



Mediating Role of Quality of Life in the Relationship between Prison Climate and Life Satisfaction

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ABSTRACT

This study emphasises the importance of Quality of Life (QoL) as a bridge between prison climate and life satisfaction among Malaysian drug-abuse inmates. The respondents are given a self-administered assessment randomly selected from the list of drug-abuse inmates in a Malaysian prison. The Structural Equation Modelling in IBM-SPSS-AMOS 25.0 is applied to model and calculate the inter-relationships among the constructs in the study. The results show that QoL significantly influences drug abuse inmates' prison climate and life satisfaction and partially mediates the relation between prison climate and life satisfaction among Malaysian drug-abuse inmates. QoL is essential to fulfil drug-abuse inmates' life satisfaction during imprisonment and achieve a better life in the community after being released from prison. Hence, practical contributions are proposed to the Malaysian Prison Department for designing appropriate policies and strategies to improve prison climate and QoL for achieving drug-abuse inmates' life satisfaction since Malaysian life satisfaction has become the government's priority in the 12th Malaysia Plan (2021-2025).

Keywords: Quality of Life, prison climate, life satisfaction, drug-abuse inmates, Malaysia

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INTRODUCTION

Without a doubt, the global drug abuse issue has risen rapidly. With the world's dynamics changing, discovering new synthetic drugs and the advanced trafficking strategies employed by criminal organisations have strengthened the need to effectively combat drug issues (Nazira et al., 2019). Regretfully, since the issue has not been fully resolved yet, the Twelfth Malaysia Plan's (2021-2025) priority of increasing Malaysians' well-being by addressing Malaysian life satisfaction appears challenging to attain (Economic Planning Unit, 2021). Indeed, the problems have gotten worse due to drug abusers being sent to prison and dominating the prison community. 61.5% of 59,187 inmates were incarcerated for drug abuse offences (Bilik Gerakan Ibu Pejabat Penjara Malaysia, 2021). To cope with the challenges, ensuring the life satisfaction of drug-abuse inmates appears to be a vital part of achieving the government's aspiration, as they are Malaysian citizens. Indeed, low life satisfaction among drug-abuse inmates stems from a variety of factors, including inefficient treatment programs (Lee et al., 2021), inequity in the management of communicable diseases (Fazel & Baillargeon, 2011), drug use in prison (Øiestad et al., 2019), and insufficient numbers of prison staff (Bahagian Sumber Manusia, 2020). Likewise, drug-abuse inmates also experienced severe anxiety (Lindstedt et al., 2005), isolated living in custody (Baharudin et al., 2020b), and traumatic incidents (Pavot & Diener, 2008). Hence, a better degree of life satisfaction is necessary for greater resilience, reduced emotional

suffering, and improved adjustment to incarceration (Baharudin et al., 2020a; Leidenfrost et al., 2016), which can

be achieved by focusing on their prison climate and quality of life (QoL). Despite this, prison climate and QoL studies among drug-abuse inmates remain undiscovered to maximise drug-abuse inmates' life satisfaction. Therefore, the research aims to determine the importance of prison climate and QoL factors contributing to reasonable life satisfaction among drug-abuse inmates. This study attempts to offer a theoretical contribution by covering a gap in the literature since no previous study has evaluated prison climate in relation to inmate life satisfaction, with QoL acting as a mediator. Thus, the objectives of this study are as follows:

- i. To determine the effect of prison climate on QoL and life satisfaction among Malaysian drug-abuse inmates.
- ii. To determine the role of QoL as a mediator in the relationship between prison climate and life satisfaction among Malaysian drug-abuse inmates.

THEORETICAL FRAMEWORK AND HYPOTHESES DEVELOPMENT

Prison Climate

Prison climate is regularly known as a secure environment (Schalast et al., 2008), institutional environment (Day et al., 2011), prison environment (Ross et al., 2008), climate perception (Parker et al., 2003), social environment (Smith

