correlation and factor analysis, will be employed for data analysis. The study will evaluate the efficacy of the counseling interventions in raising awareness and preventing drug abuse. These findings will enhance understanding of youth drug resistance in Tabuk and inform the development of targeted prevention strategies.

## 1. Introduction

Addressing the challenge of youth drug abuse in the Tabuk region necessitates a nuanced understanding of the psychological factors influencing drug resistance. As substance abuse among young people becomes an increasingly urgent issue, it is crucial to investigate the underlying psychological dimensions that contribute to their ability to resist drug use. Psychological factors such as self-awareness, self-regulation, social support, and emotional states like depression and anxiety play pivotal roles in shaping an individual's susceptibility to substance abuse (Mausam 2024, Khan Mohammadi et al. 2022, Binisris et al. 2022, Bavarian et al. 2022).

Research has shown that these psychological elements can significantly impact youth behavior and attitudes toward drugs (Njoki et al. 2022, Izmi et al. 2024, Ibobor et al. 2024, Deuchar and McLean 2021, Nairn et al. 2022). For instance, self-efficacy and social support have been identified as key determinants in enhancing resistance to drug use and preventing addiction relapse. Community-based interventions and educational programs have also proven effective in raising awareness and fostering resilience against drug misuse (Lee et al. 2021, Hanson 2024, Hezarian et al. 2021, Phukao 2021).

This study aims to analyze these psychological factors within the context of Tabuk, employing a survey methodology to gather data from a diverse sample of local youth. By evaluating various counseling interventions—ranging from behavioral and educational counseling to social support and self-directed education—the research seeks to determine their effectiveness in enhancing drug resistance and preventing substance abuse. Ultimately, the findings will contribute to a more comprehensive understanding of youth drug resistance in Tabuk and inform the development of targeted, evidence-based prevention strategies tailored to the region's unique socio-cultural landscape.

## 2. Review of Literature

An extensive review of current literature reveals a diverse array of psychological factors pivotal in shaping drug resistance among youth. Noteworthy research by (Malik et al., 2023) highlights self-efficacy, social support, and conscientiousness as significant determinants, with studies emphasizing their role in mitigating addiction relapse. Additionally, Latumahina's work (Latumahina et al., 2023)

underscores the effectiveness of community-based drug prevention programs in bolstering youth awareness, thereby fortifying resistance against drug misuse.

Interventions targeting elementary school-aged children, exemplified by Tymes (Tymes et al., 2016), showcase promising outcomes through life skills training, enhancing social confidence and resistance skills against drugs. Abdurahman's research (Abdurahman, 2023) emphasizes the role of self-regulation in adolescent resilience, suggesting its potential in navigating substance abuse challenges.

Studies by Ismayilova (Ismayilova & Terlikbayeva, 2018) and Dewi (Dewi et al., 2016) demonstrate the positive impact of family-focused interventions and health education in reducing substance abuse among youth, respectively. Furthermore, Allahverdipour's study (Allahverdipour et al., 2009) in Islamic contexts highlights the effectiveness of skill-based interventions in enhancing preventive behavior against substance abuse.

Innovative approaches, such as multimedia awareness programs, as evidenced by Al-Tarawneh (Al-Tarawneh & Baioumy, 2018), underscore the importance of diverse mediums in fostering self-disapproval of drug addiction. Moreover, personality-targeted interventions, like Preventure (Edalati & Conrod, 2019), prove effective in mitigating substance use and associated mental health issues among high-risk adolescents.

Scholars like Newton (Newton et al., 2020) and Mason (Mason et al., 2021) advocate for tailored prevention programs targeting specific personality traits and risk factors, supported by Mohammadi's work (Mohammadi et al., 2020) on the Health Belief Model. Additionally, Hamdan-Mansour's research (Hamdan-Mansour et al., 2020) delves into psychological determinants, emphasizing coping efficacy and social support in predicting substance use among high school students.

In our endeavor to grasp the psychological intricacies of drug resistance among Tabuk's youth, these findings emphasize the necessity for evidence-based interventions customized to meet their specific psychological profiles and risk factors.

Furthermore, cognitive-behavioral interventions targeting personality risk factors, illustrated by Conrod (Conrod et al., 2006), and family-based approaches, as evidenced by Hogue (Hogue et al., 2002), offer promising avenues for curbing substance abuse among adolescents.

In examining the multifaceted nature of factors influencing drug resistance among youth, recent studies have highlighted various dimensions that contribute to understanding and addressing this issue. Research by Tucker et al. (2023) provides valuable insights into how factors influencing participation in physical activities and sports can impact overall well-being and resilience in children and adolescents with spinal conditions. This underscores the importance of incorporating physical activity as a component of comprehensive substance abuse prevention strategies.

