

## Impact of dialectic behavior therapy and assertiveness training on mental health of socially stressed senior secondary students

Rita Kienka\*, University of Lagos, Faculty of Education, Department of Education Foundations, Akoka, Lagos, Nigeria

### Suggested Citation:

Kienka, R. (2023). Impact of dialectic behaviour therapy and assertiveness training on mental health of socially stressed senior secondary students. *Global Journal of Guidance and Counseling in Schools: Current Perspectives*, 13(1), 01-10. <https://doi.org/10.18844/gjgc.v13i1.8827>

Received from December 02, 2022; revised from January 15, 2023; accepted from March 14, 2023.

Selection and peer review under responsibility of Assoc Prof. Dr. Nur Demirbas Celik, Alanya Alaadin Keykubat University, Turkey

©2023 by the authors. Licensee Birlesik Dunya Yenilik Arastirma ve Yayıncılık Merkezi, North Nicosia, Cyprus.

This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

### Abstract

Social stress from substance abuse is common and worrisome, especially among adolescents. Therefore, this study examined "Dialectical Behavior Therapy and Assertiveness Training" in the management of mental health problems of high school seniors who abuse substances. In the resADDREearch, quasi-experimental pre-test and post-test design were used. The research was conducted with 75 students using the multi-stage sampling method. Tools used to collect data are Car, Relax, Alone, Forget, Family/Friend Issue, Warwick Edinburgh Mental Well-Being Scale, and Social Phobia Inventory. Two research questions were raised, and two research hypotheses were tested at the 0.05 significance level. The findings revealed that there was a significant difference in the psychosocial problems of adolescents in high school seniors as a result of the interventions, but dialectical behavioral Therapy had a greater effect in reducing adolescents' social stress, although both treatments had significant effects. Based on the findings, it was recommended that assertiveness education be added to the secondary school curriculum to reduce the incidence of substance abuse.

Keywords: Mental health, substance abuse, dialectic behavior therapy, assertiveness training.

---

\* ADDRESS OF CORRESPONDENCE: Rita Kienka, University of Lagos, Faculty of Education, Department of Education Foundations, Akoka, Lagos, Nigeria  
Email address: [ritakienka@gmail.com](mailto:ritakienka@gmail.com)

## 1. Introduction

We live in a society in that is full of occurrences that could stress any individual. It is so worrisome because the academic body of the entire nation is bedeviled with incessant closures and problems, the government has not been able to address. The senior secondary school student who in time past would look forward to moving on to the University may not be so enthusiastic because of University strikes every year. According to Adebayo (2016) stated that in recent times, the scale of social ills in the society has become very worrisome that people begin to question whether anything is left at all that Nigeria as a nation can be proud of. These social ills among adolescent secondary school students manifest in diverse forms which can be seen in the increase of cases of bullying, gangsterism, truancy, youth restiveness, substance abuse, and many other vices which have taken their tolls on the academic and social pursuit of the children and youth. Thus, making mostly the secondary schools and tertiary institutions to turn out youth who cannot hold their own in the society.

Social stress may have variety of causes and could have mental health effects on people in different ways. One of such could be abuse of substances and mental health concerns which are often intertwined. It could negatively affect health enhancing behavior and increase the risk of illness and injury on people.

Stress is a response that occurs in the body when a change is encountered. It is a feeling that threatens one's relationships, affects the individual's sense of belonging and can affect and self-esteem. It can be related to physical and psychological strain. Social stress is also a mental health problem that can be caused by substance abuse because long-term use of substances can also lead to stressful situations and can aggravate aggressive behavior that could affect relationships with others in schools as well as social environment.

