Natural Resources for Human Health
eISSN: 2583-1194

Original Research

Received 25 March 2026
Revised 28 April 2026
Accepted 26 May 2026

Natural Resources for Human Health 2026, Vol. 6 (3): 1101–1112

KEYWORDS:
resilience; self-acceptance; mental health; incarcerated women

Resilience and Mental Health among Incarcerated Women: The Mediating Role of Self-Acceptance

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ABSTRACT:

Objective: Incarcerated women are a high-risk population for mental health disorders, but the psychological resources that stabilize their well-being have not yet been adequately explored in Southeast Asian correctional settings. This study explored the association between resilience and incarcerated females' mental health and assessed if self-acceptance mediates the relationship of these constructs.

Material and Methods: Using a quantitative cross-sectional survey design grounded both in Wagnild and Young's conceptualisation of resilience and the self-acceptance principle of Rational Emotive Behaviour Therapy. By using systematic probability sampling, data were collected from incarcerated women at Kajang Women's Prison, Malaysia, the largest female correctional facility in the country. Resilience was measured by using the Resilience Scale, self-acceptance with the Unconditional Self-Acceptance Questionnaire and mental health measured by the Depression, Anxiety and Stress Scale-21. Data were processed and analyzed using Partial Least Squares Structural Equation Modelling (PLS-SEM) method and bootstrapping.

Result: The measurement model was found to be adequate in its reliability and validity (Cronbach's alpha =.727–.915; composite reliability =.732–.971; AVE=.714–.855). The structural model showed that resilience strongly predicted both self-acceptance (β = .126, p = .007) and mental health (β = .206, p < .001), thus proving H1 and H2. However, self-acceptance did not significantly predict mental health (β= .063, p= .142). And resilience's indirect effect on mental health through self-acceptance was (β= .008, p= .390) unsupportive for H3 and H4, respectively.

Conclusion: These results show that resilience has a direct, not self-acceptance-mediated effect on mental health among incarcerated women, with implications for targeted resilience-specific interventions in correctional facilities.

1. INTRODUCTION

Mental health in prison populations is also one of the most critical yet under-resourced issues in the realm of contemporary public health. There is epidemiological evidence that prisoners suffer much higher levels of psychological problems than the rest of the population. Fazel, Hayes, Bartellas, Clerici and Trestman (2016) also found high rates of depression, anxiety, post-traumatic stress, and self-harm among the imprisoned population, with proportionately higher rates reported than that of

community samples, attributable to a confluence of pre-existing vulnerabilities and the deprivations of prison and lack of access to mental health services. As the World Health Organization (2022) has also pointed out, incarcerated women specially form a sector of the population that is at increased risk of mental ill-health as a result of having disproportionately high rates of trauma, abuse, low socioeconomic status, and caregiving disruption. This issue is particularly important for Malaysian correctional environments. The Malaysian Prisons Department (2025) revealed that there were 5,140 women behind bars at 17 institutions in Malaysia, most notably the Kajang Women's Prison in Selangor. The international evidence has been confirmed by empirical evidence carried out in a Malaysian correctional environment: one of the studies using the Depression, Anxiety and Stress Scale among a sample of incarcerated women in Kajang reported substantially high psychological distress (Hamizi et al., 2018); while another broader view pointed out mental health problems were a great concern in the adult prison population (Yaacob et al., 2022).

Whereas research on psychological distress is established in correctional populations, the data surrounding protective psychological resources that allow some incarcerated women to maintain better mental health in adverse environments is relatively more limited. Resilience, its ability to adapt effectively, bounce back, and hold your own psychologically even in the face of adversity (Wagnild & Young, 1993), has garnered particular focus as a dispositional trait associated with psychological well-being. Resilience may be especially important for incarcerated women, providing the adaptive capacity to endure deprivation and to preserve a sense of meaning and emotional stability. One potential, though uninvestigated, mechanism through which resilience may influence mental health is self-acceptance. Based on Ellis's (1962, 1977) Rational Emotive Behaviour Therapy, unconditional self-acceptance refers to an individual's capacity to embrace themselves as a fully human being free of external, contingent notions of worth relative to success or failure and others' assessments of their worth (Chamberlain & Haaga, 2001). For incarcerated women who may experience extreme destabilisation by stigma, guilt, and loss of social roles, there may be a significant psychological pathway bridging resilience and mental health. Although its theoretical significance, self-acceptance as a mediator between resilience and mental health has hardly been tested empirically, and almost never in correctional populations in the Malaysian setting.

