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Understanding the Influence of Traffic Congestion on Tourist Consumer Behaviour: The Role of Stoicism and Sad Ripu Control in Maintaining Sustainable Tourism

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Abstract

This research investigates the effects of Stoic principles and Sad Ripu control on tourists' consumption behaviour regarding the perceived condition of traffic congestion in Bali. Among tourists' most pervasive problems, traffic congestion affects consumptive behaviour and travel decisions. This study tries to investigate how emotional regulation, governed by Stoicism and a traditional Balinese philosophy known as Sad Ripu, influences the response of tourists to perceived crowding and, subsequently, their behaviour. This study is novel because integrating Stoic principles with Sad Ripu control offers a fresh perspective into emotional regulation in tourism behaviour. A quantitative approach with structured questionnaires was applied to 200 tourists in Bali, testing relationships among the variables by means of SEM. The findings indicate that Stoic principles and Sad Ripu control are significantly associated with more positive tourist behaviour, promoting less stress and more satisfaction, hence more positive consumption decisions. Besides, traffic congestion has been found to play a mediating role in emotional regulation and consumer behaviour. This study underlines the importance of emotional management in tourism and claims that Stoic practices and emotional control strategies can improve the tourist experience and foster loyalty. Further studies are necessary to explore broader contexts and long-term impacts across various tourist destinations.

Keywords: Traffic Congestion; Tourist Experience; Emotional Control; Stoicism; Sad Ripu; Sustainable Tourism; Bali; Indonesia

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Introduction

Knowledge has been identified as a driving force of international development (Wang et al., 2024). Specialised activities stimulate company growth in management (Moyano-Castolo et al., 2024). The COVID-19 pandemic affected many business sectors due to strict containment measures (Ruppenthal & Rückert-John, 2024). Despite this, Bali continues to attract international and domestic tourists (Gonçalves et al., 2024). However, rapid industry growth leads to problems such as traffic congestion in key tourism areas, disrupting tourists' physical comfort and emotional experience and affecting satisfaction and intention to return (Bursa et al., 2022). Recent studies focusing on Bali have emphasised the growing impact of traffic congestion on tourists' satisfaction and behavioural intentions, highlighting the urgent need for localised psychological and cultural coping mechanisms (Arismayanti et al., 2022; Listiani et al., 2024). Addressing this requires approaches beyond infrastructure, including psychological and cultural strategies to manage stress (Aoyagi et al., 2020).

Stressful conditions require philosophical frameworks like Stoicism, which emphasises self-control, wisdom, and acceptance of uncontrollable circumstances (Hirsch et al., 2023; Yapijakis, 2022). Stoicism helps individuals regain control and balance between external and internal factors, maintaining peace of mind during adversity (Dopierała, 2022; Gulevataya et al., 2022).

While Stoicism offers a universal framework for emotional regulation, it is equally important to recognise local philosophies rooted in the cultural identity of the destination. In the Balinese context, one such system is Sad Ripu. Sad ripu is a traditional Balinese philosophy that offers a unique solution to stress. The six internal enemies of human beings govern behaviour and emotions: lust, anger, greed, confusion, envy, and idleness. As described in Kakawin Rāmāyana sargah 1, it reads: *Ragàdi musuh maparö, rihati ya tonggwanya tan madoh ring awak, yeka tan hana ri sira, prawira wihikan sireng niti*. It signifies: "affections, preferences and so on are close enemies, their destination is within the heart and not far from the body. They are not within him, the wise and clever king Daśaratha, a political scholar" (Subagia, 2016:94). This philosophy stresses self-control to overcome internal barriers rather than external troubles, promoting emotional stability and stress management (Santi, 2020). In this study, the concept of sad ripu was clearly explained to all respondents, including international tourists, in the questionnaire to ensure a common understanding of its philosophical meaning. The study also explores how tourists from diverse cultural backgrounds interpret and internalise these values, highlighting the universal applicability of sad ripu's principles in managing emotional responses and stress. In tourism, congestion is an infrastructural and psychological issue affecting tourists' experience and return intention (Brokowski, 2019; Papadopoulou et al., 2023).

Methods like mindfulness and cognitive restructuring enhance tourists' emotional resilience, complemented by Stoic principles of embracing uncertainty (Borchers, 2005; Hu & Xu, 2021). Sad ripu's emphasis on control aligns with findings that cognitive control regulates emotions in stress (Rónai et al., 2024). The combination of Stoicism and Sad Ripu supports stress management, enhancing pleasure and emotional bonds with destinations (Stemmer et al., 2024). Motivations such as relaxation or cultural exploration shape tourism experiences (Çelik & Dedeoğlu, 2019). These philosophies apply not only to Balinese but also to non-Balinese and international tourists, as their values are universal (Cavanna et al., 2023).

Tourists who regulate emotions well are more likely to return despite congestion's negative impact on satisfaction (Zhu et al., 2020a). Higher usage of smartphones also plays a role in tourist decision-making (Ozkan et al., 2024), and emotional experiences are key motivators for tourists' willingness to return (Quynh et al., 2021). Future research should explore integrating Sad Ripu with modern psychological

theories to foster balanced tourism experiences and sustainable consumption (Han et al., 2022; Kumar et al., 2024). This study fills the gap by synthesising local and global philosophies to examine the psychological mediation of tourists' crowding perceptions, employing Partial Least Squares to analyse congestion, psychological management, and tourist behaviour (Rogers, 2022).