Furthermore, Alhawiti et al. (2021) offer a review of the psychological aspects of obesity and its surgical interventions, highlighting the broader psychological dimensions that can also influence substance abuse resistance. Their findings suggest that psychological well-being plays a critical role in managing various health conditions, including substance use.

Additionally, Abdelrahim (2023) explores the impact of using augmented reality technology to enhance critical thinking and writing skills among students. This innovative approach illustrates the potential for integrating advanced technologies into educational interventions to strengthen cognitive and critical skills, which can be instrumental in combating substance abuse.

Mahadevan et al. (2024) explore how mental health and well-being impact substance use disorders (SUDs). They find that poor mental health can lead to increased substance use, and excessive use negatively affects well-being. This bidirectional relationship is supported by survey data linking high substance use with worse mental health outcomes.

These studies collectively emphasize the necessity of addressing psychological, physical, and technological aspects in the development of effective preventive strategies. By integrating these diverse elements, we can better understand and enhance drug resistance among youth, particularly in specific socio-cultural contexts such as the Tabuk region.

In conclusion, these insights underscore the multifaceted nature of psychological factors influencing drug resistance among youth. As this study aims to contribute to this knowledge base, it endeavors to delve deeper into the psychological dimensions within the specific context of the Tabuk region, thereby informing the design of effective preventive strategies tailored to its unique socio-cultural landscape.

In light of these findings, it becomes evident that the psychological factors influencing drug resistance among youth are complex and multifaceted. This study endeavors to delve deeper into these dimensions within the specific context of the Tabuk region, aiming to contribute to the existing knowledge base. By doing so, it seeks to inform the development of tailored preventive strategies suited to the unique socio-cultural landscape of the region.

### **3. Methods**

#### **Sample Selection and Data Collection Process**

This study was conducted among youth in the Tabuk region from October 2023 to February 2024. A sample size of approximately 934 individuals was targeted to ensure representation across various demographics. The survey was distributed electronically via email and social media platforms. Data collection was carried out using survey methodology, with participants completing self-administered questionnaires designed to assess psychological factors related to drug resistance. The survey achieved a response rate of around 90%, with informed consent obtained from all participants prior to their involvement.

#### **Instruments**

The questionnaire utilized in this study underwent a rigorous development process to ensure its effectiveness and validity. Extensive literature reviews across national and international scientific databases were conducted to identify pertinent scales and items for assessing psychological factors related to drug resistance among youth. Subsequently, items deemed prevalent and relevant were meticulously selected and organized into distinct dimensions for analysis, with redundant items systematically eliminated.

To validate the content of the questionnaire, a panel consisting of 3 university professors provided invaluable input. Their expertise and perspectives aided in refining the questionnaire. Prior to full-scale data collection, a pilot test involving 20 young adults, later excluded from the final sample, was conducted to assess the questionnaire's clarity and comprehensibility comprehensively.

The final version of the questionnaire comprised 29 questions distributed across various sections. It included 5 questions aimed at gathering sociodemographic information about the participants, such as sex, age, educational background, professional status, and living situation. The remaining 24 questions were divided into two thematic sections:

#### **Psychological Factors Impacting Youth Resistance to Drugs:**

This section, comprising 17 questions in total, aimed to explore the various psychological determinants that could positively or negatively influence youth resistance to drug use. It encompassed dimensions such as psychological health awareness, self-control, social and family support, as well as negative factors like anxiety, depression, and curiosity. Each dimension contained a combination of questions probing both positive and negative aspects to provide a comprehensive understanding of the psychological factors at play.

### **Effectiveness of Preventive Counseling Interventions in Enhancing Self-Awareness:**

This section, comprising the remaining seven questions, focused on assessing the effectiveness of preventive counseling interventions in enhancing self-awareness among young individuals regarding drug-related risks. It encompassed dimensions such as educational counseling, social counseling, psychological counseling, and behavioral counseling, each aimed at evaluating the impact of interventions on various aspects of self-awareness and risk perception.

Each section was meticulously designed to evaluate different aspects of psychological factors influencing drug resistance among youth, encompassing both positive and negative influences. The questionnaire employed a Likert scale response format, ranging from "Strongly Agree" to "Strongly Disagree." This approach ensured comprehensive data collection regarding participants' knowledge, attitudes, and behaviors related to illicit drug use.

### **Statistical analysis**

Data analysis involved a meticulous process aimed at deriving meaningful insights from the survey data in alignment with the research objectives. To begin, the statistical software IBM SPSS Statistics for Windows, version 25.0, was utilized for its robust capabilities in handling and analyzing complex datasets. This choice of software was pivotal in facilitating comprehensive analyses tailored to the specific research questions and the structure of the questionnaire.

The reliability of the questionnaire scales was rigorously assessed using Cronbach's alpha ( $\alpha$ ), a measure of internal consistency. This ensured that the survey items reliably measured the intended constructs related to psychological factors, demographic variables, and drug resistance among youth, as outlined in the research objectives.