Social stress is a burden that affects individuals as well as communities where person reside. Senior secondary school students could begin to abuse substances as a result of stressors in life, but the abuse of substances could also enhance social stress among them which could make them display various forms of negative behavior. Stress could be harmful and make people vulnerable and very resilient. Wood and Bhatnagar (2015) revealed that many factors contribute to stress resilience or vulnerability and resilience is not simply the opposite of vulnerability because there are some mechanisms that are dichotomous in resilient vulnerable individuals. The effect of substance abuse could also adversely impact the stress level of other family members health and could lead to mental and physical disorder. Furthermore, research has confirmed that sharing a home with an individual who abuses substances tends to increase the likelihood of such mental and physical disorders (Ólafsdóttir et al., 2018).

The United Nations International Drug Control Program (1995) suggested that the effect of drugs may not be to improve social relationship and self-identity, but rather that drugs may cause adolescents to become apathetic and emotionally independent and, as a result, to face problems forming social bonds. As a result, the teenager becomes more and more isolated emotionally and socially. They also concluded that the mental health burden of social stress on the individual, school, and society is enormous and can lead to various criminal activities. Socially stressed individuals often do not want to communicate with others. Newcomb and Locke (2005) observed that violent, erratic, or paranoid behavior may arise from substance abuse. It has resulted into mental health problems that has led to drowning, car crashes, fall, burns, sex abuse, and many other problems which has become a burden of social stress on the society. The consumption of alcohol to reduce social stress often leads to alcoholism in individuals (Thomas, et al., 2003).

The consumption of substances may attract social acceptance from peers, but at the long run could lead to social stress and other vices. Other social predictors for the abuse of substance could be the environment the adolescents grow from. Some may include communities that are not stable with lower levels of unemployment. In their study, Whitesell, et al., (2013) concluded that abuse of substances among adolescents could bring about social stress to the individual and the community the

adolescent resides because they are often associated with individuals or groups involved in perpetrating deviant behavior which may include deviant peer relationships, popularity, bullying, and association with gangs within the environment they live. Ayodele, et al. (2018), agreed that it has personal and social consequences in the society. Their view supports other research into epidemiological studies as revealed in the reports that despite the drug laws and plans to reduce it, the burden of drug abuse is growing more among the younger population, secondary school students included in the study. Substance abuse is exposing these senior secondary school students to various forms of social stress and debilitating conditions. Therefore, Jatau, et al. (2021) concluded that stringent measures and sustainable interventions are urgently needed to curb the increasing burden of drug abuse in Nigeria.

United Nations (2013) the research on substance abuse places an enormous social stress on public health and safety on countries around the world such that peaceful development and smooth functioning of many societies are hampered. The global cost is immeasurable because many countries have not been able to measure the cost of substance abuse on health, public safety, crime, productivity, and governance in their nations. The drugs that are most commonly reported and for which individuals receive much of the treatment in societies are heroin, cannabis, and cocaine. The cost of these treatment alone for about 4.5 million people is estimated to be at a global cost of \$35 billion annually. Social stress no doubt is a mental health concern and could be aggravated by the abuse of substances by the senior secondary school student whose mental development is undergoing a rapid developmental process.

Dialectic behavior therapy has the ability to balance acceptance of people as they are with social and other changes in focus. It could enable individuals to build lives that are worth living through “bio-social dialectical paradigm and strategies of validation, radical genuineness, skills training, and group work.” Dialectic behavior therapy treatment has the ability to bring out the client’s strength and network support that naturally occurs to create change. Cooper and Parson (2009) opined that dialectic behavior therapy treatment could model character, provide reassurance, give advice, provide protection, support and care, use persuasion, assertiveness skills, use negotiation skills, deal with hostility, aggression and violence, empower, and teach individuals how to relate in their environment. Dialectic behavior therapy therefore teaches people to peacefully and productively co-exist.

Nnadi, et al. (2020), in their work reported that assertiveness training could reduce social withdrawal behavior among adolescents. Manesh, et al. (2015), and Adegoke (2018), agreed that social stress could cause social avoidance, negative feelings of social interactions and distress but assertiveness training skills aid the reduction of social anxiety, changes expectations, beliefs, attitude, and build positive evaluation among individuals. Adolescents who are not socially assertive could be prone to substance abuse but assertive skills could also deter others from taking advantage of another person.