Self-regulation also influences attitudes toward time and adversity (Wang & Sun, 2023). Both Stoicism and Sad Ripu teach emotional inhibition in unpleasant scenarios. This study develops an Emotion-Control-Based Tourism Experience Management theme, portraying Bali as a place of external beauty and emotional-spiritual fulfilment, benefiting MSME entrepreneurs in managing uncertainty. Stoicism is a means to thrive in adversity, enriching literature on tourist consumer behaviour and offering adaptable solutions for destinations facing similar stressors (Bijlsma, 2022).

However, although numerous studies have examined the impact of traffic congestion on tourist satisfaction and behavioural intentions, very few have explored how internal philosophical frameworks, particularly those that combine Western Stoicism with Balinese Sad Ripu, can regulate tourists' emotional responses. Moreover, the integration of local wisdom with global philosophical thought remains underexplored in tourism behaviour literature.

Therefore, this study aims to fill this gap by examining the mediating role of emotional regulation, framed through Stoicism and Sad Ripu principles, in the relationship between perceived traffic congestion and tourist consumer behaviour in Bali. This research contributes theoretically by integrating Eastern and Western emotional regulation philosophies and practically by offering stress management insights for tourism managers in high-congestion areas.

This paper is structured as follows. The next section reviews key literature related to emotional regulation, stoicism, sad ripu, and tourist behaviour in high-congestion areas. The research method is explained, including sampling, measurement, and data analysis using Partial Least Squares. The results section presents the findings of the statistical analysis, which are then discussed in relation to existing theories and practical implications. The final section concludes with theoretical and managerial contributions, limitations, and suggestions for future research.

Theoretical Approaches

The background presented makes it possible to support this research through two grand theories. These theories are important as they relate to managing stress, emotional experiences, and consumer self-control under external environmental conditions like congestion. They are the Self-Control Theory and the Consumer Behaviour Theory.

Self-Control Theory

Self-control is defined as the ability to resist immediate temptations in favour of long-term goals. It serves as an executive function necessary for achieving personal objectives and is linked to various positive life outcomes, including academic success, stable relationships, and overall health (Gottfredson, 2017). The theory suggests that individuals with high self-control are less likely to engage in delinquent behaviours, as they can inhibit impulsive actions that lead to negative consequences (Burt, 2020). Self-control is a groundwork from which stressors related to traffic congestion and its impacts on the tourism experience are dealt with. Similarly, Duckworth et al. (2013) demonstrated that the centrality of self-control to a broad range of developmental outcomes informed the current investigation of adverse life events and self-control in early adolescence. Thus, this theory provides the basis for understanding how tourists manage their stress and maintain their tourism experiences.

Consumer Behaviour Theory

Consumer behaviour encompasses searching for information about a product, comparing alternatives, making a purchase decision, and reflecting on feelings resulting from consumption, which may impact future choice.

Traditionally considered through the lens of neoclassical economics, rational choice was seen as intended to maximise utility; however, today it is recognised that emotions, social forces, and cognitive distortions are also part of consumer behaviour (Reina Paz & Rodríguez Vargas, 2023). Scholars such as Curtale et al. (2024:86) have stated that "destinations are trying to find solutions to such challenges by improving transportation systems with the help of park-and-ride facilities or enhanced public transportation. In this way, congestion situations can be minimised while tourists can travel comfortably at sites of interest and enjoy more time without depending on their private cars." With the integration of these strategies into their lives, along with the practice of Stoicism and Sad Ripu, external shocks—for example, congestion of traffic-can be better attenuated, hence improving the experience of consumption for tourists.

Hypothesis Development

Based on the theoretical framework and explanations presented above, eight hypotheses are set for this research to find relationships among the sad ripu control, principles of stoicism, traffic congestion, and consumer behaviour of tourists.

Stoicism Correlates With Reduced Distress During Traffic Congestion

From this hypothesis, Stoic values such as self-control, wisdom, and acceptance enable travellers to react better to the stressors brought about by traffic congestion. Stressors become manageable if a traveller focuses on what they can control, such as attitudes and emotions, rather than dwelling on uncontrollable external situations. This goes hand in hand with the statement of Siddiqui et al. (2021) and Can et al. (2020) that enhancing an individual's self-control enables one to replace negative thoughts with more constructive thoughts, hence reducing stress responses.

Sad Ripu Control is Associated with the Principles of Stoicism

This proposition postulates that Sad Ripu control, which refers to the six inner enemies, may affect the principles of Stoicism. The Balinese philosophy makes people accept emotional control to support Stoicism, particularly under external pressure. This was proved in studies where people who use acceptance are better at handling emotions in stressful situations since their self-regulation is enhanced through more productive answers provided (Herrando & Constantinides, 2021). Strategies like cognitive reappraisal and expressive suppression also help individuals manage (Brundin et al., 2022).

