

EMOTION REGULATION AMONG ADOLESCENTS WITH DRUG ABUSE: A QUALITATIVE STUDY

Farhana Nabila Fakaruddin

*Azmawaty Mohamad Nor

Department of Educational Psychology and Counselling,
Faculty of Education, University of Malaya

* azy_mn@um.edu.my

ABSTRACT

Adolescence, a transition between childhood and adulthood is viewed as a phase of increased decision making, pressure and understanding one's self. In search of their identity, adolescents experienced peer pressures and tend to engage in social problems such as drug abuse which leads them to believe in expressing their inner selves. Research on emotion regulation among adolescents has burgeoned in recent years to better understand their emotional development and ability to control emotion. Based on Gross' Emotion Regulation Theory, emotion regulation is an emotion management skill that require individuals to better manage their emotion in an emotional experience. Past studies have indicated that this skill can help to change the way a situation is interpreted thereby decreasing its emotional impact. This paper aims to understand how emotion regulation skills can assist adolescents to cope with drug abuse, while dealing with emotional problems caused by internal conflicts, stress, family issues, and peer pressure. This study employed a Basic Qualitative Inquiry on three participants aged between 18 to 21 years old. It was found that avoiding venues associated with drug abuse, managing their thoughts, and avoiding non-supportive friends; are some methods that have helped the adolescents to have better control of themselves. This study hopes to contribute in better understanding the coping skills that can be developed to assist students who are involved in drug abuse.

Keywords: *Emotion Regulation, Adolescents, Drug Abuse, Emotional Disturbance, Emotion Management*

INTRODUCTION

Malaysia has witnessed a steady increase of social problems. This has resulted in a public outcry against the multiplication of drug addicts among adolescents. Adolescence is a transition between childhood and adulthood; the age group is between 10 to 18 years old. Statistics from National Anti-Drug Agency Malaysia have recorded an increase in the number of drug addicts among adolescents (National Anti-Drugs Agency, 2018). Reportedly, the number of new and repeated cases have increased from 20,887 to 30,844 cases between the years 2013 to 2016 (National Anti-Drugs Agency, 2018). The reasons for using drugs were identified by National Institute on Drug Abuse (2011) which includes the desire for new experiences, help in problem solving, peer pressure and to do well in school (Hagos, Asfeha, & Berihu, 2016). Furthermore, the desire to experiment in new things is part of the developmental stages of adolescents' self-identification (Hagos et al., 2016). Adolescents are often curious and tend to explore various kind of drugs that could lead to an addiction (Ismail, Ahmad, Ibrahim, & Nen, 2017). Therefore, emotional management is essential to ensure that school-going adolescents are able to cope with the challenges relating to drug abuse (Fakaruddin & Tharbe, 2018).

Emotions are important and have various complex main components remains to be discussed. It is a major aspect that affects the thoughts and actions of an individual in their everyday life (Zadra & Clore, 2011). Good emotional management among adolescents is a significant factor in helping them adapt to the changes in their lives (Fakaruddin & Tharbe, 2018). Drug abuse can affect adolescents' development. This includes their affection, cognition, and/or behaviour (Shadur & Lejuez, 2015; Sulaiman & Johari, 2015).

Adolescents with low emotional understanding could result in the lack of emotional management, which leads to an increased risk-taking behaviour (Hessler & Katz, 2010). A concerning outcome of lacking emotional management among adolescents is the chances of relapse once they have clean (Ramo, Prince, Roesch, & Brown, 2012) as they might consider drugs as a coping mechanism.

The **contributing factors to adolescents' drug abuse behaviour can also be a key factor to help curb their desires to abuse drugs** (Choopan et al., 2016). The importance of emotion regulation is seen when adolescents involved with drug abuse managed to check their emotions and reduced their desire for drugs; showing that their need to consume drugs was a method to escape their negative life experiences (Hessler & Katz, 2010). **Emotion regulation also discusses one's ability to effectively understand and respond emotionally to a certain experience; and one's ability to choose their intended emotion and decide how and when to express them** (Gross, 2002; Pena-Sarrionandia, Mikolajczak, & Gross, 2015). Despite the many treatments available and that has been used to treat addiction, previous studies show that previous addicts go back to using drugs due to the failure of managing their emotions (Ismail et al., 2017; Nachiappan, 2015).

