

Factors Influencing the Tendency of Drug Abuse among Adolescents in Malaysia

Muhammad Syamiezy Bin Sidek

Department of Psychology, Faculty of Social Sciences, Universiti Islam Melaka, 78200 Masjid Tanah, Melaka, Malaysia
Email: syamiezy@unimel.edu.my

Nurliana Binti Suhaini

Centre for Language and General Studies, Universiti Islam Melaka, 78200 Masjid Tanah, Malaysia
Corresponding Author Email: nurliana@unimel.edu.my

Syazwana Binti Aziz

Department of Guidance and Counseling, Faculty of Human Development, Universiti Pendidikan Sultan Idris 35900 Tanjung Malim, Perak, Malaysia
Email: syazwana.aziz@fpm.upsi.edu.my

Faudziah Binti Yusof

Department of Psychology, Faculty of Social Sciences, Universiti Islam Melaka, 78200 Masjid Tanah, Melaka, Malaysia
Email: faudziah@unimel.edu.my

Siti Marhamah Binti Kamarul Arifain

Department of Professional Educational and Postgraduate, Faculty of Technical and Vocational Education, Universiti Tun Hussein Onn Malaysia 86400 Parit Raja, Batu Pahat Johor, Malaysia
Email: marhamah@uthm.edu.my

To Link this Article: <http://dx.doi.org/10.6007/IJARBSS/v15-i6/25688> DOI:10.6007/IJARBSS/v15-i6/25688

Published Date: 14 June 2025

Abstract

The issue of drug abuse among adolescents in Malaysia continues to pose a significant challenge to society, with rising cases severely impacting the nation's social and economic well-being. This study aims to review the conceptual frameworks based on previous research concerning factors influencing drug abuse among adolescents in Malaysia, applying Bronfenbrenner's Ecological Theory (1999). This theory encompasses various systemic levels including microsystem (direct relationships with family, school, and peers), mesosystem

(interactions between microsystems), exosystem (external influences such as parents' workplaces), and macrosystem (cultural values, social norms, and national policies). Through this approach, the study seeks to provide a deeper understanding of how environmental and social factors affect adolescents' decisions regarding drug abuse. The implications highlight the necessity for an integrated approach involving family, schools, and community efforts in prevention strategies and along with public policies emphasizing awareness of drug abuse dangers particularly among youths. Such an approach will help foster healthier environments and support adolescent well-being in Malaysia.

Keywords: Factors Influencing, Tendency of Drug Abuse, Adolescents in Malaysia

Introduction

Adolescents are an important asset in the development of a country as they are the heirs of leadership and the drivers of future society. However, the adolescent phase is also a critical period in an individual's life because it involves various changes in terms of emotions, psychology, social aspects, and self-identity. During this phase, some adolescents are easily exposed to various negative influences, including drug abuse. This group is known as at-risk adolescents for drug abuse, meaning those who have a high potential to be involved in the use of illegal substances due to the influence of internal and external factors.

The definition of at-risk adolescents for drug abuse refers to individuals aged between 13 and 21 years who exhibit characteristics that lead to involvement in drug abuse. These characteristics include problematic family backgrounds, lack of social support, academic pressure, peer influence, urban poverty and the absence of coping skills to overcome life stressors. In addition, adolescents who are less exposed to accurate information about the dangers of drugs and do not have positive role models also fall under this category. A study conducted by Murad, Kamaluddin, and Nasir (2020), showed that adolescents who have difficulties regulating their emotions are more likely to display delinquent behavior, including drug abuse. Furthermore, a lack of close relationships with the community or family increases their vulnerability to this phenomenon (Murad et al., 2020).

The current situation of drug abuse among adolescents in Malaysia remains alarming. According to the National Anti-Drug Agency (AADK) Drug Statistics Report 2022, a total of 28,000 drug addicts were recorded, with over 40% of them being youths aged between 19 and 39 years, many of whom initiated drug use during their adolescence (Agensi Antidadah Kebangsaan, 2023). The most commonly used drugs among adolescents include methamphetamine (syabu), marijuana (ganja), "horse pills" (pil kuda), and inhalants such as glue. More worryingly, research by Rachmawati et al. (2016) found that traditional educational approaches such as lectures are not very effective in shaping attitudes to reject drugs among adolescents. Instead, interactive and community-based programs such as CBIA-Narkoba (Community-Based Interactive Approach) were found to be more effective in increasing knowledge and awareness among secondary school students to resist drug influence (Rachmawati et al., 2016). Besides peer influence and lack of knowledge, academic pressure and family conflicts also act as catalysts for adolescents' involvement in drug abuse. In many cases, drugs are used as a coping mechanism to reduce stress or sadness. This situation is worsened by a permissive social environment, where adolescents can easily obtain illegal substances through friends or social media.