Sad Ripu Control Reduces Negative Perception of Traffic Congestion

This hypothesis assumes that Sad Ripu control can affect individual responses to congestion. Controlling anger and impatience makes people respond calmly, reducing the negativity of congestion. Scholars argue that, drivers with emotional control are less likely to show aggressive actions, such as tailgating or road rage, which eventually diminishes the intensity of stress and makes driving more pleasant in nature (González-Aliste et al., 2023).

Tourist Consumer Behaviour Varies in Relation to Perceived Traffic Congestion

This hypothesis assumes that traffic congestion significantly impacts tourist consumer behaviour by increasing stress, causing dissatisfaction, and decreasing intentions to revisit the destinations. Research by Curtale et al. (2024) demonstrate that introducing sustainable transport solutions like park-and-ride systems or bike-sharing programs can help alleviate such congestion and improve tourists' experiences by reducing car usage and enhancing the quality of the tourist experience.

Sad Ripu Control is Associated with Tourist Consumer Behaviour, with the Principles of Stoicism and Traffic Congestion as Mediating Variables

This hypothesis is that the control of sad ripu affects tourist consumer behaviour mediated by the principles of stoicism and traffic congestion. Tourists who report higher emotional control and adherence to stoic principles tend to handle congestion-related stress more effectively, so it

will make the tourists better in their journey and consumption. Research by White (2019) showed that stress is a driver of "retail therapy," shopping to help consumers deal with their negative feelings. The association between employee welfare and customer experience is also pertinent, thus creating an emotional feedback loop for both parties.

Sad Ripu Control is Associated with Perceptions of Traffic Congestion Through the Principles of Stoicism

The hypothesis is that sad ripu control is significantly related to how tourists perceive traffic congestion through the mediating principles of stoicism. Tourists who can manage their sad emotions through sad ripu will likely adopt stoicism, enabling them to accept traffic congestion more wisely and lower negative perceptions of the congestion. Proper emotional regulation may be joined to rational decision-making. Various scholars have asserted that, drivers who practice effective management of their emotions are not impulsive or aggressive while driving; thus, it enhances the flow of traffic and reduces incidents of aggressive driving (Holman & Popusoi, 2020; Kerr, 2021).

Traffic Congestion Mediates the Effect of Stoicism Principles on Tourist Consumer Behaviour

This hypothesis follows the assumption that traffic congestion is a mediator for stoic values' influence on tourist consumer behaviour. Under stressful travel conditions such as traffic congestion, tourists embracing stoic values such as emotional regulation, acceptance of uncontrollable occurrences, and rational response are more likely to remain calm and psychologically sound. These stoicism-based responses, triggered by real stressful stimuli like congestion, shape tourists' experience perception and also their consumer behaviour and satisfaction (Su et al., 2023). Besides, scholars like Han et al. (2022) determined that individuals who are more emotionally resilient—usually cultivated in philosophical or psychological models like stoicism—are more forgiving of service failure, which is prevalent in tourism environments. This capacity to forgive is associated with stronger affective links to tourist destinations as well as to tourism brands, and consequently generates loyalty and repeat visitation.

Traffic Congestion Mediates the Sad Ripu Control-Tourist Consumer Behaviour

This hypothesis suggests that traffic congestion mediates the relationship between sad ripu control and tourist consumer behaviour. Travellers who manage their emotions effectively are more likely to respond positively to congestion, improving their experience and consumer behaviour. Research shows that emotional regulation helps travellers focus on enjoying their experience rather than stressing over delays (Zhu et al., 2020b). Additionally, traffic congestion negatively impacts tourist satisfaction and decision-making, leading to poor behaviour (Curtale et al., 2024).

Methods

The conceptual framework of the study is outlined in Figure 1. The population of tourists visiting Bali in September 2025 reached 508,350. The type of research used in this study is a quantitative approach deploying questionnaires to collect data from the tourists as respondents. The data used in this study is primary data. The sample was selected using a purposive sampling method, targeting tourists who met specific criteria relevant to the study's objectives. The inclusion criteria were: (1) actively traveling in Bali during the study period, (2) experiencing traffic congestion in Bali, and (3) being willing and able to complete the questionnaire. This non-probability sampling method was chosen to ensure that respondents had sufficient exposure to the phenomena being investigated (that is, congestion and emotional responses), which is essential for the validity of their responses. While the sample size is calculated by multiplying the number of indicators by 5 to 10, in this study, with a total of 20 indicators, the sample size of this research was determined as 200 tourist respondents.

This questionnaire was designed to determine the variables related to sad ripu control, principles of stoicism, traffic congestion, and

tourist consumer behaviour. All measurements of variables were done using a Likert scale. According to (Claveria, 2021), Likert-scale questions can be applied in various contexts of economic issues. The standard format for attitude measurement with a Likert scale involves statements to which specific scores are assigned. Respondents indicate their agreement or disagreement by circling options ranging from "strongly agree" to "strongly disagree". Statements in this questionnaire were closed-ended to measure respondents' perceptions and attitudes toward the identified four key variables.

Each variable was represented by statements relevant to the research context of tourists in Bali, reflecting perceptions related to each variable under investigation. Accordingly, these question designs allow data collection to reflect the relationships among variables for analysis using the PLS-SEM method. These questions assessed the degree to which respondents engage with each variable influencing the sustainability and quality of their tourism experiences.