Past researches has also shown that good emotion regulation gives a positive impact on drug addicts among adolescents (Tugade & Fredrickson, 2007; Zareban, Bakhshani, Bor, & Bakhshani, 2017). Not only that, the Malaysian Ministry of Education has stated that it is important to provide the youth with the necessary support to equip them with the tool needed to face future challenges (Malaysia Education Blueprint 2013-2025, 2013). Based on that, the primary goal of this research is to obtain a deeper **understanding of adolescent students' emotion regulating ability with drug abuse.**

Literatures have suggested that adolescence is a transitional phase that may be confusing and a period when they began to question, explore and take risks. During this stage, adolescents tend to face emotional and self-conflicting issues. The problems faced are influenced by parental indifference, school related issues and social inferiorities. When faced with these problems, adolescents tend to favour getting involved is risky behaviour to lessen the chances of disappointing experiences (Farley & Kim, 2014). The lack of ability to manage emotions could lead to more severe problems like anxiety, depression and phobia among adolescents (Kaur, 2017). The failure to control emotions could also influence their life development (Kaur, 2017; Wills, Pokhrel, Morehouse, & Fenster, 2011).

Drug experimentation is becoming an increasingly prevalent part of an adolescent's rite of passage and rates of substance use peak during adolescence (Shadur & Lejuez, 2015). Drug problems that persist in adolescents also lead them to experience emotional disturbances and negative behaviours (Sulaiman & Johari, 2015). **Peer influence is one of the most important factors in adolescents' involvement in drug abuse** (Lian & Chu, 2013). This was urged by the curiosity and feelings of eagerness to explore new experiences (Hagos et al., 2016; Lian & Chu, 2013). The involvement of adolescents in drug abuse and addiction also affects them emotionally (McGlinchey & Harvey, 2015). Many studies have been conducted to see the effectiveness of treatment and rehabilitation suggested and provided at the country's drug rehabilitation centre to reduce the problem of drug addiction among adolescents (Chemi, Abdullah, Singh, & Isa, 2014; Ismail et al., 2017; Tunggak, Hashim, Mohamad, & Ali, 2015).

During the adolescence stage, self-regulation and emotion regulation are key factors that influences **adolescents' social development** (Farley & Kim, 2014). **It is widely agreed that emotions are a central feature in any psychological model of the human mind** (Gross & Barrett, 2011). This proves that the **ability to regulate emotions has an important impact on adolescents' emotions that are subjective and**

complex (Farley & Kim, 2014; Gross & Barrett, 2011). Emotion regulation is also seen as the ability of an individual to manage and respond well to their emotional experiences (Rolston & Llyod, 2017). Emotional regulation is also seen as a skill that helps individuals to muddle through difficult situations in their everyday life to adapt to their environmental demands (Rolston & Llyod, 2017). Furthermore, emotion regulation is a process people undertake to control their emotional response (Bosse, Pontier, & Treur, 2008) and to help them understand, control and reflect on their emotions, and make perceptions of a situation.

There are five components discussed and used to understand emotion regulation in the model of **emotion regulation in Gross's Emotion Regulation Theory, which are situation selection, situation modification, attentional deployment, cognitive change, and response modification**. Situation selection means one chooses the situation based on the emotional impact they may face as an effective strategy to regulate their emotions (Webb, Lindquist, Jones, Avishai, & Sheeran, 2018). Meanwhile, situation modification refers to effort that directly modifies the current situation to alter its emotional impact (Oostveen, 2017). Attentional deployment means the capability to change attentional focus away from a negative emotional characteristic to have a positive emotional impact (Skogsberg, 2012). Besides, cognitive change includes strategies that modify the way an individual think about a situation (Oostveen, 2017) and ability to select a cognitive meaning to an event (Bosse et al., 2008). This strategy includes a specific type of cognitive change which is reappraisal. Reappraisal means an individual cognitively re-evaluates a potentially emotion-eliciting situation to decrease its emotional impact (Bosse et al., 2008). The last component is the response modulation strategy. This strategy is applied after the emotion response tendencies have been generated (Bosse et al., 2008). Response modulation is the capability of producing positive social behaviours when an individual re-evaluates their action (positive reappraisal) towards an emotional situation (Stiller, Kattner, Gunzenhauser, & Schmitz, 2018). Figure 1 depicts the process model of emotion regulation that proposed by Gross (2002).