et al., 1997), workplace climate (Carr et al., 2003), ethical climate (Ulrich et al., 2007); and ward climate (Ulrich et al., 2007). Apart from this, some scholars identified prison climate as a safety climate (Dollard & Bakker, 2010), social climate (Day et al., 2011; Langdon et al., 2006), and prison social capital (Lafferty et al., 2016). Some researchers call it a black box (Auty & Liebling, 2019), a box check (Williams et al., 2019), and an organisational climate of correction (Lugo, 2016; Martin et al., 2014). In brief, researchers must address the practical implementation of terminology since the concept and definition of prison climate are interpreted differently (Berg et al., 2009; Ross et al., 2008; Rössberg & Friis, 2003). Prison climate does not depend solely on passive security, established by the safety and security of walls, cells, fences, and devices, but also on dynamic security, influenced by the inmate-prison officer relationship and the inmates' activities (Beijersbergen et al., 2014). Ian Dunbar pioneered the dynamic security paradigm, which emerges when interaction and individuality coexist in deliberate and intentional activity (Brayford et al., 2010). Similarly, the United Nations Office on Drugs and Crime (UNODC) conceptualises a dynamic security model as a conjunction of the groups of people in prison, the relationship between the inmate and the prison officer, and the prison activity that must be practised by the prison authority (Bryans, 2015), in order to preserve a conducive prison climate.

Quality of Life (QoL)

Recently, a study on QoL gathered input from various parties to ascertain development, sustainable growth, and social stability (Mohamad et al., 2017). QoL is frequently known as a good life (Muller, 2020), a primary predictor of a healthy life, achievement, satisfaction (Brown & Brown, 2005), and positive mental states (Yuh & Choi, 2017), as experienced by the individual concerned (Robertson et al., 2020). Consequently, QoL is essential for achieving a better life, as evidenced by the author's perspective, expertise, and fields of study (Chemi et al., 2014; Ibrahim et al., 2016; Mohamad et al., 2014). Currently, QoL is being studied among patients affected by the coronavirus disease 2019 (COVID-19) pandemic, heart transplant, and obesity (Curtis et al., 2020; Ooi et al., 2020). Individuals, particularly drug-abuse inmates, require QoL to maintain physical and psychological health and abstain from drug misuse (Inanlou et al., 2020; Laudet & White, 2008). One established theory of QoL is the *maqasid* shariah quality of life (MSQoL), composed of five dimensions, namely, religion, life, mind, lineage, and property, which is the primary source of guidance to all Muslims, including drug abuse inmates as mentioned in the Holy Quran (Mohamad & Ali, 2016). The first premise is to preserve religion, as humans must prioritise religious concerns in daily life. Second, is to protect life through preserving the soul. Third, is to protect the mind by being filled with positive values and beneficial knowledge. The fourth is to preserve the lineage in society by not doing actions that hurt the offspring. Fifth, is to protect the property from destruction (Saat et al., 2019).

Few studies have explored the relationship between prison climate and QoL (Barquín et al., 2019; De Smet et al., 2017; Skar et al., 2019). Barquín et al. (2019), in a recent study of Spanish inmates in five prisons between 2015 and 2017, demonstrate that prison climate affects inmates' QoL.

Whereas, a prior study among Kosovo inmates also illustrates the impact of prison climate violence on inmates' QoL (Skar et al., 2019), while a prior study among Belgium's senior inmates established a link between prison climate and QoL, which illustrates that a positive correlation between prison climate and QoL (De Smet et al., 2017). Putting this into perspective, and in line with the preceding explanation, it is hypothesised that,

H1: Prison climate has a direct effect on QoL

Life Satisfaction

Life satisfaction has often been referred to as an individual's cognitive component, one of the fundamental components of subjective well-being (Diener et al., 2013) towards a better life (Veenhoven, 2009). Individuals frequently evaluate life satisfaction in sum, encompassing their current, prior, and future life (Diener et al., 2013, 2018; Tov & Diener, 2003). Individual QoL is related to life satisfaction (Skowroński & Talik, 2020), although various prior studies frequently utilised the terms "life satisfaction," "well-being," "happiness," and "QoL" interchangeably and inconsistently (Bakar et al., 2016; De Leo et al., 1998; Valdez & Agustin, 2020). Several scholars equated QoL with living well, even though most scholars agree that living well encompasses well-being and life satisfaction concepts and is, therefore, more expansive than QoL (Clare et al., 2014; Martyr et al., 2018). Life satisfaction is vital among drug-abuse inmates since it probably explains their overall satisfaction with prison life. While incarcerated, greater life satisfaction is associated with a greater likelihood of survival (Skaggs & Barron, 2006). Also, ensuring life satisfaction is fundamental for supporting inmates in obtaining their optimal level of functioning while incarcerated (Ali et al., 2016; Kashy & Morash, 2021) and successful reintegration into communities upon release (Ali et al., 2016).