Descriptive analysis played a crucial role in summarizing the demographic characteristics of the participants and the distribution of responses to each survey item. Through this process, absolute frequencies (n) and relative percentages (%) were calculated to provide a clear picture of the sample composition and response patterns.

We employed a range of measurements and techniques to assess the psychological factors influencing drug resistance among the target population. One of the measures used was the T-Test, which we employed to analyze the impact of both positive and negative factors on drug resistance. Additionally, we utilized measurements such as Cronbach's alpha and logistic regression analysis to provide more accurate estimations of the relationships between the studied variables. We also employed binary regression analysis techniques to identify factors significantly affecting drug use. Through these measurements and techniques, we aimed to comprehensively explore the factors influencing drug resistance and provide valuable insights for intervention strategies.

Overall, the statistical analyses conducted in this study were tailored to address the research questions comprehensively, providing valuable insights into the factors influencing drug resistance among youth and the effectiveness of preventive interventions. These analyses formed the cornerstone of the research findings, contributing to the advancement of knowledge in the field and guiding evidence-based interventions aimed at promoting healthier behaviors among youth.

## **4. Results**

The table 1 provides a comprehensive breakdown of the demographic characteristics of a surveyed population, offering insights into gender distribution, age groups, marital status, educational attainment, and perceived financial situations. It reveals that out of 840 respondents, 462 (55.0%) identified as male and 378 (45.0%) as female. The largest age group was 25-29 years old, with 359 respondents (42.7%), followed by 30-39 years old with 331 respondents (39.4%), and 18-24 years old with 150 respondents (17.9%). Marital status indicated that 526 (62.6%) were married, 198 (23.6%)

were single, and 116 (13.8%) were divorced. Educationally, 402 (47.9%) had a high school education, 338 (40.2%) had a university education, and 100 (11.9%) had education up to middle school level. Financially, 516 (61.4%) perceived their situation as average, 213 (25.4%) as bad, and 111 (13.2%) as good. This detailed breakdown offers valuable insights into the diverse demographic makeup of the surveyed population, facilitating a deeper understanding of the distribution across various demographic categories.

Table 1: Sociodemographic Characteristics

Demographic Characteristics	Frequency		Percentage	
Male	462	840	55.0%	100%
Female	378		45.0%	
18-24 years old	150	840	17.9%	100%
25-29 years old	359		42.7%	
30-39 years old	331		39.4%	
Single	198	840	23.6%	100%
Married	526		62.6%	
Divorced	116		13.8%	
Middle school education	100	840	11.9%	100%
High school education	402		47.9%	
University education	338		40.2%	
Good financial situation	111	840	13.2%	100%
Average financial situation	516		61.4%	
Bad financial situation	213		25.4%	

**T-Test for Positive factors:**

Table 2 presents the statistical analysis of psychological factors affecting resistance to drug consumption. The examination of self-consciousness, social support, and self-control reveals significant impacts on drug resistance. Notably, self-consciousness demonstrates a substantial t-value of 128.730 (df = 839, p < 0.001), with a mean difference of 4.22738 and a 95% confidence interval (CI) from 4.1629 to 4.2918. Similarly, social support exhibits a noteworthy t-value of 266.303 (df = 839, p < 0.001), accompanied by a mean difference of 4.17778 and a 95% CI ranging from 4.1470 to 4.2086. Furthermore, self-control displays a significant t-value of 135.169 (df = 839, p < 0.001), with a mean difference of 4.10357 and a 95% CI from 4.0440 to 4.1632. These findings underscore the pivotal roles of self-consciousness, social support, and self-control as psychological factors influencing resistance to drug consumption.

Table 2: Statistical Analysis of Psychological Positive Factors Impacting Resistance to Drug Consumption.

Psychological Factor	t-value	df	Sig. (bilatérale)	Mean Difference	95% CI Lower Bound	95% CI Upper Bound
Self-Consciousness	128.730	839	p < 0.001	4.22738	4.1629	4.2918
Social Support	266.303	839	p < 0.001	4.17778	4.1470	4.2086
Self-Control	135.169	839	p < 0.001	4.10357	4.0440	4.1632

Table 3 presents the effect sizes for the single sample analysis of psychological positive factors on drug resistance. The effect sizes are measured using Cohen's d and Hedges' g, providing estimates along with their corresponding 95% confidence intervals (CI) lower bound and upper bound. For self-consciousness, both Cohen's d and Hedges' g exhibit similar effect sizes, with Cohen's d estimated at 0.95177 (95% CI: 4.218 to 4.664) and Hedges' g at 0.95262 (95% CI: 4.215 to 4.660). Similarly, self-control demonstrates consistent effect sizes between Cohen's d and Hedges' g, with Cohen's d estimated at 0.87988 (95% CI: 4.430 to 4.897) and Hedges' g at 0.88067 (95% CI: 4.427 to 4.892). In contrast, social support exhibits slightly lower effect sizes compared to self-consciousness and self-control. Cohen's d for social support is estimated at 0.45468 (95% CI: 8.743 to 9.633), while Hedges' g is slightly higher at 0.45509 (95% CI: 8.736 to 9.624). These effect size estimates provide valuable insights into the magnitude of the impact of each psychological factor on drug resistance, with self-consciousness and self-control demonstrating larger effect sizes compared to social support.