This study analysed data using Partial Least Squares Structural Equation Modeling version 4.0 (PLS-SEM) (see below the Complete Combined Model). This approach is a higher-order statistical analysis technique through which one may examine hard-to-analyse complex relationships among variables. According to Magno et al. (2024), this is indeed an appropriate method since one can simultaneously test the measurement models and structural models necessary to investigate the interrelationships among the variables in this study.

Complete Combined Model

$$Y2 = \beta_0 + \beta_1 X1 + \beta_2 X2 + \beta_3 Y1 + \varepsilon_1 \quad (1)$$

$$Y1 = \beta_4 + \beta_5 X1 + \beta_2 X2 + \varepsilon_2 \quad (2)$$

$$X2 = \beta_7 + \beta_8 X1 + \varepsilon_3 \quad (3)$$

$$Y1 = \beta_9 + \beta_{10} X1 + \beta_{11} X2 + \varepsilon_4 \quad (4)$$

$$Y2 = \beta_{12} + \beta_{13} X1 + \beta_{14} X2 + \beta_{15} Y1 + \varepsilon_5 \quad (5)$$

$$Y2 = \beta_{16} + \beta_{17} X1 + \beta_{18} Y1 + \varepsilon_6 \quad (6)$$

$$Y2 = \beta_{19} + \beta_{20} X1 + \beta_{21} Y1 + \varepsilon_7 \quad (7)$$

$$Y2 = \beta_{22} + \beta_{23} X1 + \beta_{24} Y1 + \varepsilon_8 \quad (8)$$

Description

- $Y1$: Traffic Congestion
- $Y2$: Tourist Consumer Behaviour
- $X1$: Principles of Stoicism
- $X2$: Sad Ripu Control
- $\beta_0, \beta_1, ..., \beta_{24}$: Regression Coefficients
- $\varepsilon_1, \varepsilon_2, ..., \varepsilon_8$: Error terms for each equation

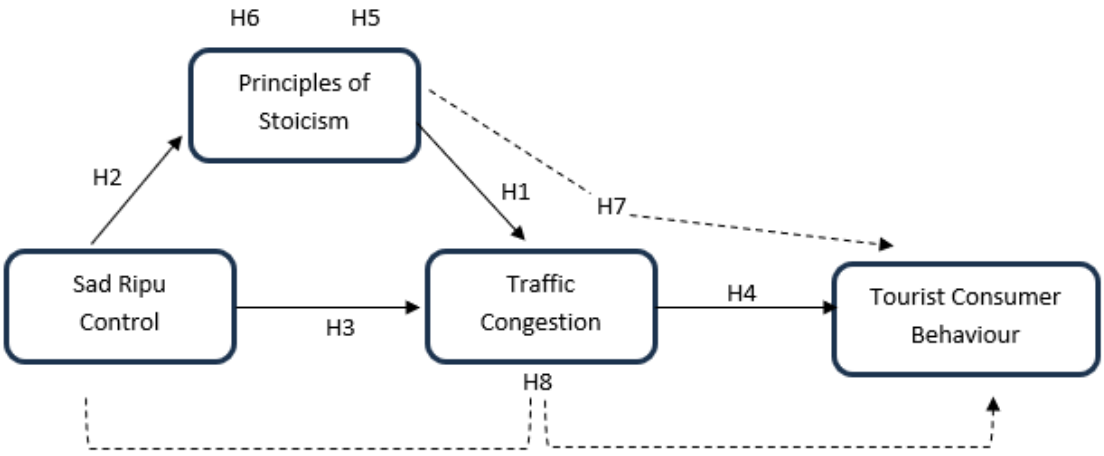

Figure 1. Conceptual Framework Model
Source: Compiled by the Authors

Results and Discussion

Table 1: Descriptive Profile of the Respondents	
Gender	
Male	**113**
Female	**87**
Age	
Under 30	**30**
30 - 40	**70**
Over 40	**100**
Frequency of Travel	
Rarely (1-2 times/year)	**42**
Occasionally (3-5 times/year)	**95**
Frequently (>5 times/year)	**63**
Experience with Traffic Congestion	
Mild	**54**
Moderate	**82**
Severe	**64**
Source: Compiled by the Authors	

Table 1 illustrates the demographic and travel information of the 200 tourist respondents in this study. Under gender, 113 respondents (56.5%) were male, while 87 respondents (43.5%) were female, offering representation from both sexes. The age bracket has 30 respondents (15%) aged under 30 years, 70 respondents (35%) aged between 30 and 40 years, and 100 respondents (50%) aged above 40 years, offering analysis reflecting different age brackets of tourists. The frequency of travel varied among the tourists, where 42 tourists (21%) travelled infrequently (1–2 times/year), 95 tourists (47.5%) travelled occasionally (3–5 times/year), and 63 tourists (31.5%) travelled frequently (more than 5 times/year). The variation provides several insights into tourists' adaptation to travel situations, including traffic congestion.

Traffic congestion experience differed among the respondents, too: 54 tourists (27%) experienced mild congestion, 82 tourists (41%) experienced medium congestion, and 64 tourists (32%) experienced high congestion. This

difference in congestion experience is relevant to examine psychological concepts such as sad ripu control and stoicism principles in regulating consumer behaviour in travel stress. The heterogeneity of the sample in terms of gender, age, travel frequency, and congestion experience confirms the study's strength. It ensures that the data collected represents various tourist perceptions and experiences. Therefore, this sample meets the demands of representativeness to rigorously test the hypotheses concerning stress management and tourist consumer behaviour in Bali.