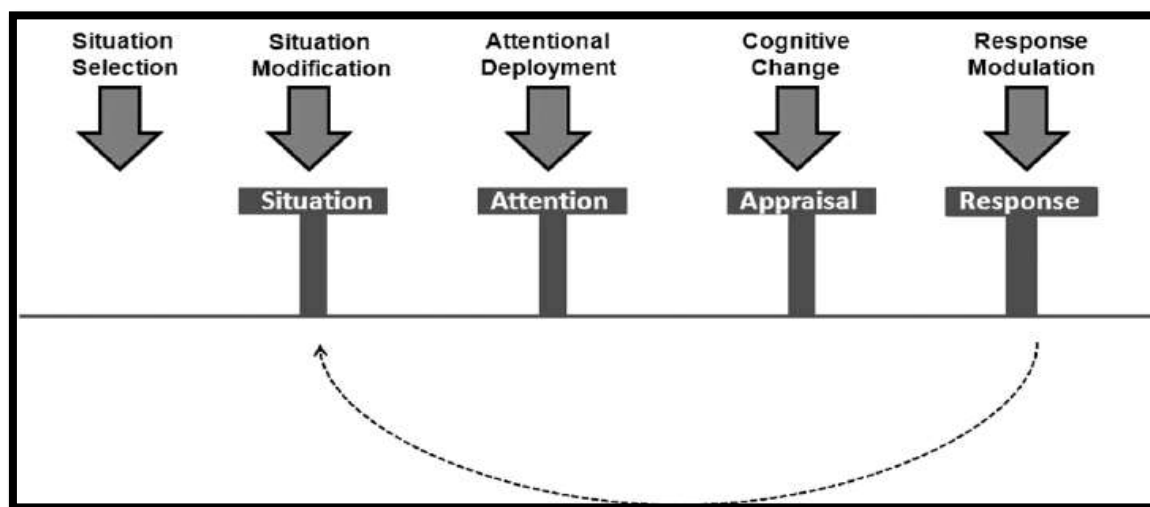


Figure 1. The Process Model of Emotion Regulation by Gross (2002)

Adolescents who possess the ability to regulate their emotion can identify the emotions experienced and manage those emotions, this enables them to a better well-being (Strauss, Raubenheimer, Campher, Coetzee, Diedericks, Gevers, . . . van Niekerk, 2016). In the context of adolescents and substance dependency, emotion regulation is a potential approach to reduce the probability of substance abuse by focusing in the emotion experienced rather than the triggering event (Chooan et al., 2016). Previous studies also demonstrate how emotion regulation helps teenagers with other psychological disorders and psychopathology (Kober, 2013; Larsen et al., 2012; Porter, Ireland, Gardner, & Eslea, 2016; Shadur & Lejuez, 2015), substance abuse (Kelly & Bardo, 2016; Rahbarian, Mohammadi, Abasi, & Soleimani, 2017) and academic achievements (Valiente, Swanson, & Eisenberg, 2012). Nevertheless,

adolescents' risky behaviour is closely linked to the inability to regulate emotions caused by troubling experiences (Oshri, Sutton, Clay-Warner, & Miller, 2015).

It was shown that emotion regulation strategies were effective in the prevention of drug dependence (Rahbarian et al., 2017). Drug abuse among adolescent college students is closely linked with failure to regulate emotional well in terms of impulsiveness and affective lability (Wills et al., 2011). In fact, the problem of drug abuse can be reduced if adolescents are able to utilize their cognitive abilities to manage their emotions more effectively (Choopan et al., 2016). Adolescents with substance abuse issues could resort to emotion regulation as a strategy used to manage their emotions (Barrett, Mesquita, Ochsner, & Gross, 2007; Choopan et al., 2016; Rahbarian et al., 2017; Wills et al., 2011). Moreover, an enormous amount of research proved that emotion regulation helped adolescents with drug abusing behaviour, regulate and manage their negative emotions in positive manners (Choopan et al., 2016; Silk, Steinberg, & Morris, 2003; Wills et al., 2011). Emotion regulation is essential coping strategy to build positive emotion and become resilient people (Tugade & Fredrickson, 2007). In addition, emotion regulation plays an important role to prevent addiction and to avoid relapse (Rahbarian et al., 2017). Past researches encourage an extensive study on emotion regulation among adolescents involved in substance abuse to understand the mechanism behind their emotional management and response; and the extent of awareness they have on the matter (Hessler & Katz, 2010).

Hence, the findings of this study are expected to improve the understanding of adolescents in many aspects not limiting to the ones raised early on. Past studies focused on how emotion regulation can help addictive problems and psychological disorders among adolescents. Based on that, this study aims to enhance the understanding of emotion regulation among students who are caught up in substance abuse.