Statistics from recent studies in Malaysia indicate that approximately 1 in 10 adolescents have experimented with illegal drugs, raising significant concerns due to the detrimental effects on their nervous system, academic achievement, and social relationships (National Anti drug Agency (2021); Ministry of Health Malaysia (2023)).In fact, drug abuse is also linked to increased crime rates, school dropouts, and mental health problems among adolescents. To address this issue, a holistic and evidence-based prevention approach needs to be implemented. This includes active involvement of parents, continuous drug prevention education in schools, psychosocial support, and strengthening of religious and moral values among adolescents. Studies also show that approaches involving peers, communities, and the use of digital technology can enhance the effectiveness of interventions. At-risk adolescents for drug abuse are a group that requires special attention from all levels of society. Without early and comprehensive effective intervention, they not only risk damaging their own future but also jeopardize the country's social and economic development.

Bronfenbrenner's Ecological Theory

This study was conducted by applying Bronfenbrenner's Ecological Theory developed by Bronfenbrenner (1999). This theory focuses on (a) proximal processes, (b) individual components, (c) contexts involving microsystem, mesosystem, exosystem, and macrosystem processes in child development, as well as (d) time (chronosystem). The ecological theory emphasizes the influence of the environment on individual development, meaning that individual development is the result of interactions between the environment and the individual (Muh. Hariz Zubaidillah, 2019).

First, proximal processes refer to interactions between the child and caregivers, where caregivers include parents, teachers, counselors, grandparents, or caregivers. It may also involve interactions between the child and objects such as video games, educational digital tablets, or balls. These processes are more effective for child development if they occur consistently and over a long period (Bronfenbrenner & Ceci, 1993). Bronfenbrenner (1999) stated that proximal processes are achieved when the individual is engaged in activities frequently and continuously to attain effective development. These interactions are not limited to interpersonal interactions but may also involve interactions among activities, individuals, objects, and symbols.

Second, the individual component was added, which was not present in the earlier Ecological Theory. Bronfenbrenner (1999) found that personal characteristics influence child development because they affect how the child is influenced by social interactions at the first level (process). Identity formation, self-concept, physical appearance, gender, and age determine how an individual interacts with others and how the individual responds to them.

Third, the context involves microsystem, mesosystem, exosystem, and macrosystem processes in child development. Bronfenbrenner (1999) found that children develop based on social neighborhood factors, family, and parenting (microsystem); development with home and school (mesosystem); the mother's workplace environment that does not directly involve individual development (exosystem); and socioeconomic status, cultural patterns learned such as beliefs, clothing, economy, and social systems of a culture (macrosystem). The interaction between adolescents and these contexts helps them develop social values and psychological well-being, especially involving beliefs and culture carried from childhood

to adolescence. Additionally, researchers found that drug-involved students and normal students share similar attitudes toward moral dimensions in life, meaning that adolescents involved in drug abuse are aware that their involvement is wrong but use denial as a defense mechanism to justify it (Norhayati Ibrahim et al., 2018).

Meanwhile, time involves the chronosystem aspect, which indicates the degree of stability or change in a person's world (Bronfenbrenner, 1999). This includes changes in family composition, residence, or parents' employment. Changes in family patterns are one of the chronosystem factors. Shaffer and Kipp (2010) also state that cognitive and biological changes during puberty, such as increased conflict between early adolescents and parents, are also factors in the chronosystem and relate to the formation of delinquent behavior among adolescents.

Ecological theory explains that human development is influenced by environmental contexts according to systems as established by Bronfenbrenner. Each subsystem has a role in ensuring physical, mental, and cognitive development of children through complete processes within their environment. The reciprocal relationship between the individual and the environment shapes the individual's behavior in their life context. Based on ecological theory, problems in the microsystem will cause the child to fail to explore their environment properly (Paquette & Ryan, 2001). Moreover, Addison (1992) states that failure at this level will cause adolescents to become antisocial, have low self-discipline, and show poor ability to determine their life direction (in Paquette & Ryan, 2001).