Reliability and Validity Test

Table 2: Construction of Reliability and Validity

Variables	Indicators	Cronbach's Alpha	Composite Reliability (rho_a)	Composite Reliability (rho_c)	Average Variance Extracted (AVE)
Sad Ripu Control	I can control myself from breaking traffic rules, even when stuck in traffic.	0.828	0.855	0.883	0.610
	I can control my emotions even when stuck in traffic for a long time.	0.828	0.855	0.883	0.610
	I can avoid complaining when stuck in traffic in Bali.	0.828	0.855	0.883	0.610
	I can accept that traffic congestion is something that cannot be avoided.	0.828	0.855	0.883	0.610
	I remain calm when facing traffic jams, despite the frustration caused.	0.828	0.855	0.883	0.610
Principles of Stoicism	I remain calm even when faced with traffic congestion that disrupts my comfort.	0.929	0.935	0.947	0.782
	I remain productive despite being stuck in traffic.	0.929	0.935	0.947	0.782
	I focus on things I can control, even when stuck in traffic.	0.929	0.935	0.947	0.782
	I do not let traffic congestion disturb my mood during my travels.	0.929	0.935	0.947	0.782
	I view traffic congestion as an opportunity to practice patience and resilience.	0.929	0.935	0.947	0.782
Traffic Congestion	I often experience traffic congestion when travelling in Bali.	0.807	0.862	0.854	0.545
	Traffic congestion disrupts my travel time while visiting Bali.	0.807	0.862	0.854	0.545
	Traffic congestion is part of my experience while traveling in Bali.	0.807	0.862	0.854	0.545
	I avoid areas that are known to experience frequent traffic congestion when travelling in Bali.	0.807	0.862	0.854	0.545
	I find it difficult to enjoy my travel experience when I am stuck in traffic.	0.807	0.862	0.854	0.545
Tourist Consumer Behaviour	Traffic congestion affects my decision to choose a tourist destination.	0.779	0.819	0.852	0.544
	I prefer to use other modes of transportation to avoid traffic congestion while travelling.	0.779	0.819	0.852	0.544
	I remain loyal to tourist destinations even though I often encounter traffic congestion.	0.779	0.819	0.852	0.544
	Due to traffic congestion, I tend to shorten or extend my visit to Bali.	0.779	0.819	0.852	0.544
	I am more likely to visit locations with less traffic congestion during peak tourist seasons.	0.779	0.819	0.852	0.544

Source Compiled by the Authors

Table 2 shows the reliability and validity metrics of the measurement model of the four most significant constructs: Sad Ripu Control, Principles of Stoicism, Traffic Congestion, and Tourist Consumer Behaviour. Several indicators were employed to measure every construct, registering high internal consistency and convergent validity. All the constructs possess

Cronbach's Alpha values greater than 0.7, suggesting good internal reliability. The construct of principles of stoicism is highly consistent with Cronbach's Alpha of 0.929. Composite reliability estimates (rho_a and rho_c) for all the constructs are between 0.819 and 0.947, which suggests good construct reliability according to standard guidelines (Hair & Alamer, 2022).

Average Variance Extracted (AVE) ranges from 0.544 to 0.782, all of which are greater than the minimum desirable value of 0.5, showing that sufficient variance in every construct is captured by its measures. It ensures convergent validity, which is important to ascertain that structural equation modelling is conducted meaningfully. Furthermore, the fit indices of the model were analysed to examine the global fit of the structural and measurement model of PLS-SEM. The standardised root mean square residual (SRMR) was lower than the recommended cutoff of 0.08, indicating adequate model fit. Furthermore, the normed fit index (NFI) was above the threshold value of 0.9, confirming the appropriateness of the model in explaining the latent variables' relationship.

In parallel, these reliability, validity, and fit indices, all validate the measurement model's strength and provide a solid ground for the following hypothesis testing using PLS-SEM. The properly designed indicators rightly reflect tourists' psychological and behavioural responses towards traffic congestion in Bali, thereby guaranteeing trust in the structural findings of the research.

Hypothesis Test

The relationships among the latent variables were analysed using Partial Least Squares and are illustrated in the Structural Equation Model in Figure 2, which depicts the direction and strength of the effects of stoicism principles and sad ripu control on perceived traffic congestion and tourist consumer behaviour.