Table 3: Effect Sizes for Single Sample Analysis of Psychological Positive Factors on Drug Resistance

Psychological Factor	Effect Size Measure	Estimate	95% CI Lo. Bound	95% CI Up. Bound
Self-Consciousness	Cohen's d	0.95177	4.218	4.664
	Hedges' g	0.95262	4.215	4.660
Self-Control	Cohen's d	0.87988	4.430	4.897
	Hedges' g	0.88067	4.427	4.892
Social Support	Cohen's d	0.45468	8.743	9.633
	Hedges' g	0.45509	8.736	9.624

### T-Test for Negative factors:

Table 4 illustrates the statistical analysis of psychological negative factors impacting resistance to drug consumption. Among the factors analyzed—Anxiety, Depression, and Curiosity—Depression emerges as the most significant factor influencing resistance to drug consumption, based on the provided data.

The t-values for Depression are notably high, with a value of 161.069 (df = 839) and a significance level (Sig.) of .000, indicating a highly significant impact. The mean difference associated with Depression is 4.40992, with a narrow 95% Confidence Interval for the Difference ranging from 4.3562 to 4.4637. These findings suggest that individuals experiencing higher levels of depression tend to

exhibit substantially different levels of resistance to drug consumption compared to those with lower levels of depression.

While Anxiety and Curiosity also show significant impacts on drug resistance, as evidenced by their respective t-values and significance levels, Depression appears to have the most pronounced effect based on the provided statistical measures.

Table 4: Statistical Analysis of Psychological Negative Factors Impacting Resistance to Drug Consumption

Psychological Factor	t-value	Degrees of Freedom (df)	Significance (Sig.)	Mean Difference	95% Confidence Interval for the Difference
Anxiety	123.357	839	.000	4.09127	(4.0262, 4.1564)
Depression	161.069	839	.000	4.40992	(4.3562, 4.4637)
Curiosity	75.662	839	.000	3.33155	(3.2451, 3.4180)

Table 5 presents the effect sizes for the single sample analysis of psychological positive factors on drug resistance, measured using standardization (Cohen's d) and estimation of points (Hedges' Correction), along with their respective 95% confidence intervals (CI).

For Anxiety, the effect sizes are relatively large, with Cohen's d at 0.96124 and Hedges' Correction at 0.96210. The 95% confidence interval for Anxiety ranges from 4.256 to 4.471, indicating a substantial impact on drug resistance.

Similarly, Depression demonstrates significant effect sizes, though slightly smaller compared to Anxiety. Cohen's d for Depression is 0.79352, and Hedges' Correction is 0.79423, with a wider 95% confidence interval ranging from 5.557 to 5.832.

In contrast, Curiosity exhibits the largest effect sizes among the three factors analyzed, with Cohen's d at 1.27617 and Hedges' Correction at 1.27732. The 95% confidence interval for Curiosity is relatively narrower, ranging from 2.611 to 2.752.

These effect size estimates provide valuable insights into the magnitude of the impact of each psychological factor on drug resistance, with Curiosity showing the most substantial effect size, followed by Anxiety and Depression.

Table 5: Effect Sizes for Single Sample Analysis of Psychological Positive Factors on Drug Resistance

Psychological Factor	Standardisation (Cohen's d)	Estimation des points (Hedges' Correction)	95% Confidence Interval (Lower Bound)	95% Confidence Interval (Upper Bound)
Anxiety	0.96124	0.96210	4.256	4.471
Depression	0.79352	0.79423	5.557	5.832
Curiosity	1.27617	1.27732	2.611	2.752

Table 6: Effect of Guidance Types on Test Values and Mean Differences: Results from a Specific

Study

Guidance Type	Test Value	Degrees of Freedom	Two-tailed Significance (p-value)	Mean Difference	95% Confidence Interval of the Difference
Self-education	126.035	839	0.000	4.301	(4.23, 4.37)
Psychological Guidance	245.523	839	0.000	4.705	(4.67, 4.74)
Behavioral Guidance	139.346	839	0.000	4.446	(4.38, 4.51)
Social Guidance	116.581	839	0.000	4.24048	(4.1691, 4.3119)
Educational Guidance	166.496	839	0.000	4.54048	(4.4869, 4.5940)

Table 6 presents the results of a specific study examining the effect of different types of guidance on test values and mean differences. Each guidance type is associated with a test value, degrees of freedom, two-tailed significance (p-value), mean difference, and a 95% confidence interval of the difference.