Several previous scholars have studied the link between prison climate and life satisfaction (Ali et al., 2016; Kearney & Sellen, 2013; Lee et al., 2021; van Ginneken et al., 2019). As such, the relationship between prison climate and life satisfaction has been studied among Netherlands inmates (van Ginneken et al., 2019), Malaysian inmates (Ali et al., 2016), South Korean inmates (Lee et al., 2021), and the United States inmates (Kearney & Sellen, 2013), which illustrates that prison climate is vital for achieving inmates' life satisfaction. Therefore, it is hypothesised that,

H2: Prison climate has a direct effect on life satisfaction.

Numerous previous studies prove a significant relationship between QoL and life satisfaction (Garrido et al., 2013; Ghaheri et al., 2016; Khademi et al., 2020; Nawaz & Usman, 2019). Previous scholars point out that improving an individual's QoL is essential for better life satisfaction (Nawaz & Usman, 2019; von Humboldt et al., 2013). Taking it all into account, and in consideration of the prior explanation, it is postulated that,

H3: QoL has a direct effect on life satisfaction.

A more in-depth consideration for exploring shape reveals that the previous variable has tangled relationships with other variables, mediated by the implication of a third

variable. Hence, by referencing the literature review, several researchers examined QoL as a mediator. For instance, Eifert et al. (2019) studied the role of QoL as a mediator among American older women. The findings of the study indicate that QoL mediates the relationship between leisure activities and perceived health. The findings also conclude that the relationship between leisure activities and perceived health is partly mediated by QoL and recommends that possible models should be designed to provide a framework for discovering those relationships.

Meanwhile, other studies examined QoL's mediator role on the relationship between attention-deficit hyperactivity disorder (ADHD) and suicidality. A study by Tai and Gau (2017) among Northern Taiwan male military recruits sheds evidence that QoL partially mediated the relationship between ADHD and suicidality. The mediating result of QoL implies that improving recruits' QoL is essential for preventing suicidal behaviours among recruits with ADHD. Furthermore, a study among university students in Portugal examined the mediator role of QoL on the relationship between students' loyalty and students' recommendation (Pedro et al., 2018). As a result, it is possible to hypothesise that,

H4: QoL mediates the relationship between prison climate and life satisfaction.

Consequently, the relations between the constructs in the form can be linked to a more general conceptual model, as shown in Figure 1.

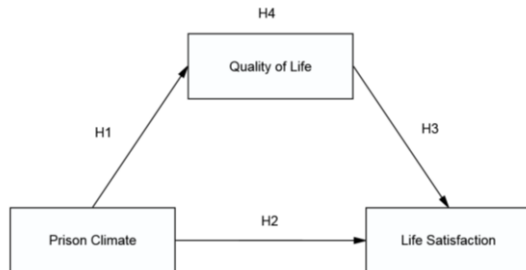


Figure 1: The Framework of the Study

METHODS AND DATA COLLECTION

This study employed a cross-sectional research design and focused on drug abusers imprisoned in Malaysian drug cases prisons. The study is based on a population of 1,460 respondents charged under Section 39C of the Dangerous Drugs Act 1952 (revised in 1980), from which 457 samples were randomly selected using simple random sampling. The statistical analysis used the Structural Equation Modelling (SEM) method in IBM-SPSS-AMOS 25.0 to illustrate the model and test procedures. The quantitative study's measurements were adapted from those of earlier experts. Molleman and van der Broek (2014) established the assessment for inmate surveys which relates to prison climate, while the *maqasid* shariah prison quality of life (MSPQoL) is used for measuring QoL (Mohamad et al., 2016), and the Satisfaction with Life Scale was used to assess life satisfaction (Diener et al., 1985).

After receiving the instruments back, the researchers adjusted them under the remarks provided by the appropriate experts. Since the instruments were adapted from prior studies and modified to meet the current study, the researchers referred the amended instruments to the competent experts to examine criterion validity, content validity, and face validity (Awang et al., 2018). Upon finalisation, the pilot study was conducted in which 150 self-administered questionnaires were distributed to selected respondents. The researchers employed data from the pilot study to conduct an Exploratory Factor Analysis (EFA) to determine the usefulness of the items measuring the respective constructs (Shkeer & Awang, 2019). Throughout the demographic profile, respondents were requested to disclose their demographics such as prison institutions, state of origin, current age, education level, occupation, monthly average income, and marital status.