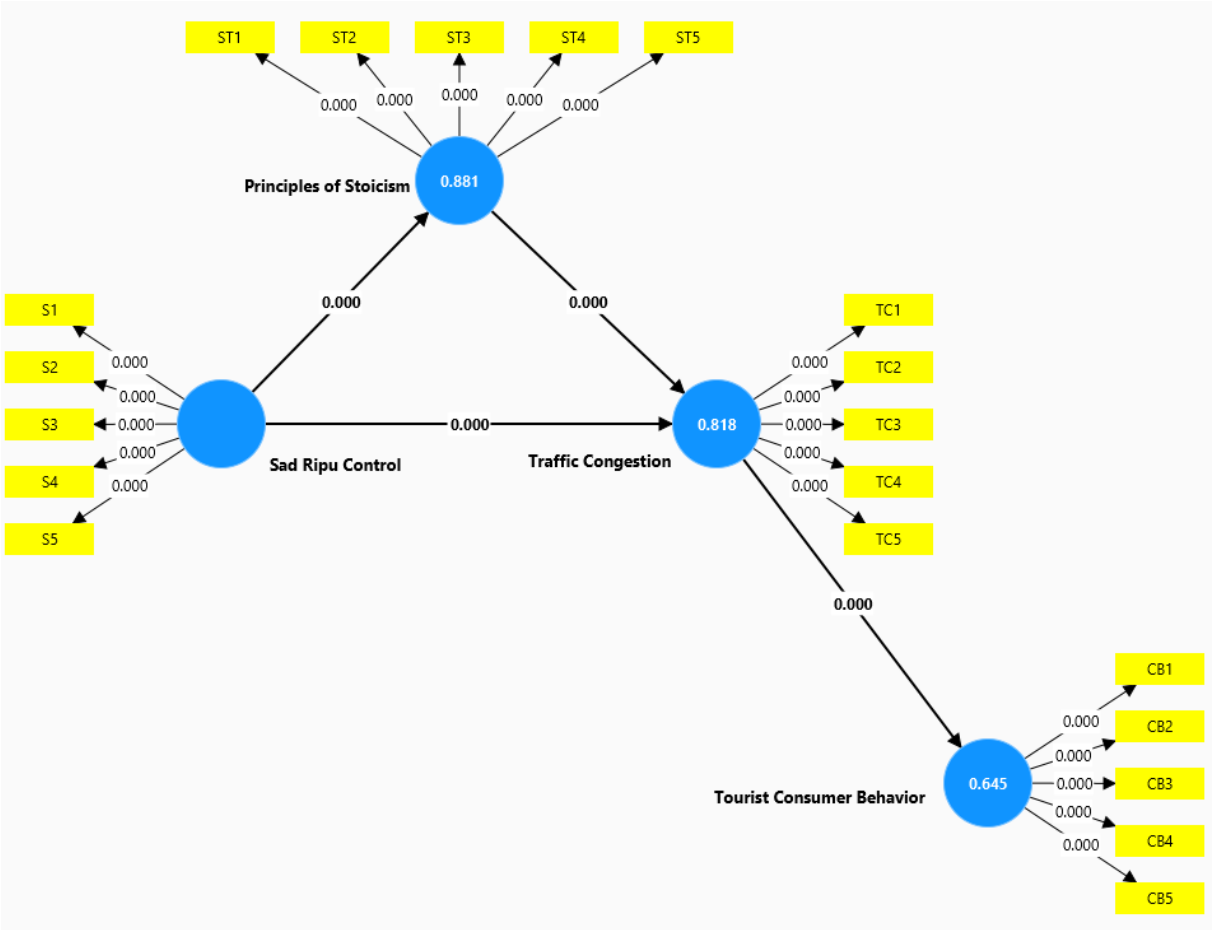

Figure 2: Structural Equation Model Testing
Source: Created by the Authors

Table 3: Regression Weight Structural Equational Model

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Principles of Stoicism -> Traffic Congestion	**2.307**	**2.325**	**0.122**	**18.948**	**0.000**
Sad Ripu Control -> Principles of Stoicism	**0.938**	**0.939**	**0.007**	**134.745**	**0.000**
Sad Ripu Control -> Traffic Congestion	**-1.737**	**-1.754**	**0.151**	**11.467**	**0.000**
Traffic Congestion -> Tourist Consumer Behaviour	**0.803**	**0.808**	**0.013**	**61.595**	**0.000**

Source: Compiled by the Authors

Therefore, the results of path analysis show many significant relations between the variables under study. First, the principles of stoicism are positively related to Traffic Congestion: the path coefficient equals 2.307, the T-statistic is 18.948, and the P-value is 0.000. It would mean that adherence to stoic principles—one of which is remaining calm and focused in challenging situations—is associated with a greater acceptance or awareness of traffic congestion. Furthermore, it has been revealed that sad ripu control has a very strong positive impact on the principles of stoicism: path coefficient = 0.938, T-statistic = 134.745, and P-value = 0.000. This essentially means that one with better self-control in terms of managing one's emotions is most likely to adopt stoic philosophies. On the contrary, sad ripu control negatively correlates with Traffic Congestion: its path coefficient equals -1.737, T-statistic is 11.467, and the P-value equals 0.000. Thus, people with high self-control also show less stress and frustration when traffic congestion hits them. Lastly, there is the positive effect of Traffic Congestion on Tourist Consumer Behaviour, with the path coefficient at 0.803, T-statistic at 61.595, and P-value at 0.000; it therefore means that traffic congestion plays a vital role in the decision of tourists concerning their choice of travel destinations, mode of transport selection, or adjustment in stay-over time. In general, such findings hint at a complex interplay of variables that relate emotional self-regulation and stoic philosophy to tourists' Behavioural responses to traffic congestion.