Based on Ecological Theory, this study emphasizes the third system, which covers aspects of proximal processes within the microsystem, mesosystem, exosystem, and macrosystem in child development. This is supported by Mohammad Nasir, Aslina, Amelia, Ahmad Jazimin, Mohd Bazlan, Noraini, Samsiah, Faizura & Mohd Noor (2015), where the ecological approach shows that at-risk adolescents are more likely to come from negative or risky environments. Therefore, a conceptual study was conducted to identify factors contributing to the tendency of drug abuse among adolescents based on the third system in Ecological Theory.

Environmental Factors Contributing to the Tendency of Drug Abuse among Adolescents

Environmental factors encompassing family environment, neighborhood, school, parents' workplace, beliefs, culture, economy, and social systems are among the contributors to the tendency of drug abuse problems among adolescents if these systems experience dysfunction. Risk and protective factors are referred to within the environmental context and are translated into several domains, namely intrapersonal, interpersonal, school, and community domains, showing interactions among these domains (Rozmi et al., 2017). Therefore, several environmental factors have been identified in this study as contributing to the tendency of drug abuse among adolescents in Malaysia.

Environmental Factors (Microsystem)

Microsystem factors refer to the immediate environment that directly influences individual development, including family relationships, peer groups, and community. In the context of drug abuse among adolescents, this factor plays an important role either as a protector or a promoter of risky behavior. A study by Mohd Yusoff, Ahmad, and Mahat (2023) found that

fragile family relationships and negative peer influences significantly contribute to adolescents' tendency to engage in drug abuse. Lack of emotional support from parents and ineffective monitoring make adolescents more easily influenced by peers, who often act as the main source of exposure to illicit substances.

This finding is also supported by Zakaria and Mohd Noor (2022), who emphasized that social pressure from peers and risky community influences greatly affect adolescent behavior. This study reinforces the argument based on Bronfenbrenner's ecological theory, which states that elements within the microsystem such as family and immediate social environment have a direct effect on an individual's psychosocial development. In this regard, Mohd Jani and Mohamad (2023) further add that mental health imbalance and lack of sufficient social support put adolescents at greater risk of drug addiction and social deviation. This condition shows that a combination of emotional stress, feelings of alienation, and absence of strong support systems can drive adolescents to seek easy solutions through illicit substances.

A study by Cano, Comulada, and Molina (2023) indicates that microsystem factors such as peer influence and ease of access to drugs in low-income communities are strong predictors of adolescent drug abuse. A report by the National Institute on Drug Abuse (2022) also stated that reduced social interactions during the COVID-19 pandemic contributed to a decline in substance use among adolescents, proving that social elements within the microsystem are highly influential. Research by Norhayati et al. (2018) identified three main reasons why a drug user becomes a dealer: to finance their own addiction, influenced by family or friendship ties, and being asked by existing dealers to assist in distribution. These findings demonstrate that substance abuse affects individuals physically and psychologically and can lead to involvement in criminal activities such as drug distribution when environmental pressures and financial needs become urgent. Hence, microsystem factors such as close social influences, family, and peers play a role in triggering the transition from passive users to active distributors.

Norhayati et al. (2018) identified three main reasons why a drug user transitions to a dealer: to finance their own addiction, influenced by family or friendship relationships, and requests from existing dealers to assist in distribution. Meanwhile, Rozmi et al. (2017) emphasized that easy access to illicit substances within adolescents' residential environment is a significant environmental risk factor for substance misuse behavior. This is supported by earlier research by Hollen (2009), who also stated that the availability of illicit substances in the community increases the likelihood of adolescents engaging in uncontrolled substance use. This explains how loose physical and social environments in terms of control and social norms allow the spread of substance abuse among youth. Findings from Rozmi Ismail et al. (2017) clearly show that environmental risk factors such as easy availability of drugs contribute to substance misuse behaviors among adolescents alongside other risk factors. This is supported by findings from Hogan et al. (2003) and Hollen (2009), which state that easy access to substances or drugs in adolescent communities increases the risk of substance misuse among youth.