METHOD

This study utilized a qualitative research approach to acquire more information that might not surface using a **quantitative research method on adolescent college students' experience of emotion regulation when involved with drug abuse**. **Basic Qualitative Inquiry** was used to explore the subjects' perception on emotion regulation and their experience of drug abuse as adolescents. Table 1 below shows the objectives and questions of research:

Table 1
Research objectives and questions

Research Objectives	Research Questions
1. To identify the perception of students with drug abuse on emotion regulation.	1. What is the perception of students with a drug abuse on emotion regulation?
2. To explain how students with a drug abuse regulate their emotion.	2. To what extent does students with a drug abuse regulate their emotion?

The subjects of this study were three male students in Malaysia aged between 18 to 21 years old who are also under the supervision of NADA Malaysia due to cases of drug abuse. They have undergone treatment and rehabilitation at a rehabilitation centre in Malaysia. The selection was made to obtain valid information on the experience of students with a drug abuse problem in regulating emotion. Purposive sampling was used to ensure the samples selected fulfil the criteria needed to obtain the relevant research data.

An interview protocol had been set up and used during the interview session with the samples of study. The interview session with the participants were conducted for 1 hour and 30 minutes to 2 hours using focus group discussion method. The participants were given informed consent forms prior to the interview in order to get their consent for participating in this study. To enhance validity and reliability

of this study, the researcher also conducted an interview with a NADA officer to support the findings of this research.

Data Analysis

Coding process from thematic analysis was used to analyse the research findings. Upon the completion of the interview, a verbatim transcript was provided by the researcher. The researcher focused on important facts stated in the transcript to analyse the findings. The steps used to obtain the discussion theme are shown below in Figure 2:

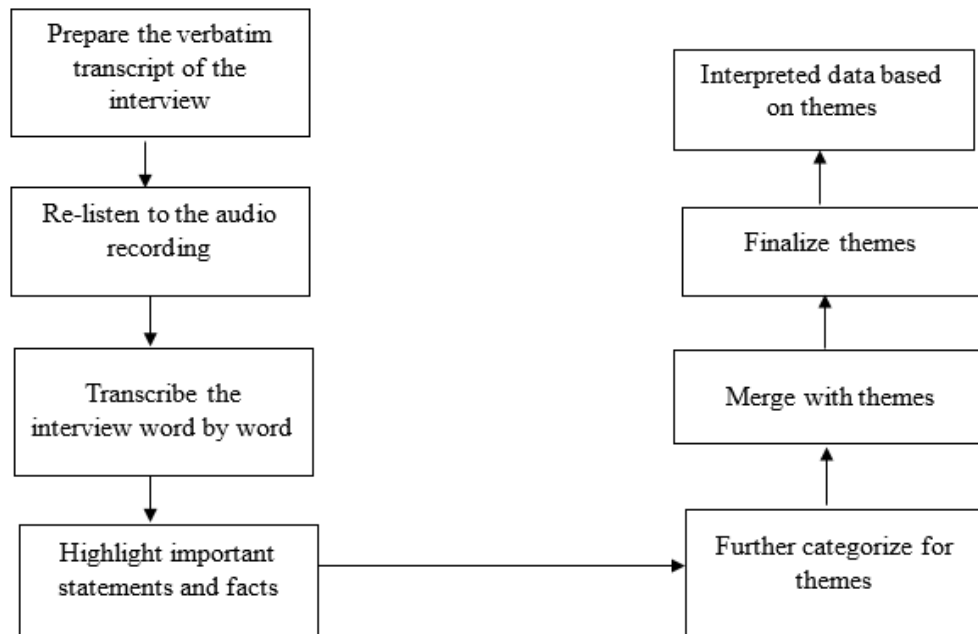


Figure 2. Steps to obtain the discussion theme

Ethical Concern

Ethical considerations were given priority and the researcher has developed informed consent for all subjects under study. It was done to ensure the confidentiality of the subjects were protected, they were made aware of the process of the interview and to serve as proof of their participation in the study. Since the subjects were students and still under the supervision of NADA, the necessary documents needed to carry out the interview smoothly was provided. The researcher used pseudonyms for each participant during the reporting of data and data analysis to avoid breaching confidentiality.