RESULTS AND DISCUSSION

Validation Procedures

The structure of this study comprises of one construct of the exogenous, endogenous, and mediator. The study has three latent constructs: prison climate, QoL, and life satisfaction. Prison climate is the second-order construct, QoL is the third-order construct, while life satisfaction is the first-order construct. In particular, life satisfaction is an exogenous construct measured with three components: rights and rules, interaction with prison officers, and prison activities. The mediator construct of QoL is measured by five components: religion, mind, life, lineage, and property. Meanwhile, life satisfaction is the endogenous construct measured with four items. The data have been analysed using the Confirmatory Factor Analysis (CFA) to validate the measurement model consisting of validity (convergent validity, construct validity, and discriminant validity) and composite reliability before conducting the SEM (Awang et al., 2018). Besides, SEM is practical in estimating the interrelationships between all constructs, testing the study hypotheses, and the role of QoL as a mediator of the relationship between prison climate and life satisfaction. The measurement model in Figure 3 has achieved the required fitness indexes satisfactorily. Figure 2 illustrates the measurement model that has successfully achieved the necessary fitness indexes ($\text{ChiSq/df} = 2.051$, $\text{TLI} = 0.925$, $\text{CFI} = 0.929$, and $\text{RMSEA} = 0.048$) and the construct validity (Awang, 2015; Awang et al., 2018).

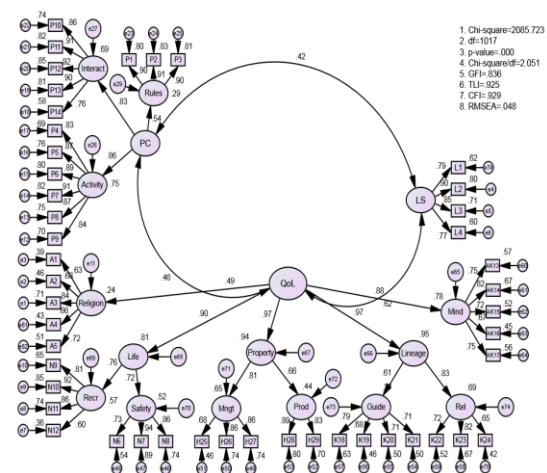


Figure 2: Pooled-CFA Result

Meanwhile, Table 1 demonstrates the factor loading, the Composite Reliability (CR), and the Average Variance Extracted (AVE) for prison climate, QoL, and life satisfaction. The requirement for composite reliability was achieved as the CR is more significant than 0.6 and the AVE is greater than 0.5 (Hair et al., 2019). The results indicate that the prison climate construct consisting of three components of

Table 1: The CR and AVE Values of Prison Climate, Social Support, and Life Satisfaction

Construct	Component	Factor Loading	CR	AVE
Prison Climate	Right and rules	0.536	0.796	0.574
	Interaction with prison officers	0.83		
	Prison activity	0.864		
QoL	Religion	0.49	0.933	0.745
	Mind	0.883		
	Life	0.901		
	Lineage	0.975		
	Property	0.97		
Life Satisfaction	L1	0.786	0.896	0.683
	L2	0.897		
	L3	0.845		
	L4	0.773		

Table 2 shows that when the AVE's square root reaches its correlation value with other constructs in the model, the discriminant validity of the respective construct is achieved (Awang et al., 2018; Hair et al., 2019). In the above statements, discriminant validity is achieved when the diagonal values (in bold) are more significant than all other values in the row and column. The analysis, therefore, demonstrates that discriminant validity is obtained for all constructs. Moreover, the present study's normality assessment was provided by observing the value of skewness and kurtosis for each item. The outcome demonstrated that the skewness value is between -1.405 and 1.694, while the kurtosis ranges between -1.436 and 2.506. According to Brown (2006), when applying the SEM analysis, acceptable skewness values are ± 3.0 , while acceptable kurtosis values are ± 10.0 (Griffin & Steinbrecher, 2013). This study shows that the data were normally distributed based on achieving the required skewness and kurtosis.