Overall, microsystem factors play a significant role in influencing adolescents' tendencies toward drug and substance abuse. Loose relationships with parents, negative peer

influences, lack of social support, and pressures from risky community environments are identified as the main causes of adolescent involvement in substance misuse. Local studies indicate that family and peer roles are key factors that need attention, while international studies emphasize the role of physical access to drugs and local social structures. Indirectly, all these findings confirm the importance of interventions based on microsystem support systems such as family, school, and community to reduce the risk of drug abuse among adolescents.

Environmental Factors (Mesosystem)

The issue of adolescent involvement in drug abuse is a very important topic to discuss and study as it involves the institutional systems of family and education (Norhayati Ibrahim et al., 2018). Mesosystem factors such as home and school environments have been proven to play a significant role in influencing adolescent drug abuse tendencies at the international level. A study by Watts, Kelly, and Sinha (2024) shows that peer influence is one of the main drivers of substance abuse behavior, as adolescents are easily influenced by the social norms of their groups. This finding is strengthened by Sun and Zhang (2023), who emphasize that the quality of teaching in schools can act as either a protective factor or an enhancer of risky behaviors. Schools weak in social control and student engagement tend to allow negative peer influences to grow. Therefore, support structures and control at school are important factors that must be given attention in prevention interventions.

Moreover, the family environment also plays a critical role in shaping adolescent behavior. A study by Ghasemi et al. (2019) shows that family conflicts, household disharmony, and lack of emotional support increase the risk of adolescent involvement in drug abuse. Similar findings were found in a study by Maraire and Ismail (2024), which identified that lack of positive activities at school and teacher support also contribute to this tendency. Meanwhile, Musomboli, Auma, and Oketch (2023) stress that social influences such as peer pressure at school need to be addressed systematically through approaches involving family and school communities. Overall, these findings show the need for integrated approaches in developing home and school support systems to reduce the risk of substance abuse among adolescents.

Additionally, a study by Allen et al. (2023) found that peer influence at school greatly affects adolescents' decisions to engage in substance abuse. Adolescents tend to imitate negative behaviors displayed by their peers, which often leads to drug use. In the Malaysian context, peer influence is also seen as a key factor in risky behavior among students, especially in secondary schools. This aligns with findings by Winstone et al. (2023), which show that the transition from primary to secondary school is a critical phase, where adolescents are more vulnerable to substance abuse risks if they do not receive adequate support in their school environment.

Furthermore, family factors play an important role in reducing or increasing adolescents' tendencies to engage in drug abuse. Ghasemi et al. (2019) argue that family disharmony, such as conflicts between parents and lack of positive communication, can increase the risk of adolescents engaging in risky behaviors. Conversely, strong emotional support from the family can act as a protective layer. A study by Trucco et al. (2023) also shows that higher parental supervision and a positive school environment can reduce the

influence of peers on adolescents' decisions to use illicit substances. Therefore, mesosystem factors such as family and school function synergistically to shape adolescent decisions in facing external influences.

These studies provide important insights into understanding the environmental dynamics shaping adolescent behavior related to drug abuse. Zhang et al. (2022) emphasize that family disharmony and lack of parental emotional support can lead to mental health problems, which in turn make adolescents more vulnerable to substance abuse as a coping mechanism. These findings show that family and school factors not only influence adolescent social behavior but also their mental well-being. Therefore, effective prevention approaches should involve active participation from parents, teachers, and the community in providing a supportive environment to prevent drug abuse problems among adolescents.

Environmental factors such as home and school (mesosystem) play a very important role in shaping adolescents' tendencies toward drug abuse. Weak interactions within family institutions—such as lack of emotional support, parental conflicts, or neglect of supervision—can increase the risk of adolescents seeking outside solutions such as substance use. At the same time, unsupportive school environments, such as negative peer influences, low teaching quality, and lack of co-curricular activities, also contribute to the increased risk.