The psychological mechanisms being revealed here go beyond the academia. Indeed, correctional institutions are becoming more often than not seen as sites of rehabilitation rather than just a place where individuals spend time locked up and the mental well-being of incarcerated individuals is at its core a component of that rehabilitative mandate. Poor psychological health among incarcerated women is linked to negative prison outcomes and challenges to reintegration after release, and psychological resources, such as resilience, may facilitate adjustment and reduce the likelihood of recidivism. Understanding the dispositional resources supporting mental health and specifying their workings thus has direct implications for the design of evidence-based rehabilitation and psychological intervention programmes. Given the limited research available on the mental health status of incarcerated women in Malaysia, there is an acute need for such evidence to guide correctional policy and practice.

Against this backdrop, the present study addresses a clear empirical and conceptual gap. It investigates the relationship between resilience and the mental health of incarcerated women and examines whether self-acceptance mediates this relationship. Specifically, the study is guided by the following objectives: (i) to examine the relationship between resilience and self-acceptance; (ii) to examine the relationship between resilience and mental health; (iii) to examine the relationship between self-acceptance and mental health; and (iv) to examine the mediating role of self-acceptance in the relationship between resilience and mental health. Correspondingly, the study seeks to determine whether resilience significantly predicts self-acceptance and mental health, whether self-acceptance significantly predicts mental health, and whether self-acceptance mediates the resilience and mental health relationship. By testing a mediated model among incarcerated women in Malaysia, the study contributes both theoretically, by clarifying the mechanism through which a dispositional resource translates into well-being, and practically, by informing the design of targeted psychological interventions.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1 Mental Health among Incarcerated Women

By a conceptualisation of mental health as a state of mind, represented in this study by depression, anxiety and stress as captured in the Depression, Anxiety and Stress Scale-21 (Lovibond & Lovibond, 1995), is an individual's psychological state defined by the relative presence or absence of negative emotional symptomatology. Incarcerated women are widely recognised as a vulnerable subgroup whose mental well-being is influenced by the presence of risk factors that more often than not predate

incarceration, such as histories of interpersonal violence, substance dependence, poverty, and the rupture of family and caregiving relationships (World Health Organization, 2022). Psychological vulnerability worsens further in the carceral environment itself characterized by loss of autonomy, separation from children, overcrowding and uncertainty (Fazel et al., 2016). Within Malaysia, a limited but consistent empirical record suggests that psychological distress is prevalent among incarcerated women (Hamizi et al., 2018; Yaacob et al., 2022), thereby highlighting both the relevance of studying mental health in this population and the appropriateness of the DASS-21 as an operational measure.

2.2 Resilience and Self-Acceptance

Resilience is the ability of people to bounce back, recover and stay psychologically whole under stress and adversity (Wagnild & Young, 1993). It is conceptualised as a multidimensional construct including self-reliance, meaningfulness, equanimity, perseverance and existential aloneness and represents an internal reservoir of strength that one wields to withstand the ravages of adversity without succumbing to any psychological deterioration. With the concept of self-acceptance reflected in Rational Emotive Behaviour Therapy, it is described as the disposition to accept oneself fully as a fallible human being, without making global, contingent judgements of one's worth (Ellis, 1977; Chamberlain & Haaga, 2001). In theory, resilience is a plausible antecedent for self-acceptance: when people keep enduring adversity they develop a stable self-regard, not changed as circumstance may lead, and the meaning-making and equanimity characteristic of resilient individuals support a non-contingent acceptance of the self. Accordingly, the following hypothesis is proposed:

H1: There is a positive and significant relationship between resilience and self-acceptance.

2.3 Resilience and Mental Health

A large body of research has consistently found that greater resilience is linked to enhanced psychological health and fewer symptoms of depression, anxiety, and stress. Resilience acts in a protective capacity that serves as a buffer to the psychological effects of stressors which help people to bounce back from adversity and manage emotional equilibrium. The construct's protective function is posited to be based on a number of interrelated mechanisms that support the preservation of meaning, the maintenance of equanimity in the face of disruption, and persistence to continue goal-directed behavior under challenge (Wagnild & Young, 1993). These dynamics are especially relevant to the carceral environment, where chronic stressors and the loss of personal control can lead to psychological degeneration. For women who are incarcerated, resilience may serve as the ability to adapt to the deprivations of confinement, and to maintain a sense of meaning and a stable sense of life, in the context of chronic stress. Women in correctional environments often have the additional load of separation from children, histories of trauma, and uncertainty about the future, and resilience would dictate the degree to which these stressors result in mental harm. In this connection, resilience is likely to be positively associated with the mental health status of incarcerated women, such that resilient individuals also tend to have lower rates of depression, anxiety, and stress. Accordingly:

H2: There is a positive and significant relationship between resilience and mental health.