The degree at which substance abuse is having an effect on the mental health of the adolescent secondary school students in Port Harcourt Metropolis and the social stress accompanying it is becoming overwhelming. It has become a regular subject of discussion in various households and a vital problem confronting the students.

This behavior has the potential to cause massive negative impact such as bullying, stealing, and fighting and many other delinquent characteristics on the lives and future of the youths if they are not managed. The direct and indirect burden of treatment, management and prevention of consequences of substance abuse on the economic development of the state if properly valued could be alarming. Various studies have been carried out by researchers on the prevalence of challenges of substance abuse and its social effects on the society. However, there is no widely known empirical studies about the mental health of the adolescent secondary school students and how stressed they are in Rivers State. This study therefore sought out to find the effects of mental health challenges of adolescent senior secondary school students who abuse substances and are socially stressed using dialectical behavior therapy and assertiveness training.

### 1.1. Research questions

The following research questions guided this study.

1. To what extent will the posttest social stress scores of high school seniors with mental health problems who abuse substance abuse be different when exposed to dialectical behavioral therapy, assertiveness training, and the control group?
2. What is the difference between the post-test social stress mean scores of students with mental health problems and substance use in the experimental and control groups according to gender?

### 1.2. Research hypotheses

1. There is no significant difference in the social stress of high school seniors with mental health problems who abuse substances when exposed to dialectical behavioral therapy, assertiveness training, and the control group.
2. There is no significant difference in social stress of senior students with mental health problems who use substances in the experimental and control groups according to gender.

## 2. Methods

The research methodology applied in this study was quasi-experimental, pre-test, and post-test control group design. Three experimental groups, two treatment groups and one control group. One group was exposed to dialectical behavior therapy, the other to assertiveness training, and the third was the control group.

All the senior secondary school two (SS II) students from the 17 public senior secondary schools for both high and low socio-economic classes made up the population. Multi-stage sampling process was used to select the participants in the study.

Three schools each from one zone were selected from the 13 zones in Port Harcourt Metropolis using simple random sampling.

Students abusing substances were identified using Car, Relax, Alone, Forget, Family/Friends Problem (CRAFFT) on 1680 students from three selected schools (See in Appendix). Two hundred and five students were identified as adolescents who used substance. The Warwick Edinburgh Mental Well-Being Scale (WEMWBS) was administered to them to determine the effects of mental health problems

Seventy-five students scored above average on the two instruments administered and were assigned to treatment through simple random sampling. Twenty-five students were assigned to Dialectical Behavioral Therapy treatment. Twenty-six students were assigned to assertiveness training and 24 students were in the control group. Treatment groups met once a week for 6 weeks. At the end of the intervention, the research tools were reapplied to both the treatment and control groups as a post-test.

### 2.1. Compliance with ethics

Care was taken to comply with scientific and ethical principles throughout the preparation and writing process of this study. It was stated that all research and studies used in the study were stated in the bibliography and the purpose of the study was explained to the participants and voluntary consent was obtained.

## 3. Results

**Hypothesis 1:** There is no significant difference in social stress among adolescents with mental health challenges who abuse substances exposed to dialectic behavior therapy, assertiveness training, and the control group.

Analysis from Table 1 shows that the social stress mean of participants in DBT, AST, and Control Group were 56.32, 57.92 and 57.71, respectively, at pre-test. At post-test, the social stress mean fell to 39.52

for DBT, 43.35 for AST, and 59.54 for control group. DBT group had the higher reduction (-16.8) followed by AST group (-14.58). However, control group had marginal increase of 1.83. To determine the significant differences in the mean, an analysis of covariance was computed. The result of the analysis is displayed in Table 2.