Table 2: Summary of the Discriminant Validity Index for All Construct

Constructs	Prison Climate	QoL	Life Satisfaction
Prison Climate	0.76		
QoL	0.46	0.86	
Life Satisfaction	0.42	0.62	0.83

Data Analysis

The present study designed the structural model and performed the Structural Equation Modelling (SEM) procedure to verify the stated hypotheses for this study after the constructs achieved the criteria for unidimensionality, validity, reliability, and normality. The study employed the SEM approach to examine links among all constructs

right and rules (rules), interaction with prison officers (interact), and prison activities (activity) achieved the level of CV and CR. Likewise, QoL constructs consisting of five components of religion, life, mind, lineage, property, and life satisfaction (L1, L2, L3, and L4) also achieved the CV and CR levels. Thus, the results prove that they had achieved the analysis requirement.

presented by the indicator variables. Likewise, the SEM approach considers correlations among measurement errors and estimates the recursive relationship among the constructs, as displayed in Figure 3.

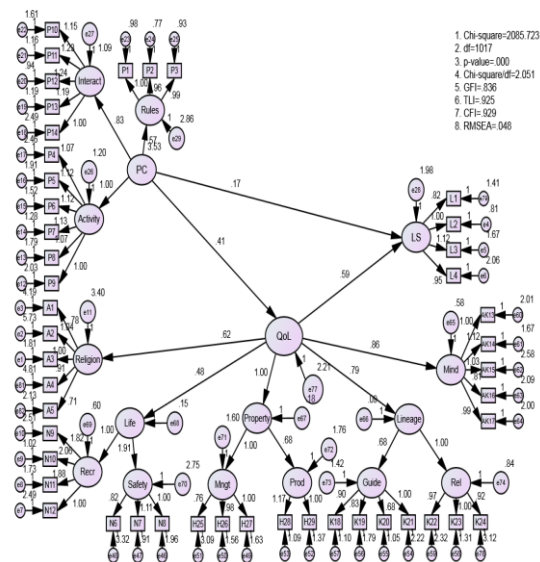


Figure 3: The Regression Path Coefficient between prison climate, QoL, and life satisfaction constructs in the Model

Result

The information output obtained from the implementation of the SEM technique is presented in Table 3. Consequently, it was discovered that the prison climate had a positive and significant effect on QoL. As a result, H1 is supported. Furthermore, it was revealed that the direct effect of prison climate on life satisfaction is positive and significant. H2 is supported in this vein. Likewise, it was shown that QoL has a direct positive and significant effect on life satisfaction. H3 is similarly accommodated in this manner. Since both indirect effects are significant, the finding shows that the model's mediation effect has occurred. As this direct effect is also significant, the type of mediation is partial mediation. As a consequence, H4 is supported.

Table 3: The Regression Path Coefficient and Its Significance

Construct	Path	Construct	Beta Estimate	Standard Error	Critical Regression	P-Value	Result
QoL	<--	Prison climate	0.413	0.055	7.577	***	Significant
	-						
Life satisfaction	<--	Prison climate	0.169	0.052	3.257	0.001	Significant
	-						
Life satisfaction	<--	QoL	0.592	0.065	9.153	***	Significant
	-						

Meanwhile, Figure 4 suggests that 41 % of drug-abuse inmates' life satisfaction might be predicted by employing the components in the model, particularly prison climate and QoL.

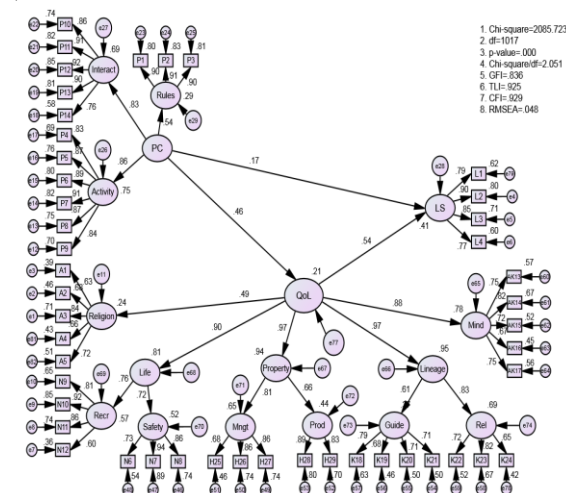


Figure 4: The Standardised Path Coefficients between prison climate, QoL, and life satisfaction constructs in the Model