2.4 Self-Acceptance and Mental Health

A significant aspect of Rational Emotive Behaviour Therapy is the fact that much of psychological distress is caused a result of hard, contingent self-evaluations with the individual assessing their overall value based on certain events or qualities (Ellis, 1977). Self-acceptance, in that it disentangles self-worth from performance and external approval, is projected to shield a person or institution from this disturbance. Chamberlain and Haaga (2001), in developing the Unconditional Self-Acceptance Questionnaire, showed signs of concurrent validity through relationships to lower anxiety and depression and increased life satisfaction, paralleled by validation studies in later publications (Nadel et al., 2025). The ability to accept oneself could be a determinant of mental health for incarcerated women, whose self-concept is susceptible to being destabilized by stigma, guilt, and the loss of prized social roles. The following hypothesis is therefore proposed:

H3: There is a positive and significant relationship between self-acceptance and mental health.

2.5 The Mediating Role of Self-Acceptance

In addition to its relationship with mental health, resilience has been theorized to affect psychological well-being indirectly, via the impact on self-acceptance. The nature of this mediated pathway is that resilience engenders a stable, non-contingent self-regard, which protects against psychological distress. In this perspective, self-acceptance serves as the intervening factor that

converts the dispositional resource of resilience into a better mental state. This view is also in line with Rational Emotive Behaviour Therapy which posits self-acceptance as a proximal determinant of emotional health, and with mediation models of dispositional traits shaping outcomes in the distal through more proximal cognitive-evaluative processes. Exploring self-acceptance as the mediator provides an explanatory perspective beyond the mere documentation of a direct effect, clarifying not merely whether resilience matters for mental health but how it does so. Accordingly:

H4: Self-acceptance mediates the relationship between resilience and mental health.

2.6 Conceptual Framework

The study aligns conceptual framework with the self-acceptance principle of Rational Emotive Behaviour Therapy through a conceptual framework that draws upon Wagnild and Young's (1993) conceptualisation of resilience.

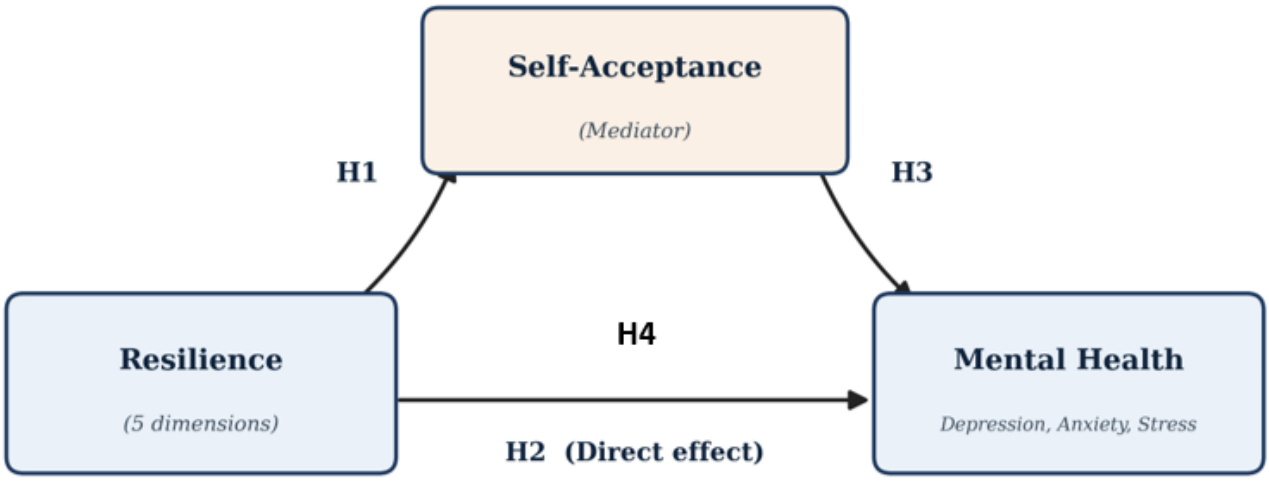

Figure 1. Conceptual model of the study.

This framework specifies resilience as the exogenous (independent) variable, self-acceptance as the mediating variable, and mental health as the endogenous (dependent) variable. The direct effect of resilience on mental health (H2) is predicted in the model but so is an indirect effect transmitted by self-acceptance (H1, H3, and H4). The proposed conceptual model is illustrated in Figure 1.