Therefore, the results of path analysis showing significant relationships among study variables indicate the effect of both direct and indirect effects. The indirect effect of Sad Ripu Control on Tourist Consumer Behaviour through Principles of Stoicism and Traffic Congestion has a path coefficient of 1.739. This is highly significant with a T-statistic of 17.014 and a P-value of 0.000. This would, therefore, suggest that the better the emotional self-regulation, the more the application of stoic principles in managing experiences of traffic congestion would result in positive consumer behaviour. The effect of Sad Ripu Control on principles of stoicism and traffic congestion is direct and strong; the path coefficient is 2.165, with a T-statistic of 17.043 and P-value of 0.000, showing that emotional

self-regulation enhances stoic values, which help in tackling traffic congestion.

Indirectly, too, the principles of stoicism's impact on tourist consumer behaviour via traffic congestion are vital because the path coefficient is 1.853, while its T-statistic is 18.999, with a P-value of 0.000. This means that stoic principles contribute to successfully dealing with the problem of traffic congestion and, therefore, positively influence tourist decisions.

Table 4:Total Indirect Effect

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Sad Ripu Control -> Principles of Stoicism -> Traffic Congestion -> Tourist Consumer Behaviour	1.739	1.765	0.102	17.014	0.000
Sad Ripu Control -> Principles of Stoicism -> Traffic Congestion	2.165	2.185	0.127	17.043	0.000
Principles of Stoicism -> Traffic Congestion -> Tourist Consumer Behaviour	1.853	1.878	0.098	18.999	0.000
Sad Ripu Control -> Traffic Congestion -> Tourist Consumer Behaviour	-1.395	-1.417	0.118	11.789	0.000

Source: Compiled by the Authors

Sad Ripu Control has a negative direct effect on Traffic Congestion and Tourist Consumer Behaviour with a path coefficient of -1.395 (T-statistic = 11.789, P-value = 0.000), which means that the higher one's self-control, the less disturbance caused by traffic congestion, the more it enhances the improvement of the tourism experience. The general results indicate complex relationships among emotional regulation, stoic philosophy, traffic congestion, and their combined influence on consumer behaviour in the context of tourism.

Discussions

The findings from Table 3, together with the results presented in Table 4, highlight some of

the model's key relationships. These also develop some congruence with the hypotheses developed based on previous literature.

Stoicism Principles Ease Congestion

This, in other words, sets the hypothesis that the principles of stoicism, like self-control, wisdom, and acceptance, enable individuals to deal with the stress resulting from traffic congestion. The findings support this hypothesis, as using stoic values in relation to uncontrollable external factors—in this case, traffic—shifts the focus to things they can manage, such as their attitude and feelings. This concurs with the research of Siddiqui et al. (2021) and Can et al. (2020), who note that improved self-control ensures the replacement of bad thoughts with good, constructive ones, and thereby decreases stress. The null hypothesis is rejected since the path from Sad Ripu Control to the Principles of Stoicism is significant and positive, with a T-statistic of 18.948 and a P-value of 0.000.

Sad Ripu Control Antecedents the Principles of Stoicism

This hypothesis is that sad ripu's emotional regulation is directly proportional to the extent to which stoicism is practised. The results confirm this hypothesis: the higher the emotional self-regulation via sad ripu, the better one can apply stoicism under stress. This also fits previous research, such as (Herrando & Constantinides, 2021) and (Brundin et al., 2022), pointing out that acceptance and cognitive reappraisal stand out in enhancing resilience among emotion regulation strategies. This hypothesis is accepted with a significant direct effect: T-statistic = 134.745 and P-value = 0.000.

Sad Ripu Control Influences Traffic Congestion

It is hypothesised that emotional self-regulation through sad ripu dampens stress levels and, hence, response to traffic congestion. The test of this hypothesis resulted in a significant negative effect of sad ripu control on traffic congestion with a T-statistic of 11.467 and a P-value of 0.000. This finding bears resonance with the observation of in agreement with González-Aliste et al. (2023), who it stated that emotional regulation reduced the number of aggressive driving practices, thus giving way to increasing the positive feeling of being in transit. Thus, the hypothesis is accepted because emotional regulation lowers negative emotions about traffic congestion.

Traffic Congestion Affects Consumer Tourist Behaviour

This hypothesis states that due to traffic congestion, there will be a negative impact on tourist consumer behaviour and dissatisfaction and a reduction of the probability of returning to the places of destination. The findings confirm this hypothesis, as traffic congestion significantly influences tourist consumer behaviour (T-statistic = 61.595, P-value = 0.000). This finding reinforces the finding of Curtale et al. (2024), who found that sustainable transport solutions can reduce congestion and improve the tourist experience. The hypothesis is accepted, showing a significant relationship between traffic congestion and consumer behaviour.

Sad Ripu Control Affects Tourist Consumer Behaviour with Stoicism Principles and Traffic Congestion as Mediators

This hypothesis was tested under the assumption that sad ripu control influences tourist behaviours by affecting the principles of stoicism and also congestion. The mediation effects are significant, hence supporting these results. The path from sad ripu control to principles of stoicism and, further, to traffic congestion and tourist consumer behaviour is strong and positive, with a T-statistic of 17.014 and a P-value of 0.000. This result is in line with White (2019), who suggested that regulated emotions are associated with improved tourist experiences and lower stress levels generated in conditions of traffic congestion, thus affectings consumer behaviour in more positive ways. Thus, the hypothesis is accepted.