The findings indicate significant differences across various guidance types. Self-education yielded a test value of 126.035, while Psychological Guidance, Behavioral Guidance, Social Guidance, and Educational Guidance resulted in test values of 245.523, 139.346, 116.581, and 166.496, respectively. All of these test values have associated p-values of 0.000, indicating statistical significance.

Furthermore, mean differences between groups are observed, ranging from 4.24048 to 4.705. The 95% confidence intervals of these differences provide additional insight into the precision of these estimates, with ranges varying slightly depending on the guidance type.

Overall, these results suggest that different types of guidance have a significant impact on test values and mean differences, highlighting the importance of considering the type of guidance when analyzing outcomes in this context.

Table 7: Effect Sizes (Cohen's d and Hedges' Correction) with Confidence Intervals for Different Guidance Types.

Guidance Type	Standardization Method	Point Estimate	95% Confidence Interval
Cohen's d			
Self-education	0.989	0.989	(4.130, 4.567)
Psychological Guidance	0.555	0.555	(8.060, 8.882)
Behavioral Guidance	0.924	0.925	(4.568, 5.047)
Social Guidance	1.054207	1.05421	(3.818, 4.226)
Educational Guidance	0.790380	0.79038	(5.461, 6.028)
Hedges' Correction			

Guidance Type	Standardization Method	Point Estimate	95% Confidence Interval
Self-education	0.989	0.990	(4.126, 4.563)
Psychological Guidance	0.555	0.556	(8.053, 8.874)
Behavioral Guidance	0.925	0.926	(4.564, 5.043)
Social Guidance	1.05515	1.05515	(3.815, 4.222)
Educational Guidance	0.79108	5.739538	(5.456, 6.022)

The results presented in Table 7 illustrate the impact of various types of guidance on the effect sizes, as measured by Cohen's *d* and Hedges' correction. Each guidance type underwent standardization, with point estimates and 95% confidence intervals provided for both methods.

Across the guidance types, notable variations in effect sizes are observed. For instance, Psychological Guidance exhibits relatively lower effect sizes compared to other types, as evidenced by its Cohen's *d* of 0.555 and Hedges' correction of 0.556. On the other hand, Social Guidance shows comparatively higher effect sizes, with a Cohen's *d* of 1.054207 and Hedges' correction of 1.05515.

These findings suggest that different forms of guidance have distinct impacts on the outcomes being measured. Additionally, the slight variations between Cohen's *d* and Hedges' correction may indicate differences in sample sizes and potential biases, highlighting the importance of considering both measures in effect size estimation. Further interpretation of these results would require contextual understanding and additional statistical analysis.

## 5. Discussion

The findings of this study illuminate the intricate relationship between various psychological factors and drug resistance among youth in the Tabuk region. These insights are instrumental in understanding substance abuse dynamics and inform the development of targeted preventive strategies suited to the region's unique socio-cultural context.

Firstly, the study underscores the importance of diverse psychological factors in designing interventions to promote drug resistance among youth. Self-consciousness, social support, and self-control emerged as significant positive psychological factors influencing drug resistance, emphasizing their critical roles in mitigating substance abuse tendencies. These findings align with prior research (Malik et al., 2023; Abdurahman, 2023; Arab, 2023), emphasizing the need for comprehensive intervention approaches addressing these dimensions.

Conversely, life pressures, notably depression, emerged as significant negative influencers of substance abuse behaviors among youth. Stress, peer pressure, and socioeconomic challenges contribute to heightened susceptibility to drug experimentation and addiction, underscoring the necessity for targeted interventions addressing these underlying issues comprehensively.

The effectiveness of community-based drug prevention programs, as demonstrated by Latumahina (Latumahina et al., 2023), highlights the pivotal role of societal support structures in bolstering youth awareness and resistance against drug misuse. Engaging community resources and fostering collaborative efforts between stakeholders can enhance the reach and impact of preventive initiatives.

Furthermore, family-focused interventions and health education, as evidenced by Ismayilova (Ismayilova & Terlikbayeva, 2018) and Dewi (Dewi et al., 2016), underscore the significance of familial and educational environments in shaping youth attitudes towards drug use. Strengthening family bonds and providing comprehensive health education programs empower youth with the

knowledge and skills to resist substance abuse.

Innovative approaches, such as multimedia awareness programs and personality-targeted interventions, offer promising avenues for promoting drug resistance among high-risk adolescents. These interventions leverage diverse mediums and tailor interventions to individual personality traits, effectively addressing the heterogeneous nature of drug resistance determinants (Al-Tarawneh & Baioumy, 2018; Edalati & Conrod, 2019; Thangam, 2023).