3. METHODOLOGY

3.1 Research Design

The present study adopted a quantitative research design; which is a study strategy that aims at the objective quantification of outcomes through measurement of a variable and numerical data with the use of statistical techniques (Creswell & Creswell, 2018; Sekaran & Bougie, 2016). It was situated within the positivist paradigm and a deductive approach was used, whereby a theoretical framework and hypotheses were formulated on the basis of established theory before being tested against empirical data (Saunders, Lewis, & Thornhill, 2019). A cross-sectional design was adopted: data were collected from respondents at a single point in time (Setia, 2016); which is most appropriate for the correctional environment, where repeated longitudinal data collection over extended periods is constrained, and it permits efficient data collection in terms of time and resources.

3.2 Population and Sampling

Target Population In this study, incarcerated women were housed at Kajang Women's Prison, Selangor, the correctional facility with the largest female population in Malaysia. 5,140 women were imprisoned at 17 different institutions across the country as per the Malaysian Prisons Department (2025). The inclusion of Kajang Women's Prison was guided by findings of a high reported prevalence of mental health problems among prison populations overall (Fazel et al., 2016) and among incarcerated women in particular (World Health Organization, 2022), with corroborating Malaysian evidence from this institution (Hamizi et al., 2018; Yaacob et al., 2022). A probability sampling approach was employed (Creswell, 2012) to enhance both reliability

and generalisability. In particular, a systematic sampling method was employed whereby respondents were recruited at specified intervals from an ordered population register (Cochran, 1977; Lohr, 2010). Selection was done in a well matched manner due to the correctional context in which an ordered register helped carry out selection in an organized, time-saving and bias reducing way by specifying a random starting point and thereafter every k-th element.

3.3 Sample Size

Sample size was determined from Krejcie and Morgan (1970) table. An estimated 700 incarcerated women at Kajang Women's Prison had been sentenced by the court and thus met the inclusion criterion during the data collection period. Using a 90% confidence level the minimum sample for this population was 248 respondents. To increase reliability, mitigate the impact of sampling error, and deal with practical issues like non-response, the target sample was expanded considerably. A larger sample size is recommended to obtain more reliable and stable findings (Hair, Black, Babin, & Anderson, 2010); the sample size adopted here meets the minimum requirement for PLS-SEM in terms of 100 cases for exploratory analysis and at least 200 cases for confirmatory procedures (Tabachnick & Fidell, 2013).

3.4 Research Instruments

The study variables were measured via a demographic questionnaire and three psychometric instruments of proven validity. All constructs were assessed using an instrument already developed and validated in previous research, which used Likert-type response structures for measurement comparability. In cases where the original instrument had been developed in English, translation and cultural adaptation protocols, which aim at both conceptual equivalence and respondent comprehension, were undertaken (Brislin, 1970). The employed instruments are summarised in Table 1.

Table 1 Summary of Research Instruments

Construct	Instrument	Items	Dimensions	Source
Resilience	The Resilience Scale (RS)	25	5	Wagnild & Young (1993)
Self-acceptance	Unconditional Self-Acceptance Questionnaire (USAQ)	20	2	Chamberlain & Haaga (2001)
Mental health	Depression, Anxiety and Stress Scale-21 (DASS-21)	21	3	Lovibond & Lovibond (1995)

The Resilience Scale (Wagnild & Young, 1993) was used to assess resilience, and the measure consisted of 25 items measuring self-reliance, meaningfulness, equanimity, perseverance, and existential aloneness and listed on a 7-point Likert format (a higher score would indicate greater resilience). Self-acceptance was assessed using the Unconditional Self-Acceptance Questionnaire (Chamberlain & Haaga, 2001) a 20-item instrument, based upon Rational Emotive Behaviour Therapy (REBT), with scores on a 7-point Likert scale with several reverse-scored items. Mental health was assessed by the Depression, Anxiety and Stress Scale-21 (Lovibond & Lovibond, 1995) with 21 items rated on three subscales; depression, anxiety and stress, and in a 4-point format referencing the respondent's experience over the preceding week.

3.5 Expert Validation and Pilot Study

Before data collection the content validity of the instruments was established in an assessment carried out by a five-member panel of local experts who were skilled in psychology, counselling, and mental health (Lynn, 1986; Polit & Beck, 2006). The relevance of each item was rated, with items adjusted based on expert feedback for their clarity and their appropriateness for the correctional context. A pilot study was then realized to establish instrument reliability with questionnaires administered to incarcerated women across three institutions. Internal consistency, indicated by Cronbach's alpha, was acceptable for all constructs, surpassing the .70 threshold (Hair et al., 2017; Nunnally & Bernstein, 1994), indicating that the instruments were appropriate for deployment in the main study.