Sad Ripu Control Traffic Congestion with Principles of Stoicism as a Mediator

This hypothesis was that with the mediating role of stoicism, sad ripu control would influence on the perceptions of traffic congestion. This result confirms this hypothesis since the indirect effect is significant at T-statistic = 17.043 and P-value =

0.000. The tourists with emotional regulation practices are in a better position to adopt the principles of stoicism to accept traffic congestion graciously. This concurs with Kerr (2021) and Holman & Popusoi (2020), who posit that emotional regulation reduces impulsive reactions and enhance traffic flow. Hence, the hypothesis is supported.

Traffic Congestion Mediate the Principles of Stoicism on Tourist Consumer Behaviour

The hypothesis is that traffic congestion acts as a mediator between the application of stoic principles and tourist performance of behaviours as consumers. Traffic congestion is a situational stressor that induces the application of stoic principles, including emotional control and acceptance of the uncontrollable, which enable tourists to manage stress in real-time. These adaptive responses, therefore, lead to more positive consumer responses, such as satisfaction, loyalty, and greater forgiveness towards service failure. This is reflected by the results of the empirical testing, which confirm the hypothesis through a significant mediation effect—the presence of a T-statistic of 18.999 and a P-value of 0.000. This finding is echoed by the findings of Su et al. (2023) and Han et al. (2022), who demonstrated that emotional resilience and forgiveness under stress enhance tourists' overall satisfaction and brand loyalty. Thus, the hypothesis is accepted.

Traffic Congestion Mediates Sad Ripu Control-Tourist Consumer Behaviour

This hypothesis tests whether the traffic congestion mediates between sad ripu control and the consumer behaviour of a tourist. Since the mediation effect is highly significant, reaching 11.789 for the T-statistic with a P-value of 0.000, emotional self-regulation aids tourists in tolerating traffic congestion, hence improving their experience. This supports the findings of Zhu et al. (2020b), who note that emotional regulation by tourists aids in the feeling of the experience even in the case of delays. Therefore, the hypothesis is accepted: emotional control helps reduce the negative impact of traffic congestion on consumer behaviour.

Conclusion

This research focused on the effect of stoic principles and sad rip control on tourists' consumer behaviour, especially regarding traffic congestion. The results clearly show that stoic principles and emotional control, related to sad ripu, determine how an individual reacts to traffic congestion, which in turn affects his or her consumer behaviour. Tourists can lower the level of stress caused by traffic by effectively managing their emotions through acceptance and self-control. Therefore, better emotional regulation will improve tourist satisfaction and positive consumption behaviour.

Key Functions for Management and Managerial Practices

These findings imply fundamental bases for managing tourism destinations and traffic flow. The destination managers and transport planners should integrate emotional regulation into the tourist experience and introduce stoic-based interventions to help tourists cope with frustration and stress due to traffic flow congestion. Managers can enhance customer satisfaction by supporting customers' ability to cope with their stress, boosting loyalty and encouraging repeat visits. It will also reduce the negative impacts of traffic congestion on consumer behaviour by developing more efficient transport solutions.

Limitations and Recommendations for Future Research

These include the fact that the study focuses on tourists within a specific region, which limits the generalisability of findings to broader contexts. Another limitation involves measuring emotional control and using stoic principles, which could be further extended with other psychological variables like stress and mental resilience. It is recommended that future research not only expand the model by including additional psychological and contextual variables but also explore practical applications of stoicism and sad ripu philosophies in tourism management. For instance, tourism stakeholders could develop intervention programs or workshops based on stoic principles

and sad ripu teachings to help tourists and local service providers better manage stress and emotional responses caused by traffic congestion and other tourism-related stressors.

Pilot programs could include mindfulness training and cultural education about sad ripu, aiming to improve tourists' emotional resilience and satisfaction. Similarly, destination managers might implement real-time stress reduction tools, such as guided meditation apps or culturally tailored messaging, that promote acceptance and emotional control in stressful situations. Evaluating the effectiveness of such interventions could provide valuable insights into enhancing tourist loyalty and fostering sustainable tourism experiences that balance physical comfort with emotional well-being. Moreover, expanding these interventions across multiple tourist destinations internationally would test their adaptability and cross-cultural relevance.

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Ethical Statement

The study was performed in compliance with the Helsinki Declaration. No ethical approval was required because the research involved anonymous survey data from SMEs. The participants were informed that the research was being conducted and that their responses could be used for analysis and reporting, subject to maintaining the confidentiality of their identity and individual responses.

Conflict of Interest Statement

The authors have no conflicts of interest to declare, financial or otherwise.

Author Contribution Statement

KWSPP contributed to the study's conceptualisation, designed the methodology, and supervised the overall research process. MS was responsible for data collection, cleaning, and statistical analysis. WSM drafted the manuscript and performed critical revisions for intellectual content. All authors reviewed and approved the final version of the manuscript.

Informed Consent

Participants provided informed consent prior to completing the survey. They were assured that their names and personal survey results would be kept confidential and only used in the aggregate for data analysis and research findings.

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Data Availability Statement

The tabulated data supporting this study's findings are available upon reasonable request from the corresponding author. Raw data with identifiable information are not shared to maintain participant confidentiality.