Environmental Factors (Exosystem)

Environmental factors, particularly parents' workplace, are among significant elements influencing the psychosocial well-being of adolescents who are vulnerable to drug abuse risks. High workload, work-life imbalance, and prolonged career stress cause parents to be less involved in monitoring and emotional interaction with their children. The domino effect is a communication gap within the family, further pushing adolescents to seek social support and reinforcement outside the home, including among peers involved in drug-related behaviors. Ismail et al. (2021) emphasize that family function fragility due to external pressures, such as work factors, is proven to be a major predictor of substance abuse tendencies among adolescents in Malaysia. This indicates that the indirect effects of parents' work environments can influence deviant behavior in children unknowingly.

FSM explains how economic pressures, including workload and financial instability, can cause psychological stress among parents. This stress, in turn, can disrupt parenting functions and increase family conflicts, ultimately negatively affecting adolescent well-being (Martin, 2019). A study by Martin (2019) found that economic pressure within families is closely linked to increased drug and alcohol use among Mexican-American adolescents.

In a more critical context, parental parenting styles involving drug abuse constitute a form of negative role modeling for children. According to Shahzadi et al. (2024), permissive and neglectful parenting styles increase the risk of substance use among adolescents. Conversely, authoritative parenting styles are associated with a decreased risk. A study by the National Security Council (2022) proved that early exposure to parental behaviors involved with drugs accelerates the internalization of deviant norms among adolescents. This not only triggers identity crises but also worsens intrapersonal conflicts within adolescents, who eventually turn to drug use as a coping mechanism against environmental stress. This phenomenon is not limited to the Malaysian context. Hust and Willoughby's (2024) study in

the United States confirmed that adolescents' perceptions of their parents' marijuana use behavior influence their attitudes, intentions, and likelihood of imitating such behaviors. These findings underscore the need for family-based interventions that emphasize open communication, behavioral boundary-setting, and strengthening emotional bonds between parents and children.

Therefore, the exosystem factor of parents' workplace should be seen as an important component in building prevention strategies against drug abuse among adolescents, considering the complex interaction between external pressures and internal family dynamics.

Environmental Factors (Macrosystem)

In Bronfenbrenner's human development ecological theory, the macrosystem refers to the broadest level of an individual's environment, encompassing cultural values, ideology, social structures, and economic systems that dominate a society. In the context of adolescents in Malaysia, this macrosystem is expressed through societal cultural patterns including beliefs, lifestyles, religious systems, economic status, and social structures within the community. All these elements profoundly affect adolescents' socialization processes and can influence whether they become involved in drug abuse.

Cultural values of a society influence what is considered normal or acceptable. In permissive cultures, substance abuse such as smoking, alcohol, or drugs is often not seen as a major wrongdoing and sometimes is regarded as part of a modern lifestyle. Party lifestyles, nightlife entertainment, celebrity influence, and social media also contribute to the normalization of such behaviors among adolescents. A study by Taiwo & Olayemi (2020) shows that adolescents growing up in cultures that place less emphasis on self-discipline and social responsibility are more easily led into drug abuse. Furthermore, Schiefer's (2012) research confirms that adolescents tend to follow the cultural values of the majority society, and as they grow older, they become more strongly attached to cultural norms accepted in their community (Schiefer, 2012).

Economic inequality and unfair educational opportunities are part of the macrosystem that influence adolescents. In societies with high unemployment rates, rising living costs, and limited social mobility, adolescents from low-income families often experience significant psychosocial stress. Wang & Martins (2024) found that prolonged economic and social pressure among urban adolescents leads them to view drugs as an escape from stress or a way to earn quick income (Wang & Martins, 2024). Moreover, Dierckens et al. (2019) state that cultural inequalities also contribute to health disparities among adolescents, including tendencies toward risky behaviors such as substance use (Dierckens et al., 2019).

In summary, the macrosystem in Bronfenbrenner's ecological theory highlights how cultural values, social norms, and economic structures shape the environment in which adolescents grow and develop. In Malaysia, elements such as permissive cultural attitudes, exposure to modern lifestyle influences, religious norms, and economic disparities significantly impact adolescents' behavior and choices. When societal values normalize or downplay substance use, and when economic pressures create feelings of hopelessness or stress, adolescents become more susceptible to engaging in drug abuse. Therefore,

addressing adolescent drug abuse requires not only individual or family-level interventions but also broader societal efforts to promote positive cultural values, reduce economic inequality, and create supportive environments for youth development.