3.6 Data Collection Procedure and Ethical Considerations

Data collection for Kajang Women's Prison was done under the official sanction from the Malaysian Prisons Department and in accordance with the relevant institutional regulations and ethical standards (Creswell, 2012). The sampling frame was based on the official register of sentenced incarcerated women. The sampling interval was determined by dividing the eligible population by the required sample size; a random starting point was then selected, and every k-th individual was selected thereafter. Respondents were informed of the purpose of the study and their right to confidentiality before filling out a questionnaire. Participation was voluntary and all of the respondents were reminded that they were free to withdraw from the study at any point without being penalized as per the ethical tenets of informed consent, confidentiality, and the protection of the rights of the subjects (Sekaran & Bougie, 2016; Neuman, 2014). Completed questionnaires were verified, coded, and kept confidentially for academic purposes, and the identities of respondents were fully anonymised.

3.7 Data Analysis

A Partial Least Squares Structural Equation Modelling (PLS-SEM) was utilized to test the measurement model and to explore relationships between resilience, self-acceptance, and mental health. PLS-SEM is robust to non-normal data distributions and suitable for relatively small sample sizes (Afthanorhan, 2013; Henseler, Ringle, & Sinkovics, 2009), and it allows simultaneous measurement and structural models, direct, indirect, and mediating effects also to be compared (Hair et al., 2017; Ramayah et al., 2018). Data were analyzed in two phases. We first evaluated the measurement model for indicator reliability (outer loadings), internal consistency reliability (Cronbach's alpha and composite reliability ≥ .70), convergent validity (Average Variance Extracted, AVE ≥ .50; Fornell & Larcker, 1981), and discriminant validity (the Fornell-Larcker criterion & the Heterotrait-Monotrait ratio, HTMT < .90; Ramayah et al., 2018). Second, the structural model was evaluated via bootstrapping (5,000 resamples) to determine path coefficients, t-values, and p-values in addition to measuring the coefficient of determination (R^2), predictive relevance (Q^2), and providing a formal test of the mediation effect through the variance accounted for (VAF).

4. DATA ANALYSIS AND RESULTS

4.1 Respondent Profile

The full study sample consisted of 501 respondents, all of whom (100%) were female. The largest group of respondents fell within the 30–40 age range (n = 181, 36.1%), followed by the 41–50 age category (n = 144, 28.7%). Meanwhile, respondents aged 30 and under totaled 112 (22.4%), whereas those aged 51 to 60 numbered 53 (10.6%). Only a few people were aged 60 and above (n = 11, 2.2%). Most of the respondents were Malay (n = 364, 72.7%), followed by Indian (n = 59, 11.8%) and Chinese (n = 58, 11.6%); the "Other" category represented the smallest group (n = 21, 3.9%). Among those of religious identity, the majority reported being Muslim (n = 389, 77.6%), while the next largest percentages were Buddhist (n = 47, 9.4%), Hindu (n = 41, 8.2%), Christian (n = 23, 4.6%), and other religions (n = 1, 0.2%).

As for academic qualifications, most respondents had qualifications related to secondary education, mainly, SPM/STAM/MCE (n = 168, 33.5%) and PMR/SRP/LCE (n = 118, 23.6%). Low percentages of respondents with bachelor's degree (n = 23, 4.6%), master's degree (n = 4, 0.8%), or PhD (n = 2, 0.4%) were found. It reflects that the majority of respondents had pre- and post-secondary education levels. Widows were the most numerous (n = 214, 42.7%), married respondents the second largest group (n = 149, 29.7%) and single respondents were the third largest (n=138, 27.5%). In regard to employment after their time in prison, the majority of them were found to be self-employed (n = 222, 44.3%), the private sector (n = 132, 26.3%), the unemployed (n = 86, 17.2%), and business owners (n = 61, 12.2%). The percentage of respondents with drug-related crimes was the most common (n = 405, 80.8%) by offense type. Theft (n = 15, 3.0%), causing injury (n = 12, 2.4%), homicide (n = 10, 2.0%) and other offenses (n = 35, 7.0%) all had the lowest numbers. As for sentence duration, more than half of the sampled men served sentences of less than one year (n=276, 55.1%), while others served sentences of four to five years (n=82, 16.4%). Only a small number received life sentences (n=12, 2.4%), and three people (n=3, 0.6%) were serving life sentences. Lastly, about the frequency of incarceration, the overall proportion of respondents were incarcerated once (n = 176, 35.1%). At the same time, a subset of participants having been incarcerated more than 11 consecutive times (n = 89, 17.8%) suggest that some of the participants had imprisoned more than 2 times. The whole sample is Malay and Muslim in origin with a predominance of middle age, with secondary level education and mixed social classes and was predominantly composed of females who were of different marital status and had had a previous sentence of imprisonment. Such data offer insights into the demographic profiles of study participants.