However, the study has limitations. Firstly, caution must be exercised in generalizing the results due to the random sampling approach. Additionally, while the questionnaire is based on validated scales, its formal validation is lacking. The cross-sectional design limits establishing causal relationships between psychological factors and drug resistance. Lastly, relying on retrospective data may introduce recall and social desirability biases.

Despite limitations, the study provides valuable insights into the psychological dimensions of drug resistance among Tabuk's youth. Addressing substance abuse dynamics comprehensively and tailoring interventions to socio-cultural contexts can effectively mitigate substance abuse and promote healthier behaviors among youth.

## **6. Conclusion**

In conclusion, this study delves into the influence of psychological factors on drug resistance among Tabuk's youth and evaluates the effectiveness of interventions. It emphasizes the significance of considering a range of psychological aspects in crafting preventive measures. Promising avenues include community-based initiatives, family-focused interventions, and innovative approaches. However, it's crucial to acknowledge limitations such as sampling biases and questionnaire validation concerns. Nonetheless, the findings offer valuable insights for tailored interventions aimed at combating substance abuse among the youth population in Tabuk.

### **Theoretical Implications:**

The study advances the theoretical understanding of youth drug resistance by integrating a variety of psychological factors within the context of the Tabuk region. It reinforces existing theories on self-efficacy and social support, demonstrating their critical role in enhancing drug resistance among youth. Additionally, it extends the application of cognitive-behavioral theories by showing how self-regulation and emotional states like depression and anxiety influence susceptibility to drug use. The findings align with theories suggesting that psychological resilience and robust social networks are pivotal in resisting drug abuse. The integration of diverse intervention strategies also contributes to theoretical models of preventive psychology by illustrating the effectiveness of multifaceted approaches tailored to specific psychological profiles.

### **Practical Implications:**

The results have several practical implications for designing and implementing drug prevention strategies in the Tabuk region. The study highlights the need for comprehensive intervention programs that address various psychological factors, such as self-awareness, self-regulation, and social support. Practitioners should develop and implement community-based programs that integrate behavioral, educational, social, and self-directed counseling to enhance youth resistance to drugs. Additionally, the findings underscore the importance of involving families in drug prevention efforts and utilizing innovative approaches like multimedia programs to reach and engage youth effectively. Policymakers and educators can use these insights to tailor prevention initiatives to the specific psychological and socio-cultural needs of the Tabuk region.

### Limitations:

Several limitations must be acknowledged in this study. Firstly, while the random sampling approach aimed to ensure representativeness, there may still be sampling biases that affect the generalizability of the findings. Secondly, although the questionnaire was based on validated scales, formal validation of the specific instrument used in this study was not conducted, which may impact the reliability of the results. The cross-sectional nature of the study limits the ability to establish causal relationships between psychological factors and drug resistance. Furthermore, reliance on retrospective self-reports may introduce recall and social desirability biases. These limitations should be considered when interpreting the findings and their implications.

### Future Research:

Future research should address the limitations of this study and build on its findings. Longitudinal studies could provide insights into causal relationships between psychological factors and drug resistance, offering a more comprehensive understanding of how these factors evolve over time. Research could also explore the effectiveness of specific intervention components in greater depth, using experimental designs to isolate the impact of different strategies. Additionally, expanding the study to include diverse socio-cultural contexts beyond Tabuk could enhance the generalizability of the findings and identify universal versus context-specific factors in drug resistance. Investigating the integration of emerging technologies, such as virtual reality or augmented reality, in preventive interventions may also offer innovative avenues for enhancing drug resistance among youth.

### Acknowledgments:

The author extends his appreciation to the Deanship of Scientific Research at University of Tabuk for funding this work through Research no. S-0037-1444.

### Conflicts of Interest:

The author declares no conflict of interest.

### Funding:

This work is supported by funding from the University of Tabuk.