Implications and Recommendations

The study on factors contributing to the tendency of drug abuse among adolescents in Malaysia, based on Bronfenbrenner's Ecological Theory, clearly shows that this issue cannot be viewed merely as an individual problem. Instead, it is the result of dynamic interactions among various layers of the environment — from the closest family relationships (microsystem), the networks between family and school (mesosystem), indirect influences such as family economic pressures and parents' employment (exosystem), to cultural values and national policies (macrosystem). Each layer of this ecosystem is interconnected and plays a role in shaping adolescents' decisions and behaviors when facing the risk of drug abuse.

The main implication of this study is the need to emphasize strengthening the family institution as the first line of prevention. Fragile family relationships, lack of emotional support, and absence of parental monitoring are the primary gateways for negative peer and risky community influences. Moreover, family involvement in children's social and educational activities has been proven to reduce adolescents' tendency to seek easy solutions through illicit substances. Likewise, a harmonious relationship between schools and families allows preventive messages to be delivered consistently and holistically. Failure in this system may allow adolescents to seek identity and social support outside safe environments, thereby increasing their risk of drug involvement.

Furthermore, family economic pressure and permissive or neglectful parenting styles are also found to push adolescents toward addiction. In societies that emphasize material achievement and academic success without balancing emotional and moral needs, pressured adolescents easily view drugs as a coping mechanism. Permissive cultural values toward risky behaviors, easy access to drugs in communities, and social media influences that normalize substance use complicate prevention efforts if not addressed through comprehensive and integrated policies.

Based on these findings, several strategic recommendations can be proposed to strengthen drug abuse prevention efforts among adolescents. First, parenting programs, family education, and psychosocial support need to be expanded, especially for at-risk families. Parents should be equipped with authoritative parenting skills and the importance of effective two-way communication with their children. Second, schools must become active prevention zones, with interactive educational programs, counseling units, and peer involvement as positive change agents. Strong cooperation among schools, parents, and communities should be reinforced through joint campaigns, family forums, and co-curricular activities that build adolescents' self-identity.

Third, the government and policymakers are advised to provide family-friendly economic support policies, such as financial aid, skills training opportunities, and flexible working hours for parents to maintain family life balance. Social safety nets should also be strengthened through community centers, free counseling services, and provision of healthy activity spaces at the local level. Fourth, mass media campaigns and education on moral,

religious, and civic values must be intensified to foster a drug-rejecting culture as a social norm. Youth icons and celebrities as anti-drug ambassadors can help deepen awareness among adolescents.

Finally, continuous monitoring and evaluation of programs must be conducted to ensure interventions remain relevant to current developments and challenges. Further research on the influence of digital media, changes in family structure, and social environment should also be pursued to improve existing strategies.

Conclusion

This study shows that drug abuse among adolescents in Malaysia results from complex interactions among various interconnected systems, as outlined by Bronfenbrenner's Ecological Theory. The microsystem, mesosystem, exosystem, and macrosystem influencing adolescents' lives must be considered when planning preventive policies. Influences from family environment, school, peers, and external factors such as economic pressure and government policies all have profound impacts on adolescent behavior. Therefore, each layer in this ecosystem plays an important role in shaping adolescents' decisions and behaviors, especially concerning drug abuse issues. Based on the study's findings, a holistic and integrated approach must be established to address drug abuse problems among adolescents. Collaboration between families, schools, communities, and government should be enhanced by involving multiple parties to create a positive environment that supports adolescent well-being. Additionally, cultural and national policy changes emphasizing prevention and awareness of drug abuse dangers should be implemented comprehensively. This will have a significant impact on shaping a healthier young generation free from the influence of illicit substances.

Theoretical and Contextual Contribution

This study contributes significantly to both theoretical advancement and contextual understanding of adolescent drug abuse in Malaysia. Theoretically, the application of Bronfenbrenner's Ecological Theory in this context enriches its relevance by demonstrating how each level of environmental interaction — microsystem to macrosystem — dynamically shapes adolescents' vulnerability to drug abuse. By contextualizing this theory within the Malaysian socio-cultural landscape, the study not only validates the framework's applicability across different cultural environments but also enhances its explanatory power in multi-ethnic, socioeconomically diverse settings. Contextually, this research provides empirical evidence tailored to Malaysia's unique demographic and policy challenges, including the rise of urban poverty, educational pressure, familial disengagement, and digital exposure among youths. By integrating localized data and perspectives, this study offers insights that are practically applicable for national stakeholders, including educators, social workers, and policymakers. Its emphasis on systemic and intergenerational influences reinforces the need for multi-agency collaboration in designing effective interventions, thus playing a critical role in informing Malaysia's adolescent mental health, education, and social welfare policies.