Figure 3 below shows the research procedure that was used by the researcher to conduct this study:

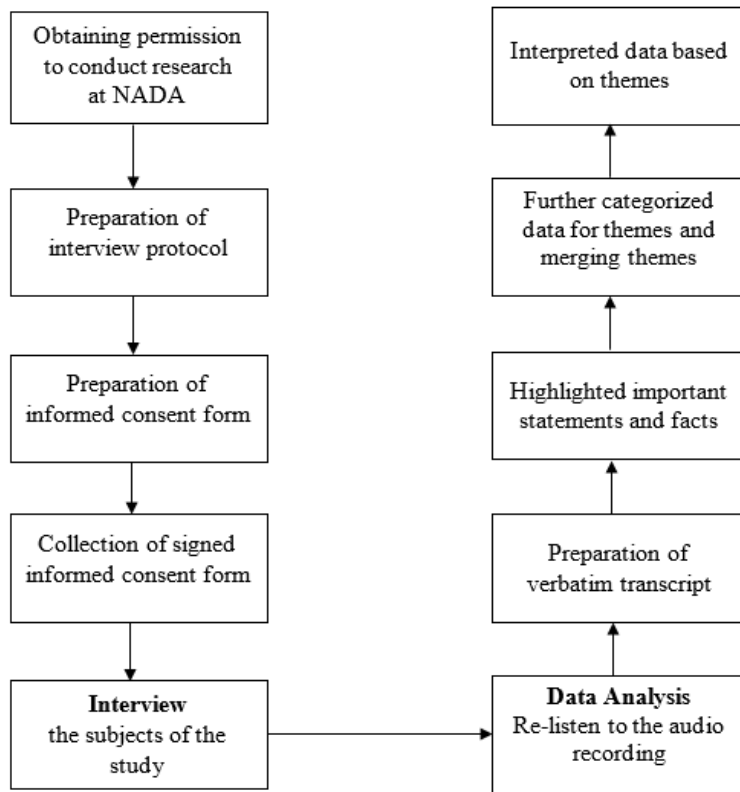


Figure 3. Research procedure

FINDINGS AND DISCUSSION

Three themes were identified from the analysis done on the interview conducted to study students experience in drug abuse and emotion regulation.

The three themes identified with initial coding are: (1) Avoiding places that triggers drug activities, (2) controlling their thought patterns, and (3) avoiding negative influences. The themes of the study are depicted in the figure below:

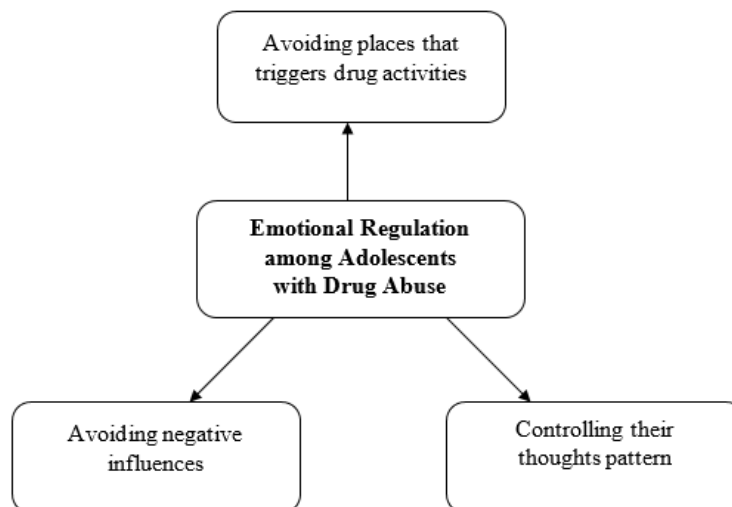


Figure 4. Themes of discussion

The findings of the three themes were supported with the verbatim transcript transcribed from the interview with the participants on emotion regulation based on their experience as drug abusers.

Theme 1: Avoiding places that triggers drug activities

Research findings indicate that avoiding places that may trigger drug related activities can help adolescents with a drug abuse issue to regulate their emotions. This strategy emerges in the findings of interview with the subjects of the study. Below is the transcript:

"Don't go to that direction. Don't go to the old places"

Transcript: Male 2/Line 753

"Old places, we called it as ports"

Transcript: Male 1/Line 958

This finding shows how students involved with drug abuse can regulate their emotion in situations that might trigger them to relapse into their old ways. Staying away from places that involves drug related activities is a form of emotion regulation displayed by the students. These findings highlighted that these venues have a triggering effect on the adolescents who were involved with drugs. The adolescents will be triggered with the feelings of wanting to do drugs again, hence the avoidance of the places that could bring back negative memories. This helps them to be more aware of their feelings and thoughts to avoid relapse. Therefore, this finding supports past research that claims **adolescents' ability to regulate emotion** would lead to an improved well-being (Strauss et al., 2016).