Natural Resources for Human Health
eISSN: 2583-1194

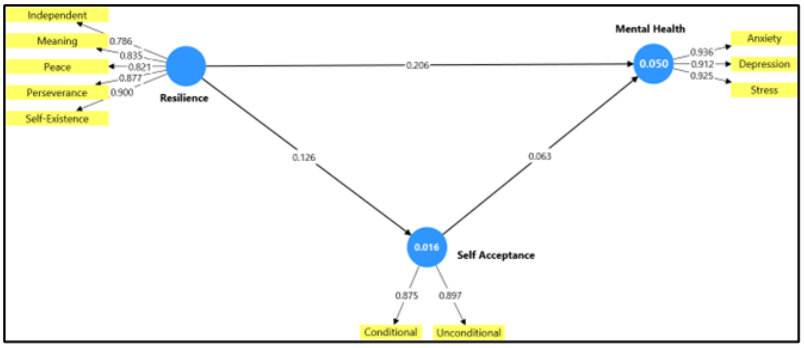

Figure 2: Measurement model

4.2 Evaluation of the Measurement Model

The measurement model reliability and validity (Figure 2) was checked before assessing the structural relationships. Internal consistency reliability was accepted, with Cronbach's alpha values between .727 to .915, all values above the threshold of .70. Composite reliability (CR) varied between .732 to .971, suggesting an acceptable to excellent internal consistency of the constructs (Hair et al., 2017). Resilience was the highest composite reliability of the constructs (CR = .971), while mental health had the highest Cronbach's alpha (α = .915). Convergent validity was indicated, with AVE values ranging from .714 to .855, all surpassing the .50 limit (Fornell & Larcker, 1981) suggesting a good deal of the variance of its indicators was accounted for by each construct. Outer loadings ranged from .786 to .936, all above the recommended minimum of .70, suggesting reliable indicators (Hair et al., 2017). Together these findings suggest that the measurement model exhibited satisfactory levels of internal reliability and robustness in relation to its convergent validity and indicator reliability. The results are shown in Table 3.

Table 3 Measurement Model

Construct	No. of Dimensions	Outer Loading	R^2	Q^2	Cronbach Alpha	CR	AVE
Resilience	5	0.786 – 0.900	—	—	0.906	0.971	0.714
Self-Acceptance	2	0.875 – 0.895	0.016	0.009	0.727	0.732	0.785
Mental Health	3	0.912 – 0.936	0.050	0.039	0.915	0.917	0.855

Note: CR = composite reliability; AVE = average variance extracted. R^2 and Q^2 apply to endogenous constructs.

4.3 Discriminant Validity

Discriminant validity was measured to verify that the constructs were not simply the same evidence or data (Ringle, Sarstedt, & Mooi, 2010). The Fornell-Larcker criterion (Fornell & Larcker, 1981) was used: the square root of AVE per construct (reported on the diagonal) was greater than its correlation with the other constructs, denoting that each construct showed more variance with its own indicators than with respect to other constructs of the model. It also examined the Heterotrait-Monotrait ratio (HTMT); according to Ramayah et al. (2018), HTMT values below .90 show sufficient discriminant validity. All HTMT values are below this threshold as shown in Table 5. Fornell-Larcker and HTMT analyses consistently indicate that discriminant validity was met for all constructs in the model.

Table 4 Discriminant Validity — Fornell-Larcker Criterion

	Mental Health	Resilience	Self-Acceptance
Mental Health	**0.924**		
Resilience	0.214	**0.845**	
Self-Acceptance	0.089	0.126	**0.886**

Note: Diagonal values (in bold) are the square roots of the AVE; off-diagonal values are inter-construct correlations.

Natural Resources for Human Health
eISSN: 2583-1194

Table 5 Discriminant Validity — Heterotrait-Monotrait Ratio (HTMT)

	Mental Health	Resilience	Self-Acceptance
Mental Health	—		
Resilience	0.198	—	
Self-Acceptance	0.109	0.130	—

Note: All HTMT values are below the .90 threshold, confirming discriminant validity.