References

- Agensi Antidadah Kebangsaan. (2015). Laporan statistik dadah kebangsaan 2015. Agensi Antidadah Kebangsaan.
- Allen, J. P., Gifford-Smith, M. E., & Hops, H. (2023). Peer influence and adolescent substance use: A meta-analytic review. *Journal of Adolescence*, 91, 154–167.
- Cano, M., Comulada, W. S., & Molina, G. B. (2023). Micro-level factors associated with youth drug use among an urban at-risk youth sample. *Journal of Substance Use*. Advance online publication.
- Dierckens, M., Weinberg, D., Deforche, B., & Hublet, A. (2020). National-level wealth inequality and socioeconomic inequality in adolescent mental well-being: A multilevel analysis of 34 countries. *Journal of Epidemiology and Community Health*.
- Ganaprakasam, C., Selvaraja, T., Michael, J., & Nithlavarnan, A. (2020). Reason to believe: Religiosity, resilience, and self-efficacy among Malaysian Indian adolescents. *Malaysian Journal of Social Sciences and Humanities*.
- Ghasemi, M., Karimi, A., & Shamsi, M. (2019). Family environment and its association with adolescent substance abuse: A cross-sectional study. *Journal of Substance Use*, 24(4), 392–398. <https://doi.org/10.1080/14659891.2019.1614232>
- Ghasemi, A., Ghaffari, M., & Bakhshani, N. M. (2019). Family environment and adolescent substance abuse: A study from Iran. *Iranian Journal of Health and Behavioral Sciences*, 13(1), 22–31. <https://brieflands.com/articles/ijhrba-83781>
- Granjeiro, A., & Almeida, R. (2017). Importance of religious participation in preventing drug abuse. *Consensus*.
- Hogan, J. A., Gabrielson, K. R., Luna, N., & Grothous, O. (2003). *Substance abuse prevention: The intersection of science and practice*. Boston: Pearson Education, Inc.
- Hollen, K. H. (2009). *Encyclopedia of addictions*. Westport, CT: Greenwood Publishing Group.
- Hust, S. J. T., & Willoughby, J. (2024). Teens say they're more likely to use cannabis if their parents do, according to new survey. *Journal of Child and Family Studies*.
- Ismail, R., Ahmad, N. A., Ibrahim, F., & Nen, S. (2021). Pengaruh faktor individu, keluarga dan persekitaran sosial terhadap tingkah laku penyalahgunaan bahan dalam kalangan remaja. *Akademika*, 91(1), 77–88.
- Kamarzaman, M. H., Mohd Rajoli, M. A. B., Kamaruzaman, M. A. S., Kamarudin, M. A., Mohd Zakarim, M. Z., & Rostam, M. N. (2024). Religious practices among Malaysia's diverse society. *International Journal of Advanced Research*.
- Kementerian Kesihatan Malaysia. (2015). *Kajian kebangsaan kesihatan dan morbiditi (NHMS) 2015*. Kementerian Kesihatan Malaysia.
- Kikuvi, R. N. (2009). *Determination of juvenile delinquency development among pupils in Machakos Rehabilitation Schools (Unpublished master's thesis)*. Kenyatta University.
- Kirby, J., Van der Sluijs, W., & Inchley, J. (2008). *Young people and substance use; the influence of personal, social and environmental factors on substance use among adolescents in Scotland*. Child and Adolescent Health Research Unit (CAHRU), University of Edinburgh.
- Majlis Keselamatan Negara. (2022). Ibu bapa terbabit dalam penyalahgunaan dadah berisiko menyebabkan anak-anak terbabit dengan gejala yang sama. Retrieved from <https://www.mkn.gov.my/web/ms/2022/02/09/ibu-bapa-terbabit-dalam-penyalahgunaan-dadah-berisiko-menyebabkan-anak-anak-terbabit-dengan-gejala-yang-sama>
- Maraire, J., & Ismail, Z. (2024). School environment and adolescent drug use in urban Zimbabwe. *African Journal of Drug & Alcohol Studies*, 23(1), 44–59.