### References

- [1] Abdelrahim, A. A. M. (2023). The impact of a critical fiction analysis based on using augmented reality technology on developing students' critical thinking and critical writing at Tabuk University. *Language Teaching Research*, 0(0). <https://doi.org/10.1177/13621688231155578>
- [2] Abdurahman, E. P. (2023). Correlation of self-regulation on enhancing adolescent self-reliance in preventing drug abuse in Medan City. *Jurnal Multidisiplin Madani*, 3(7), 1545–1550. <https://doi.org/10.55927/mudima.v3i7.4307>
- [3] Al-Tarawneh, O. S., & Baioumy, N. (2018). The impact of a preventive program based on recordings and videos on the attitudes of university students towards drug abuse and addiction in Jordan. *International Journal of Academic Research in Business and Social Sciences*, 8(11), 382–396.
- [4] Alhawiti, M. M. E., Altmimi, S. M. B., Alzahrani, A. A. M., Alshahrani, H. S., Alharbi, G. J. A., Hamdi, N. B. M., Alamrani, A. M. A., Alshehri, R. A. H., Alzahuf, S. M. H., Alhabib, R. A. M., Albalawi, A. M. H., Al Abbas, A. M. Z., Alsaqer, D. S., Altemani, M. F. H., & Ajwah, I. M. (2021). Psychological aspects of obesity and obesity surgery: A simple review. *Journal of Pharmaceutical Research International*, 33(43A), 299–308. <https://doi.org/10.9734/jpri/2021/v33i43A32490>
- [5] Arab, K. (2023). The degree of using critical thinking skills among a sample of gifted students in the Tabuk region. *Journal for ReAttach Therapy and Developmental Diversities*, 6(5s), 20–31.
- [6] Allahverdipour, H., Bazargan, M., Farhadinasab, A., Hidarnia, A., & Bashirian, S. (2009). Effectiveness of skill-based substance abuse intervention among male adolescents in an Islamic country: Case of the Islamic Republic of Iran. *Journal of Drug Education*, 39(2), 211-222. <https://doi.org/10.2190/DE.39.2.g>

- [7] Bavarian, N., Lewis, K. M., Holloway, S., Wong, L., Silverthorn, N., DuBois, D. L., ... & Siebert, C. (2022). Mechanisms of Influence on Youth Substance Use for a Social-Emotional and Character Development Program: A Theory-Based Approach. *Substance Use & Misuse*, 57(12), 1854-1863
- [8] Binisris, W. (2022). Youth Drug Problems: The Evidence in Thailand. *resmilitaris*, 12(1), 131-141.
- [9] Conrod, P. J., Stewart, S. H., Comeau, N., & Maclean, A. M. (2006). Efficacy of cognitive-behavioral interventions targeting personality risk factors for youth alcohol misuse. *Journal of Clinical Child & Adolescent Psychology*, 35(4), 550-563. [https://doi.org/10.1207/s15374424jccp3504\\_6](https://doi.org/10.1207/s15374424jccp3504_6)
- [10] Deuchar, R., & McLean, R. (2021). *Gangs, drugs and youth adversity: Continuity and change*. Policy Press.
- [11] Dewi, N. H., Reliani, R., Luthfil, Y. F., & Isnaini, I. (2016). The influence of health education with social support methods on knowledge and attitudes in preventing drug abuse in street children communities in Taman Bungkul Surabaya. *Magna Medika: Berkala Ilmiah Kedokteran dan Kesehatan*, 1(3). <https://doi.org/10.26714/magnamed.1.3.2016.45-57>
- [12] Edalati, H., & Conrod, P. J. (2019). A review of personality-targeted interventions for prevention of substance misuse and related harm in community samples of adolescents. *Frontiers in Psychiatry*, 9. <https://doi.org/10.3389/fpsyt.2018.00770>
- [13] Hamdan-Mansour, A. M., Al-Sagarat, A. Y., Shehadeh, J. H., & Al Thawabieh, S. S. (2020). Determinants of substance use among high school students in Jordan. *Current Drug Research Reviews*, 12(2), 168-174. <https://doi.org/10.2174/2589977512666200525154422>
- [14] Hanson, G. R., Venturelli, P. J., & Platteborze, P. (2024). *Drugs and society*. Jones & Bartlett Learning.
- [15] Hezarian, S., Bakhtiarpour, S., Pasha, R., Asgari, P., & Hafezi, F. (2021). The relationship of social adjustment and resilience with attitudes towards drugs in high school boy and girl students. *Zahedan Journal of Research in Medical Sciences*, 23(4).
- [16] Hogue, A., Liddle, H. A., Becker, D., & Johnson-Leckrone, J. (2002). Family-based prevention counseling for high-risk young adolescents: Immediate outcomes. *Journal of Community Psychology*, 30(1), 1-22. <https://doi.org/10.1002/jcop.1047>
- [17] Ismayilova, L., & Terlikbayeva, A. (2018). Building competencies to prevent youth substance use in Kazakhstan: Mixed methods findings from a pilot family-focused multimedia trial. *Journal of Adolescent Health*, 63(3), 301-312. <https://doi.org/10.1016/j.jadohealth.2018.04.005>
- [18] Izmi, N., Carhart-Harris, R. L., & Kettner, H. (2024). Psychological effects of psychedelics in adolescents. *Frontiers in Child and Adolescent Psychiatry*, 3, 1364617.
- [19] Iboror, M., Owoyemi, J. O., Gomment, T. I., & Yunusa, E. (2024). SOCIO-PSYCHOLOGICAL EFFECTS OF DRUG ABUSE AMONG STUDENTS OF TERTIARY INSTITUTIONS IN KOGI STATE, NIGERIA. *GPH-International Journal of Applied Science*, 7(05), 10-41.
- [20] Latumahina, F. S., Betekeneng, A., Hakim, D. A., Wally, A., & Waelissa, A. F. (2023). Drug prevention outreach: Enhancing youth knowledge and awareness in Ureng Country, Maluku Tengah, Indonesia. *Indonesian Journal of Cultural and Community Development*, 14(3). <https://doi.org/10.21070/ijccd2023900>
- [21] Khan Mohammadi, A., & Sadeghi, J. (2022). The mediating role of school anxiety and emotional control in the relationship between basic psychological needs and the tendency to use drug among. *Journal of psychological science*, 21(117), 1879-1894.
- [22] Lee, G. K. W., Chan, G., Lo, T. W., Yeung, J. W., Tam, C. H., & Guan, X. (2021). An inquiry into the relationship between drug users' psychological situations and their drug-taking behaviour. *International Journal of Environmental Research and Public Health*, 18(23), 12730.
- [23] Mahadevan, J., Gautam, M., & Benegal, V. (2024). Mental health and well-being for the prevention of substance use disorders. *Indian Journal of Psychiatry*, 66(Suppl 2), S272-S282.
- [24] Malik, N. I., Saleem, S., Ullah, I., Rehan, S. T., De Berardis, D., & Atta, M. (2023). Psychosocial factors affecting drug relapse among youth in Punjab, Pakistan. *Journal of Clinical Medicine*, 12, 2686. <https://doi.org/10.3390/jcm12072686>
- [25] Mason, M. J., Coatsworth, J. D., Russell, M., Khatri, P., Bailey, S., Moore, M., Brown, A., Zaharakis, N., Trussell, M., Stephens, C. J., Wallis, D., & Hale, C. (2021). Reducing risk for adolescent substance misuse with text-delivered counseling to adolescents and parents. *Substance Use & Misuse*, 56(9), 1247-1257. <https://doi.org/10.1080/10826084.2021.1910709>