**Table 1**

*Descriptive analysis of social stress based on the experimental groups.*

Experimental Group	N	Pre-Test		Post-Test		Mean Difference
		Mean	Std. Deviation	Mean	Std. Deviation	
		Dialectic Behavior Therapy	25	56.32	2.85	
Assertiveness Training	26	57.92	3.20	43.35	5.31	-14.58
Control Group	24	57.71	3.14	59.54	2.11	1.83
Total	75	57.32	3.11	47.25	9.50	-10.07

**Table 2.**

*ANCOVA Result for Social Stress based on the Experimental Conditions*

Source	Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	5549.421	3	1849.807	116.560	.000
Intercept	248.842	1	248.842	15.680	.000
Covariate	33.317	1	33.317	2.099	.152
Group	5329.484	2	2664.742	167.911	.000
Error	1126.766	71	15.870		
Total	174142.000	75			
Corrected Total	6676.187	74			

$p < 0.05$ ; critical value (2, 71) = 3.13

The result of the ANCOVA shows that an F-calculated value of 167.911 was derived as the significant difference as a result of the experimental conditions. The F-calculated value was observed to be greater than the critical value of 3.13 given 2 and 71 degrees of freedom at 0.05 level of significant. As a result, the null hypothesis was rejected and it was concluded that there exist a significant difference in social stress among adolescents with mental health challenges who abuse substances when exposed to DBT, AST, and the control group.

Further analysis was carried out to determine the pair that was significant, and the outcome of the analysis is displayed in Table 3.

**Table 3**

*Pair wise comparison of social stress based on the experimental groups*

(I) Experimental Group	(J) Experimental Group	Mean Difference (I-J)	Sig.
Dialectic Behavior Therapy	Assertiveness Training	-3.471*	0.003
	Control Group	-19.714*	0.000
Assertiveness Training	Dialectic Behavior Therapy	3.471*	0.003
	Control Group	-16.243*	0.000
Control Group	Dialectic Behavior Therapy	19.714*	0.000
	Assertiveness Training	16.243*	0.000

Based on estimated marginal means

\*. The mean difference is significant at the 0.05 level.

Figures from Table 3 shows that DBT when paired with AST ( $t = -3.471$ ,  $p < 0.05$ ) as well as control group ( $t = -19.714$ ,  $p < 0.05$ ) was significant. Furthermore, the pair of assertiveness training and control group ( $t = -16.243$ ,  $p < 0.05$ ) was also significant.

Analysis from Table 3 shows that at pre-test, level of depression mean value of 74.6 was derived for DBT, 72.5 for AST and 72.71 for control group. At post-test, the mean values dropped to 55.04, 55.5, and 72.5 for DBT, AST, and control group, respectively. DBT group (-19.56) had the highest reduction followed by the AST group (-17) and the control group (-0.21). Further computation was carried out to determine the significance of the mean differences using analysis of covariance (ANCOVA). The result of the computation is presented in Table 4.

**Hypothesis 2:** There is no significant difference in the social stress on mental health challenges among adolescents who abuse substances in the three experimental groups due to gender.

**Table 4**

*Descriptive Analysis of Social Stress based on Experimental Groups and Gender*

Experimental Group	Gender	N	Pre-Test		Post-Test		Mean Difference
			Mean	Std. Deviation	Mean	Std. Deviation	
Dialectic Behavior Therapy	Female	14	56.79	2.15	39.50	3.88	-17.29
	Male	11	55.73	3.58	39.55	3.98	-16.18
	Total	25	56.32	2.85	39.52	3.84	-16.80
Assertiveness Training	Female	12	58.00	3.41	43.33	4.68	-14.67
	Male	14	57.86	3.13	43.36	5.97	-14.50
	Total	26	57.92	3.20	43.35	5.31	-14.58
Control Group	Female	12	58.08	3.32	60.58	1.98	2.50
	Male	12	57.33	3.06	58.50	1.73	1.17
	Total	24	57.71	3.14	59.54	2.11	1.83
Total	Female	38	57.58	2.96	47.37	9.91	-10.21
	Male	37	57.05	3.28	47.14	9.19	-9.92
	Total	75	57.32	3.11	47.25	9.50	-10.07

Analysis from Table 4 shows that at pre-test, female participants had social stress mean values of 56.79, 58, and 58.08 for DBT, AST, and control group, respectively. Their male counterpart had mean values of 55.73, 57.86, and 57.33 47.08 for DBT, AST, and control group, respectively.