- Mohd Yusoff, A., Ahmad, A., & Mahat, H. (2023). Perkaitan perapatan ibubapa dan rakan sebaya dengan penglibatan remaja dalam penyalahgunaan dadah di Sabah. *Sabah Journal of Psychology and Education*, 21(1), 45–58.
- Mohd Jani, J., & Mohamad, M. S. (2023). Sokongan sosial dan kesihatan mental serta pengaruhnya terhadap kerentanan penglibatan penagih dadah dan pelencongan sosial dalam kalangan remaja. *Jurnal Antarabangsa Kajian Asia Tenggara*, 5(1), 22–35.
- Zubaidillah, M. H. (2019). Social and political ideas of Aldous Huxley through Bernard Marx's character in *Brave New World*. *AlFalah: Jurnal Ilmiah Keislaman dan Kemasyarakatan*, 18(2).
- Musomboli, V., Auma, M., & Oketch, P. (2023). Peer pressure and alcohol use among Ugandan adolescents: A school-based study. *East African Journal of Public Health*, 20(2), 88–96.
- National Institute on Drug Abuse. (2022). Teen substance use shows promising decline: Survey reveals surprising pandemic impact. *NIH News*.
- Norhayati, I., Ismail, R., Amit, N., Tambi, N., Selamat, M. N., Abd Razak, M. A., Ahmad, N. A., & Shafurdin, N. S. (2018). Perbandingan tahap pengetahuan, sikap dan kesan dadah dalam kalangan remaja sekolah berisiko. *Jurnal Psikologi Malaysia*, 38(2), 114–125.
- 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. *Akademika*, 87(1), 7–16.
- Schwartz-Salazar, C., & Martínez, M. (2024). Adolescents' views of an unequal world: Understanding inequality through multiple lenses. *Youth & Society*.
- Sham, F., Shafi'e, S. Z., & Abu Zahrin, S. N. (2015). Adolescent lifestyles in Malaysia. *Mediterranean Journal of Social Sciences*, 6(6 S1), 271.
- Shahzadi, M., Hafeez, S., Jabeen, M., Ehsaan, S., & Asif, N. (2024). Parental influence on adolescent substance use: A systematic review. *Pakistan Journal of Applied Psychology (PJAP)*, 3(2), 337–355. <https://doi.org/10.52461/pjap.v3i2.1771>
- Sun, Y., & Zhang, L. (2023). The moderating effect of teaching quality on peer influence and adolescent drug use. *Educational Psychology Review*, 35(1), 75–92. <https://doi.org/10.1007/s10648-022-09619-0>
- Taiwo, S. K., & Olayemi, A. W. (2020). Perceived psychosocial factors as determinants of drug use and abuse among public secondary school youths in Osun State, Nigeria. *International Journal of Emerging Trends in Social Sciences*, 5(1), 13–23.
- Trucco, E. M., White, H. R., & Stevens, S. (2023). Family and school influences on peer substance use in adolescence: A moderation model. *Substance Use & Misuse*, 58(4), 542–551. <https://doi.org/10.1007/s40894-024-00247-x>
- Watts, A. L., Kelly, T. H., & Sinha, R. (2024). Peer influence and adolescent substance use: A meta-analysis of 27 studies. *Journal of Youth and Adolescence*, 53(2), 299–315. <https://doi.org/10.1007/s10964-023-01899-3>
- Wang, Z., & Martins, S. (2024). How do socioeconomic factors affect the development of adolescent-onset drug use disorders? *Journal of Student Research*.
- Winstone, L., Smith, M., & Johnson, S. (2023). The school environment and the onset of adolescent substance use: A longitudinal study. *Journal of Substance Use*, 35(2), 213–226. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10914148/>
- Zakaria, Z., & Mohd Noor, N. M. (2022). Pengaruh faktor individu, keluarga dan persekitaran sosial terhadap tingkah laku penyalahgunaan bahan dalam kalangan remaja. *Akademika*, 92(2), 39–50.

Zhang, H., Zhang, Z., & Wang, H. (2022). Family environment and mental health problems in adolescents: The role of substance use as a coping mechanism. *Journal of Adolescent Health, 70*(2), 314–320.