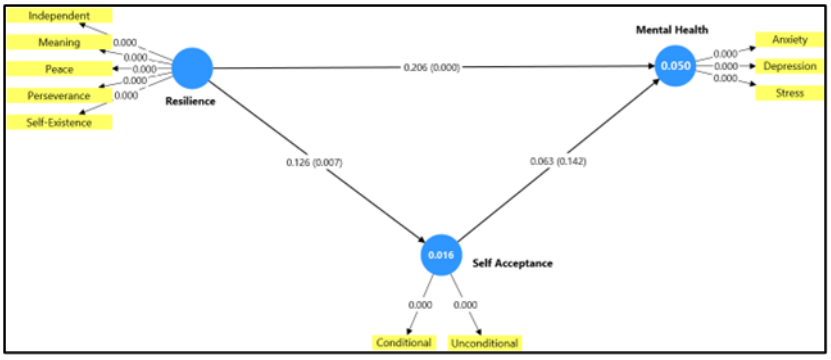

Figure 3: Structural model

4.4 Evaluation of the Structural Model

In addition, the structural model (Figure 3) was tested to determine the predicted association by bootstrapping (5,000 resamples). Collinearity diagnostics were conducted for all constructs prior to hypothesis testing and all constructs had variance inflation factor (VIF) values <5, suggesting that multicollinearity wasn't an issue. We examined the explanatory power of the model by means of the coefficient of determination (R^2). Resilience explained 1.6% of the variation in self-acceptance (R^2 = .016) and 5.0% of the variance in mental health (R^2 = .050), suggesting weak explanatory power. The predictive relevance numbers for self-acceptance (Q^2 = .009) and mental health (Q^2 = .039) were all greater than zero, indicating that the structural model had predictive relevance for endogenous constructs.

4.5 Direct Hypotheses

Bootstrapping with 5,000 resamples was performed to test the direct relationships between resilience, self-acceptance, and mental health. A path was considered statistically significant where the t-value exceeded 1.64 and the p-value was below .05 (one-tailed test). As shown in Table 6, there was a significant positive relationship between resilience and self-acceptance (β = .126, t = 2.477, p = .007), supporting H1; this indicates that higher levels of resilience are associated with greater self-acceptance. H2 was also supported, as resilience was positively associated with mental health (β = .206, t = 5.038, p < .001), indicating that more resilient individuals reported better mental health. In contrast, self-acceptance did not exert a significant effect on mental health (β = .063, t = 1.069, p = .142); thus H3 was not supported, suggesting that in this sample self-acceptance did not statistically predict mental health.

Table 6 Results of Direct Hypotheses

Hyp.	Path	Path Coefficient	t-statistic	p-value	Decision
H1	Resilience → Self-Acceptance	0.126	2.477	0.007	Supported
H2	Resilience → Mental Health	0.206	5.038	0.000	Supported
H3	Self-Acceptance → Mental Health	0.063	1.069	0.142	Not Supported

Note: Significance evaluated at $p < .05$ (one-tailed); critical t-value = 1.64.

4.6 Mediation Analysis

The mediating role of self-acceptance in the relationship between resilience and mental health was examined through the indirect effect, following the bootstrapping procedures recommended by Hair et al. (2017) and Ramayah et al. (2018). The analysis showed that the indirect effect of resilience on mental health through self-acceptance was statistically non-significant (β = .008, t = .860, p = .390). Although resilience significantly predicted self-acceptance (β = .126, t = 2.477), self-acceptance did not significantly predict mental health (β = .063, t = 1.069); consequently, the indirect path was not significant, and self-acceptance did not mediate the relationship between resilience and mental health. The total effect of resilience on mental health, however, remained positive and statistically significant (β = .214, t = 5.132, p < .001), indicating that resilience yields better mental health directly rather than through self-acceptance. Thus H4 was not supported. The results are presented in Table 7.

Table 7 Mediating Role of Self-Acceptance

Hyp.	Path / Effect	Type	Beta	t-value	p-value	Decision
H4	Resilience → Self-Acceptance (a)	Direct	0.126	2.477	0.013	Not Supported
	Self-Acceptance → Mental Health (b)	Direct	0.063	1.069	0.285	
	Resilience → Self-Acceptance → Mental Health	Indirect	0.008	0.860	0.390	
	Resilience → Mental Health	Total	0.214	5.132	0.000	

Note: The mediation decision (Not Supported) refers to the non-significant indirect effect of resilience on mental health through self-acceptance.