Theme 2: Controlling their thought patterns

Interview findings also show that NADA drug surveillance help students to control their thought patterns relating to the desire to use drugs. This finding is proved based on the interview transcript as below:

"I've been thinking about this 2 years surveillance, when I'm done, I don't want to do this anymore"

Transcript: Male 3/Line 837

"That emotion is...fear"

Transcript: Male 3/Line 670

"Indeed, I have friend who was arrested by the police, he broke the term and is now being reprimanded and faced 3 months in prison"

Transcript: Male 3/Line 680-681

This finding stated that students are able to regulate their emotions when they are more aware of the consequences of relapsing. The fear of being watched if they relapsed again, indicated that they are **able to control their thoughts based on their previous experiences. It was found that NADA's surveillance** on students have helped them in a manner where they managed to control their emotions to not misuse drugs again. The findings can serve as a suggestion for alternative drug treatment to reduce relapse cases as stated by past studies (Chie et al., 2015).

Theme 3: Avoiding negative influences

Besides avoiding triggering spaces and controlling their thought patterns, research findings also show that avoiding friends who are involved with drug abuse can help students not relapse to drug abuse. This is depicted in interview findings below:

"I avoid my friends...I don't hang out with them anymore"

Transcript: Male 3/Line 852-854

"When I see my friends, I just greet them...but I didn't join them because I know when they are start talking, they will discuss about that thing. So, I feel want to take it. So...I think by avoiding them...that's all."

Transcript: Male 3/Line 852-854

Based on these statements made by students who are involved with drug abuse, it shows that the desire to take drug can be avoided if they are able to refrain themselves from socializing with peers who involve with drug abuse. Peer pressure creates negative influence on these students and their involvement in the misuse of drugs. High occurrence of relapse cases happened when they are with their peers. One of the strategy to avoid relapse is to not be involved with the same peer group. This strategy is seen as a helpful way to help their emotional experience that may triggered their drug addiction. Moreover, the findings provide strategies for how adolescents with drug abuse can help themselves with emotion regulation when faced with triggers that may lead to the desire to abuse drugs.

IMPLICATIONS OF THE FINDINGS

Based on the findings of this study, there are some implications that can be expressed in terms of theoretical, practical, and knowledge-based implications. Firstly, the results of this study can be used for better understanding of emotion regulation among students at the adolescence stage who are involved with drug abuse. Due to the lack of qualitative studies on emotion regulation, the findings can be used as a supplementary reference to better understand the effects of emotion regulation amongst students with a history of drug abuse. Additionally, the study solidifies ideas put forth by James Gross in his studies on the different theories and processes of emotion regulation. This study also has the **potential to aid counsellors 'in-the-field'** in real-life educational settings, specifically the male student demographic who suffer with drug abuse and the role their addiction has on the regulation of mood and emotions, potentially in terms of intervention policies and education. Moreover, these findings could also serve as a databank to NADA Malaysia to help them better understand the subject at hand. The findings may, if applied, aid drug rehabilitation centres in undertaking meaningful rehabilitation for adolescent drug abusers and their consequential emotion regulation.

CONCLUSION

In conclusion, these findings outline a three-pronged approach for the rehabilitation of male adolescents who abuse drugs. Firstly, limiting social ties to other drug abusers; thereby limiting access. Secondly, avoiding certain locations that by association may act as a trigger for drug-abusing behaviour, and lastly establishing different more positive thought patterns to replace the existing thought patterns that lead to drug abuse. These findings show how the three-pronged approach can be a methodological guideline in dampening previously negative behavioural patterns that result in drug abuse. For the benefit of this area of study, future researchers should also explore alternative qualitative approaches such as case study or mixed method approaches as this specific study focuses exclusively on phenomenological study. Future researchers could, additionally undertake potential theoretical frameworks other than **frameworks based on James Gross' theory to further enhance the understanding of drug abuse among adolescents** to provide an added dimension of perspective not present in this study. Lastly, future researchers could also focus on theoretical applications with a demographic not under direct supervision of a body like NADA since this study is limited by those parameters.