At post-test, the female participants mean value for DBT dropped to 39.5, AST to 43.33 while control group rose to 60.58. Similarly, the male counterpart violent behavior mean value dropped to 39.55, 46.36, and 58.5 for DBT, AST, and control group, respectively.

The mean differences column showed that female and male participants in the DBT group had the highest reduction in social stress than other groups. Besides, an analysis of covariance was computed to determine the significance of the differences in mean. The result of the analysis is presented in Table 5.

Observation from the analysis in Table 5 shows that an F-calculated value of 0.548 was computed as the difference in the social stress on mental health challenges among adolescents who abuse substances in the three experimental groups due to gender. This value was observed to be less than



the critical value of 3.15, given 2 and 68 degrees of freedom at 0.05 level of significance. Thus, the null hypothesis was upheld. It was concluded that there exists no significant difference in the social stress on mental health challenges among adolescents who abuse substances in the three experimental groups due to gender.

Table 5

*ANCOVA Result for Social Stress based on the Experimental Conditions and Gender*

Source	Sum of squares	Df	Mean square	F	Sig.
Corrected Model	5572.044	6	928.674	57.194	.000
Intercept	253.501	1	253.501	15.612	.000
Covariate	29.882	1	29.882	1.840	.179
Group	5298.810	2	2649.405	163.167	.000
Gender	5.239	1	5.239	.323	.572
Group * Gender	17.804	2	8.902	.548	.580
Error	1104.143	68	16.237		
Total	174142.000	75			
Corrected Total	6676.187	74			

$p > 0.05$ ; critical value (2, 68) = 3.15

#### 4. Discussion

Social stress of senior secondary school students with mental health challenges who abuse substances was found to significantly differ as a result of the experimental conditions. Participants were exposed to emotion regulation and distress tolerance treatment sessions which could emotionally manage social stress. The dialectic behavior therapy group was with the highest reduction followed by the assertiveness training. The findings are in line with the findings of Karbalaee et al. (2012) where significant decrease was observed with the training of distress tolerance and emotion regulation. Reese, et al. (2019) findings are consistent with this study because they agreed that distress tolerance in dialectic behavior therapy skills could change an individual's mood and increase emotional stability and teach reality acceptance which could help in making decisions to stay away from substance abuse. The findings are also consistent with the conclusions of Cooper and Parson (2009) who observed that dialectic behavior therapy could be used to model character, provide reassurance, and teach individuals how to support and care for themselves. The finding is also supported by Manesh, et al. (2015) which showed that assertiveness training decreases social stress, changes expectations, attitude, beliefs, and positive evaluation. Manesh, et al. (2015), Adegoke (2018) agree that assertiveness training skills could aid the reduction of social anxiety, change expectations, and attitude.

#### 5. Conclusion

Based on the preceding discussion, the following conclusion were drawn.

- 1.The study demonstrated that dialectic behavior therapy and assertiveness training are effective in reducing social stress in mental health challenges of adolescents.
- 2.The study revealed that there is no gender difference in social stress of senior secondary school students with mental health challenges who abuse substances.
- 3.The study revealed that dialectic behavior therapy is a more effective treatment for mental health challenges of senior secondary school students who abuse substances than assertiveness training.
- 4.The study demonstrated that lack of assertiveness skills and poor interpersonal relationship contributes to mental health challenges of senior secondary school students who abuse substances

## 6. Recommendations

The following recommendations were made based on the findings of the study:

1. Mental health problems is becoming a subject of great concern especially as it relates to the senior secondary school student. Counselors in secondary schools should undergo specific retraining on identification and management of mental health problems among adolescent students.
2. Social stress is a burden that affects individuals as well as communities. The mental health concerns and global cost are immeasurable; therefore, assertiveness training should be added into the secondary school curriculum to reduce rising cases of substance abuse among students.
3. Rehabilitation centers which enhance healthy social activities should be built and equipped with professionals for management of various forms of stress levels rather than allow them to cohabit with other secondary school students and become subjects of social stress in the schools and society.
4. Gender prejudice should be ignored in the management of challenges relating to social stress of the senior secondary school student. Thus, both male and female victims should be given equal treatment.

## References

- Adebayo, D. O. (2016). Effectiveness of dialectical behaviour and acceptance commitment therapies in enhancing social competence of spiritually-abused adolescents in Ibadan metropolis, Nigeria. *Ethiopian International Journal of Multidisciplinary Research*, 3(3), 7-21. [https://www.researchgate.net/publication/322741827\\_Effectiveness\\_Of\\_Dialectical\\_Behaviour\\_And\\_Acceptance\\_Commitment\\_Therapies\\_In\\_Enhancing\\_Social\\_Competence\\_Of\\_Spiritually-Abused\\_Adolescents\\_In\\_Ibadan\\_Metropolis\\_Nigeria](https://www.researchgate.net/publication/322741827_Effectiveness_Of_Dialectical_Behaviour_And_Acceptance_Commitment_Therapies_In_Enhancing_Social_Competence_Of_Spiritually-Abused_Adolescents_In_Ibadan_Metropolis_Nigeria)
- Ayodele, J. O., Adeleke, K. H., & Gandonu, M. B. (2018). Crime and adolescent drug use in Lagos. *Nigeria Sociology International Journal*, 2(2), 63-74. <https://www.medcraveonline.com/medcrave.org/index.php/SIJ/article/view/18476>
- Cooper, B., & Parsons, J. (2009). Dialectical behaviour therapy: A social work intervention? *Aotearoa New Zealand Social Work*, 21(4), 83-93. <https://doi.org/10.11157/anzswj-vol21iss4id264>
- Jatau, A. I., Sha'aban, A., Gulma, K. A., Shitu, Z., Khalid, G. M., Isa, A., Wada, A. S., & Mustapha, M. (2021). The burden of drug abuse in Nigeria: A scoping review of epidemiological studies and drug laws. *Public Health Reviews*, 42(1603960), 1-11. <https://doi.org/10.3389/phrs.2021.1603960>
- Karbalae, A., Meygoni, M., & Ahadi, H. (2012). Declining the rate of major depression: Effectiveness of dialectic behaviour therapy. *Procedia Social and Behavioural Sciences*, 35, 230-236. <https://doi.org/10.1016/j.sbspro.2012.02.083>
- Manesh, R. S., Fallahzadeh, S., Panah, M. S. E., Koochehbiuki, N., Arabi, A., & Sahami, M. A. (2015). The effectiveness of assertiveness training on social anxiety of health volunteers of Yazd. *Psychology*, 6(06), 782. <https://doi.org/10.4236/psych.2015.66077>
- Newcomb, M. D., & Locke, T. (2005). Health, social and psychological consequences of drug use and abuse. *Epidemiology of Drug Abuse* (pp. 45-59). Springer Science & Business Media. [https://www.psycnet.apa.org/doi/10.1007/0-387-24416-6\\_4](https://www.psycnet.apa.org/doi/10.1007/0-387-24416-6_4)
- Nnadi, G. C., Uzoekwe, H. E., Nwanna, U. C., Udeagha, F. U., & Ofojebe, E. N. (2020). Effect of assertiveness training on social withdrawal among adolescents in secondary schools in Owerri Municipal in Imo State, Nigeria. *European Journal of Education Studies*, 6(12), 273-282. [https://www.safetylit.org/citations/index.php?fuseaction=citations.viewdetails&citationIds\[\]=citjournalarticle\\_654603\\_24](https://www.safetylit.org/citations/index.php?fuseaction=citations.viewdetails&citationIds[]=citjournalarticle_654603_24)



Kienka, R. (2023). Impact of dialectic behaviour therapy and assertiveness training on mental health of socially stressed senior secondary students. *Global Journal of Guidance and Counseling in Schools: Current Perspectives*, 13(1), 01-10. <https://doi.org/10.18844/gjgc.v13i1.8827>.