5. DISCUSSION

The present study investigated the relationship between resilience and the mental health of incarcerated women and assessed whether there is a mediating role of self-acceptance between resilience and mental health. The results provided a coherent and theoretically reliable pattern: resilience was a significant predictor of self-acceptance and mental health, but self-acceptance was not a significant predictor of mental health or a mediator of the resilience–mental health relationship. Supporting H1 demonstrates high-resilient incarcerated women are also more likely to report positive self-acceptance. This result is in line with the conceptualisation of resilience as meaning-making and equanimity (Wagnild & Young, 1993), features that might easily elicit an enduring, non-contingent self-regard. H2 as evidenced in support also supports resilience as a positive predictor of mental health, suggesting that resilience is a well known protective factor in buffering populations against vulnerability to depression, anxiety and stress. For incarcerated women subject to the deprivations of confinement, resilience provides the adaptive capacity needed to sustain psychological well-being, highlighting its significance as a target for intervention in correctional settings.

Contrary to intuition, H3 was not reinforced: self-acceptance failed significantly to predict mental health in this group. As one of the most prominent features of Rational Emotive Behaviour Therapy, self-acceptance has been posited to be an immediate predictor of emotional well-being (Ellis, 1977; Chamberlain & Haaga, 2001), whereas in this correctional population, self-acceptance failed to lead to clinically significant differences in depressive affect, anxiety, and stress. It can be explained on a number of grounds. The model had poor explanatory power for the variables ($R^2 = .050$ for mental health) implies resilience and self-acceptance alone explained a small proportion of the variance in mental health, which might suggest that other unknown factors, such as institutional conditions, social support, or clinical history, may have a large impact on this data. The protective effect of self-acceptance is also likely attenuated by the experience of incarceration whereas for a particular section of the population the construct is less effective given the stigma and judgment associated with stigma and externalised judgment on self-acceptance. Consistent with the null H3, the mediation hypothesis (H4) was not upheld. Since self-acceptance was not a significant predictor of mental health, the indirect relationship of resilience with mental health via self-acceptance was unimportant (β = .008). The overall impact of resilience on mental health was still strong, suggesting resilience does lead to direct mental health benefits rather than to an indirect effect through self-acceptance. This result furthers the theoretical intuition by illustrating that in this population resilience–mental health is not mediated by self-acceptance, and it recommends

against the assumption that self-acceptance mediates the effects of dispositional resources on well-being (as we previously argued).

5.1 Theoretical Implications

As a theoretical contribution, the study provides an empirical validation of a self-acceptance-mediated model of resilience and mental health within an understudied population. The evidence-based direct resilience effects, with the non-significance of the self-acceptance pathway, suggest that the pathways through which dispositional resources are associated with well-being may be population-specific. This work recommends that the explanatory primacy of self-acceptance proposed within Rational Emotive Behaviour Therapy should not be assumed without empirical verification in a correctional setting; further, they emphasise the importance of identifying alternate mediators that should elucidate the pathways more closely associated with resilience and supporting mental health in incarcerated women.

5.2 Practical Implications

More concretely, implications are for psychological intervention programmes in correctional facilities. This close link between resilience and mental health implies that resilience-building interventions such as programmes that develop meaning-making, perseverance and emotional regulation, are an effective 'leverage point' to enhance the psychological well-being of incarcerated women. Although self-acceptance may be a meaningful construct from a theoretical standpoint, the current results suggest that it may in isolation be inadequate to increase the mental health of this population and that interventions aimed at promoting self-acceptance should be embedded in larger resilience-focused interventions and empirically tested for effectiveness.

6. CONCLUSION

This study investigated the association of resilience with the mental health of female offenders and investigated the mediating effect of self-acceptance, in Malaysia's largest female prison. The results show that on one hand, resilience also significantly contributes directly to self-acceptance and mental health, yet self-acceptance does not predict mental health or act as a mediator of the relationship between resilience and mental health in this population. These findings support the relevance of resilience to the mental health of female inmates whereas revealing that the benefits of resilience tend to operate directly, rather than through acceptance of oneself. A number of limitations need to be recognised. The cross-sectional design precludes causal inference, and the use of self-report measures may entail common-method and social-desirability bias (which are important to prisoners within the correctional system). The model has limited explanatory validity, meaning that key mental health determinants may have been underrepresented, and that the single institution only focus might limit the external validity of the results. Future research could overcome these limitations with (1) longitudinal or mixed-methods designs, (2) a larger set of correctional facilities, (3) the inclusion of other predictors and alternative mediators, and (4) evaluation of resilience-oriented interventions by means of experimental approaches. Despite these caveats, the study is an empirically based addition to the body of research regarding mental health for women prisoners and offers a basis for developing theory-based correctional interventions.

Acknowledgement

The authors express gratitude to the participants for their involvement in this study.

Funding source B

This study received no financial support from any funding agency.

Conflict of interest

The authors declare no conflict of interest.

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