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REFERENCES

- Barrett, L. F., Mesquita, B., Ochsner, K. N., & Gross, J. J. (2007). The experience of emotion. *Annual Review Psychology, 58*, 373-403.
- Bosse, T., Pontier, M., & Treur, J. (2008). *A computational model based on Gross' emotion regulation theory*. Paper presented at the International Conference on Cognitive Modeling.
- Chemi, N., Abdullah, N., Singh, A., & Mohamad, M. F. (2014). A review of substance abuse research in Malaysia. *Med J Malaysia, 69*, 55-58.
- Choopan, H., Kalantarkousheh, S. M., Aazami, Y., Doostian, Y., Farhoudian, A., & Massah, O. (2016). Effectiveness of emotion regulation training on the reduction of craving in drug abusers. *Addiction & Health, 8*(2), 68-75.
- Farley, J. P., & Kim, S. J. (2014). The development of adolescent self-regulation: reviewing the role of parent, peer, friend, and romantic relationships. *J Adolesc, 37*(4), 433-440.
- Fakaruddin, F. N., & Tharbe, I. H. A. (2018). Self-esteem and emotional intelligence among students in a public higher learning institution in Malaysia. *Advances in Social Science, Education and Humanities Research, 149*, 243-248.
- Gross & Barrett. (2011). Emotion generation and emotion regulation: one or two depends on your point of view. *Emot Rev, 3*(1), 8-16.
- Gross, J. J. (2002). Emotion regulation: Affective, cognitive, and social consequences. *Psychophysiology, 39*, 281-291.
- Hagos, E. G., Asfeha, G. G., & Berihu, B. A. (2016). Prevalence of substance abuse among regular degree health science students in Sheba University College in Mekelle Town, Tigray - Ethiopia. *J Neurosci Rural Pract, 7*(2), 200-205.
- Hessler, D. M., & Katz, L. F. (2010). Brief Report: Association between emotional competence and adolescent risky behaviour. *Journal of Adolescence, 33*(1), 241-246.
- Ismail, R., Ahmad, N. A., Ibrahim, F., & Nen, S. (2017). *Pengaruh faktor individu, keluarga dan persekitaran sosial terhadap tingkah laku penyalahgunaan bahan dalam kalangan remaja* [Influence of individual, family, and social factors on substance abuse behavior among adolescents]. *Akademika, 87*(01), 7-16.
- Kaur, A. (2017). Risk taking behaviour of secondary school students in relation to emotional intelligence. *Journal for Humanity Science & English Language, 4*(22), 5511-5520.
- Kelly, T. H. & Bardo, M. T. (2016). Emotion regulation and drug abuse: Implications for prevention and treatment. *Drug Alcohol Depend, 163 Suppl 1*, S1-2.
- Kober, H. (2013). Emotion regulation in substance use disorder. In J. Gross (Ed.), *Handbook of Emotion Regulation* (pp. 428-446). Yale University: Guilford.
- Larsen, J. K., Vermulst, A. A., Geenen, R., van Middendorp, H., English, T., Gross, J. J., . . . Engels, R. C. M. E. (2012). Emotion regulation in adolescence. *The Journal of Early Adolescence, 33*(2), 184-200.
- Cai, L. T., & Yie, C. F. (2013). A qualitative study on drug abuse relapse in Malaysia: Contributory factors and treatment effectiveness. *International Journal of Collaborative Research on Internal Medicine & Public Health, 5*(4), 217-232.
- Chie, Q. T., Tam, C. L., Bonn, G., Wong, C. P., Dang, H. M., & Khairuddin, R. (2015). Drug abuse, relapse, and prevention education in Malaysia: perspective of university students through a mixed methods approach. *Frontiers in psychiatry, 6*, 65.
- Malaysia Education Blueprint 2013-2025. (2013). Malaysia Education Blueprint 2013-2025: Preschool to Post-Secondary Education.
- McGlinchey, E. L., & Harvey, A. G. (2015). Risk behaviors and negative health outcomes for adolescents with late bedtimes. *J Youth Adolesc, 44*(2), 478-488.