- [26] Mausam, D. V. K. (2024). Psychological and Behavioural Impact of Negative Peer Influence on Youth Offenders: A Survey Investigation.
- [27] Mohammadi, K., Khanali, M., & Tavafian, S. S. (2020). Effect of educational intervention based on health belief model on prevention of substance abuse among the students of Khatam Al-Nabieen university in Afghanistan. *Iranian Red Crescent Medical Journal*, 22(5). <https://doi.org/10.5812/ircmj.101935>
- [28] Nairn, S. A., Audet, M., Stewart, S. H., Hawke, L. D., Isaacs, J. Y., Henderson, J., ... & Conrod, P. (2022). Interventions to reduce opioid use in youth at-risk and in treatment for substance use disorders: a scoping review. *The Canadian Journal of Psychiatry*, 67(12), 881-898.
- [29] Newton, N. C., Stapinski, L., Teesson, M., Slade, T., Champion, K. E., Barrett, E. L., Birrell, L., Kelly, E., Mather, M., & Conrod, P. J. (2020). Evaluating the differential effectiveness of social influence and personality-targeted alcohol prevention on mental health outcomes among high-risk youth: A novel cluster randomised controlled factorial design trial. *Australian & New Zealand Journal of Psychiatry*, 54(3), 259-271. <https://doi.org/10.1177/0004867419877948>
- [30] Njoki, L. N., Mageto, I. G., & Kivuti-Bitok, L. W. (2022). Psychological experiences of caregivers of adolescents diagnosed with substance use disorder attending a youth centre in a low-resource setting. *International Journal of Mental Health Nursing*, 31(2), 390-399.
- [31] Phukao, D. (2021). Systematic Review of Psychological Treatments for Methamphetamine. *International Journal of Innovation, Creativity and Change*, 15(4).
- [32] Thangam, M. M. N. (2023). Insomnia and associated factors among healthcare students: Post-pandemic cross-sectional survey. *Universal Journal of Public Health*, 11(3), 359-369. <https://doi.org/10.13189/ujph.2023.110310>
- [33] Tucker, S., Heneghan, N. R., Gardner, A., Rushton, A., Alamrani, S., & Soundy, A. (2023). Factors influencing participation in physical activity, sports, and exercise in children and adolescents with spinal pain or spinal conditions: A systematic review and meta-ethnography. *Behavioral Sciences*, 13, 486. <https://doi.org/10.3390/bs13060486>
- [34] Tymes, D. D., Outlaw, K. L., & Hamilton, B. K. (2016). Life skills interventions to improve social confidence, self-management, and protection against drug use in rural elementary school-aged children. *Journal of Community Health Nursing*, 33(1), 11-19. <https://doi.org/10.1080/07370016.2016.1120592>.