Ólafsdóttir, J., Hrafnadóttir, S., & Orjasniemi, T. (2018). Depression, anxiety, and stress from substance-use disorder among family members in Iceland. *Nordic Studies on Alcohol and Drugs*, 35(3), 165-178. <https://doi.org/10.1177/1455072518766129>

Reese, E. D., Conway, C. C., Anand, D., Bauer, D. J., & Daughters, S. B. (2019). Distress tolerance trajectories following substance use treatment. *Journal of Consulting and Clinical Psychology*, 87(7), 645. <https://www.psycnet.apa.org/doi/10.1037/ccp0000403>

Thomas, S. E., Randall, C. L., & Carrigan, M. H. (2003). Drinking to cope in socially anxious individuals: A controlled study. *Alcoholism: Clinical and Experimental Research*, 27(13), 1937-1943. <https://doi.org/10.1097/01.alc.0000100942.30743.8c>

United Nations Reports. (2013). *Report of the International Narcotics Control Board for 2013*. International Narcotics Control Board. [https://www.incb.org/documents/Publications/AnnualReports/AR2013/English/AR\\_2013\\_E.pdf](https://www.incb.org/documents/Publications/AnnualReports/AR2013/English/AR_2013_E.pdf)

United Nations International Drug Control Programme. (1995). The social impact of drug abuse. *Position Paper for the World Summit for Social Development*. Copenhagen. [https://www.unodc.org/pdf/technical\\_series\\_1995-03-01\\_1.pdf](https://www.unodc.org/pdf/technical_series_1995-03-01_1.pdf)

Whitesell, M., Bachand, A., Peel, J., & Brown, M. (2013). Familial, social, and individual factors contributing to risk for adolescent substance use Hindawi Publishing Corporation. *Journal of Addiction*, 2013, 579310. <https://doi.org/10.1155/2013/579310>

Wood, S. K., & Bhatnagar, S. (2015). Resilience to the effects of social stress: Evidence from clinical and preclinical studies on the role of coping strategies. *Neurobiology of Stress*, 1, 164-173. <https://doi.org/10.1016%2Fj.yenstr.2014.11.002>

## Appendix

CAR, RELAX, ALONE, FORGET, and FAMILY/FRIENDS TROUBLE (CRAFTT)

During the past 6 months, how many days did you

		None	# of days
1	Drink more than few sips of beer, weed, gin, or any other drink containing alcohol? Put "0" if none		
2	Use any marijuana (weed, oil or hash by smoking, vaping, or in food)? Put "0" if none		
		Yes	No
3	Do you ever use alcohol or drugs in any way to relax or feel better about yourself?		

### Warwick Edinburg Mental Well-being Scale (WEMWBS)

S/N	Items	None of the time	Rarely	Some of the time	Often	All of the time
1	I've been feeling optimistic about the future					
2	I've been feeling good about myself					

### Social Phobia Inventory

S/N	ITEMS	Not at	A little	Some	Very	Extremely
-----	-------	--------	----------	------	------	-----------

Kienka, R. (2023). Impact of dialectic behaviour therapy and assertiveness training on mental health of socially stressed senior secondary students. *Global Journal of Guidance and Counseling in Schools: Current Perspectives*, 13(1), 01-10. <https://doi.org/10.18844/gjgc.v13i1.8827>.

		all	bit	how	much	
1	I am afraid of people in authority.					
2	Fear of embarrassment causes me to avoid doing things or speaking to people					