- Nachiappan, S. (2015). *Analisis faktor penyumbang terhadap penyalahgunaan dadah dan usaha pemulihan dari segi kognisi di pusat PENGASIH Malaysia* [Analysis of contributing factors to drug abuse and cognitive rehabilitation efforts in the center of PENGASIH Malaysia]. *EDUCATUM Journal of Social Sciences*, 1(1), 34-39.
- National Anti-Drugs Agency. (2018). *AADK kenal pasti 178 kawasan berisiko tinggi* [The AADK identified 178 high-risk areas]. Retrieved from <https://www.adk.gov.my/aadk-kenal-pasti-178-kawasan-berisiko-tinggi/>
- National Institute on Drug Abuse. (2011). Research report series: Prescription drug abuse.
- Oostveen, L. V. (2017). *Using Gross' emotion regulation theory to advance affective computing*. (Master Thesis), Utrecht University.
- Oshri, A., Sutton, T. E., Clay-Warner, J., & Miller, J. D. (2015). Child maltreatment types and risk behaviors: Associations with attachment style and emotion regulation dimensions. *Personality and Individual Differences*, 73, 127-133.
- Pena-Sarrionandia, A., Mikolajczak, M., & Gross, J. J. (2015). Integrating emotion regulation and emotional intelligence traditions: a meta-analysis. *Front Psychol*, 6, 160.
- Porter, C. M., Ireland, C. A., Gardner, K. J., & Eslea, M. (2016). Exploration of emotion regulation experiences associated with borderline personality features in a non-clinical sample. *Borderline Personal Disord Emot Dysregul*, 3, 8.
- Rahbarian, M., Mohammadi, A., Abasi, I., & Soleimani, M. (2017). Emotion Regulation Problems and Addiction Potential in Iranian Students. *Journal of Practice in Clinical Psychology*, 5(4), 235-242, 5(4), 235-242.
- Ramo, D. E., Prince, M. A., Roesch, S. C., & Brown, S. A. (2012). Variation in substance use relapse episodes among adolescents: a longitudinal investigation. *J Subst Abuse Treat*, 43(1), 44-52.
- Rolston, A., & Llyod, R. E. (2017). What is emotion regulation and how do we do it? *Cornell Research Program on Self-Injury and Recovery*. Retrieved from <http://www.selfinjury.bctr.cornell.edu/perch/resources/what-is-emotion-regulationsinfo-brief.pdf>
- Shadur, J. M., & Lejuez, C. W. (2015). Adolescent substance use and comorbid psychopathology: Emotion regulation deficits as a transdiagnostic risk factor. *Current Addiction Report*, 2, 354-363.
- Silk, J. S., Steinberg, L., & Morris, A. S. (2003). Adolescents' emotion regulation in daily life: Links to depressive symptoms and problem behaviour. *Child Development*, 74(6), 1869-1880.
- Skogsberg, N. J. (2012). *The choices we make: An examination of situation selection and attentional deployment in young and older adults*. (Master's degree), Brandeis University.
- Stiller, A., Kathrin, Kattner, M. F., Gunzenhauser, C., & Schmitz, B. (2018). The effect of positive reappraisal on the availability of self-control resources and self-regulated learning*. *Educational Psychology*, 39(1), 86-111.
- Strauss, M., Raubenheimer, J. E., Campher, D., Coetzee, C., Diedericks, A., Gevers, H., . . . van Niekerk, S. (2016). The development of an emotion regulation scale for adolescents. *South African Journal of Occupational Therapy*, 46(3).
- Sulaiman, N. F., & Johari, K. S. K. (2015). *Pengetahuan dan kesedaran kanak-kanak tentang penyalahgunaan dadah* [Children's knowledge and awareness of drug abuse]. Paper presented at the International Drug Prevention and Rehabilitation Conference.
- Tugade, M. M., & Fredrickson, B. L. (2007). Regulation of positive emotions: Emotion regulation strategies that promote resilience. *Journal of Happiness Studies*, 8, 311-333.
- Tunggak, B., Hashim, S., Mohamad, N. A., & Ali, M. (2015). *Faktor risiko belia terlibat dalam penyalahgunaan dadah dan cadangan penyelesaiannya menerusi model pembangunan belia muslim terpimpin* [Youth risk factors involved in drug abuse and proposed solutions through a leading Muslim youth development model]. *Jurnal Anti Dadah Malaysia*, 9(1), 0.
- Valiente, C., Swanson, J., & Eisenberg, N. (2012). Linking students' emotions and academic achievement: When and why emotions matter. *Child Development Perspectives*, 6(2), 129-135.
- Webb, T. L., Lindquist, K. A., Jones, K., Avishai, A., & Sheeran, P. (2018). Situation selection is a particularly effective emotion regulation strategy for people who need help regulating their emotions. *Cogn Emot*, 32(2), 231-248.

- Wills, T. A., Pokhrel, P., Morehouse, E., & Fenster, B. (2011). Behavioral and emotion regulation and adolescent substance use problems: A test of moderation effects in a dual-process model. *Psychology Addiction Behaviour, 25*(2), 279-292.
- Zadra, J. R., & Clore, G. L. (2011). Emotion and perception: the role of affective information. *Wiley Interdiscip Rev Cogn Sci, 2*(6), 676-685.
- Zareban, I., Bakhshani, N. M., Bor, M. H., & Bakhshani, S. (2017). Emotion regulation difficulties in drug abusers. *Annals of Tropical Medicine and Public Health, 10*(6), 1724-1728.