Discussion

The first hypothesis contends that prison climate has a significant impact on QoL among drug-abuse inmates. This study validated the assumption that prison climate has a significant impact on drug-abuse inmates' QoL. More explicitly, the Malaysian drug-abuse inmates' QoL can be improved by a favourable prison climate. Specifically, the findings demonstrate that the critical nature of the prison climate in terms of rights and rules, interaction with prison officers, and prison activities are vital for improving drug-abuse inmates' QoL (religion, mind, life, lineage, and property). This conclusion was also supported by previous research in various situations, which suggested that prison climate may be one of the characteristics that contribute to QoL improvement (Barquín et al., 2019; De Smet et al., 2017; Skar et al., 2019). Previous studies reveal that QoL's influence varies by institution due to various circumstances, including inmate-prison officer interaction and the security mechanism in the prison climate are essential for contributing to the inmates' QoL (Barquín et al., 2019). Similarly, harassment in prison climate harms inmates' QoL (Skar et al., 2019). Consequently, to ensure that inmates' QoL is appropriately addressed, prison authorities should improve the prison atmosphere (Skar et al., 2019) to increase their social interactions and community transition readiness once the inmates complete their sentence (De Smet et al., 2017).

The second hypothesis asserts that prison climate has a significant and direct effect on the life satisfaction of drug-abuse inmates. This finding was also corroborated by previous research, which postulated that prison climate contributes to inmates' life satisfaction. Prior studies stress that prison climate in the context of prison activities (education, work skills, physical exercise, and creativity) influenced drug-abuse inmates' life satisfaction (Ali et al., 2016). Similarly, horticulture therapy activities of prison climate potentially improved the inmates' life satisfaction (Lee et al., 2021). Likewise, Kearney and Sellen (2013) also

discovered that prison climate significantly relates to inmates' life satisfaction. A clearer picture of the drug-abuse inmates' life satisfaction during imprisonment will assist prison authorities in designing an appropriate prison climate that ultimately minimises recidivism (Ali et al., 2016). The third hypothesis asserts that QoL has a significant and direct effect on the life satisfaction of drug-abuse inmates. The result of this study is in line with several previous studies (Garrido et al., 2013; Ghaheri et al., 2016; Khademi et al., 2020; Nawaz & Usman, 2019). In this study, drug-abuse inmates' QoL elements of religion, mind, life, lineage, and property are proven vital for their life satisfaction during imprisonment.

The last hypothesis examines the indirect association between prison climate and life satisfaction among drug abuse inmates through the mediating effect of QoL. The research revealed that QoL mediated the relationship between prison climate and life satisfaction. Particularly, Malaysian drug-abuse inmates with a favourable QoL and a congenial prison climate expect an increase in their life satisfaction, either directly or indirectly. Additionally, the analysis proves that QoL acted as a partial mediator between prison climate and life satisfaction among drug-abuse inmates. The result also demonstrated that prison climate could, directly and indirectly, impact drug-abuse inmates' life satisfaction through their QoL. Furthermore, a better understanding of drug-abuse inmates' QoL will help prison authorities design appropriate policies and methods for drug-abuse inmates' life satisfaction during imprisonment and after release.

CONCLUSION

The study aimed to analyse the relationship between prison climate, QoL, and life satisfaction and to examine QoL's mediating role in the relationship between prison climate and life satisfaction among drug-abuse inmates. The study found that QoL played an essential role in the stated relationships. Findings suggest that drug-abuse inmates who gained a favourable QoL were satisfied with their lives. The present study also showed a significant relationship between prison climate and life satisfaction which could be improved by focusing on the drug-abuse inmates' life satisfaction. Hence, the study's findings confirmed that QoL plays a vital role as a mediator between the relationship of prison climate and life satisfaction. Thus, this study suggests that the Malaysian Prison Department should enhance the inmates' QoL and improve the prison climate aspect that potentially drives drug-abuse inmates who live in prison to fulfil their life satisfaction.

This study focuses on drug-abuse inmates even though life satisfaction also impacts other types of prison population such as juvenile, crime cases inmates, prison officers, and foreign inmates. The surveys were spread across peninsular Malaysia to selected respondents, but not to Sabah and Sarawak, which vary in demographics and thus do not represent Malaysia. Moreover, this study used the quantitative method, although a qualitative and mixed-mode would have been practical in measuring drug-abuse inmates' life satisfaction. For that reason, and for more definitive results, future studies should include other types of the prison population. Future studies also should employ the same model in other residential facilities, such as drug

treatment facilities run by private and government sectors. The outcome may differ slightly because of the uniqueness of the climate compared to the current study. Likewise, it is suggested that future researchers use other dependent constructs such as personality, resilience, and motivation since they are beneficial and potentially linked to QoL and life satisfaction.

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