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Personality correlates of the five hindrances: a pilot study

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ABSTRACT

Buddhist teachings describe five hindrances to meditation and personal development: Sensory Desire, Ill-Will, Sloth and Torpor, Restlessness and Worry, and Sceptical Doubt. We developed a new 25-item measure for these hindrances and examined their relationships with demographics and personality traits. A sample of 263 adults completed the measure, a six-factor personality assessment, and provided demographic information. The hindrances demonstrated satisfactory internal reliability, but results showed only modest support for the measure's factor structure. Our analyses revealed minimal gender differences and no significant educational effects, but suggested that older participants were less affected by the hindrances. The personality factors showed a strong correlation with the hindrances, particularly in the domains of Adjustment and Risk Approach (Courage), where all relationships were negatively correlated. While the new scale offers practitioners insights into mental states affecting mindfulness, further refinement is needed. This pilot study encourages continued research into these hindrances and their broader implications.

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Gautama Buddha identified five specific obstacles that can disrupt, block, and hinder our progress in both meditation and daily life. These obstacles, known as the five hindrances, are negative mental states that challenge our practice (Anālayo, 2013; Bhikkhu, 2005). Within the Buddhist tradition, the concept of the five hindrances (pañca nīvaraṇāni) is recognised as crucial, representing mental barriers that obstruct not only meditation practice but also everyday personal development. For instance, Anālayo (2022a) discusses how insights from early Buddhist teachings on the five hindrances can enhance success in education and learning. Thus, gaining a deeper understanding of the five hindrances should be a goal for anyone seeking clarity, progress, and mindfulness. In this pilot study we attempt to construct a self-report measure of the five hindrances which we believe may be one the first attempt to do so.

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Most major religions emphasise adherence to specific belief systems, mental practices, and behavioural patterns believed to lead to health and happiness. This notion is also reflected in the work of many Western psychologists who study happiness and well-being, often adopting a pan-cultural perspective (Argyle, 1999; Diener, 2000). Predominantly, Western psychology has been influenced by Christian and Jewish teachings in terms of how they contribute to a psychological understanding of the “good life.” However, there has been a growing interest in exploring these concepts from other religious perspectives. Notably, recent studies have increasingly begun to incorporate Buddhist perspectives (Tan et al., 2023), and over the years, psychologists from diverse backgrounds have demonstrated a significant interest in Buddhist teachings, especially those pertaining to mindfulness (Lee et al., 2021).

In a significant paper, Shonin et al. (2014) aimed to provide accurate interpretations of Buddhist terms and principles, including Buddhist-derived interventions (BDIs), as well as an overview of current directions in the clinical operationalisation of BDIs and an assessment of issues related to BDI clinical integration. They noted a growing interest in the clinical applications of BDIs. Additionally, they emphasised the foundational Buddhist concepts of wisdom, meditation, and ethical awareness. These Buddhist wisdom-related terms or concepts encompass ideas such as, deluded, non-self, attachment, impermanence, interconnectedness, emptiness, and original nature. These are not necessarily universally recognised, or clearly conceptually defined, and have been closely analysed (Gethin, 1998; Thiradhammo, 2014). Furthermore, they specifically highlighted how Buddhist teachings have significantly influenced the practices of meditation and mindfulness.

Several studies have also examined the association between mindfulness and personality. In a meta-analytic study Giluk (2009) found all of the big five personality dimensions related to mindfulness, and the strongest relationships were found with neuroticism/negative affect and conscientiousness. In a recent study Roemer et al. (2024) administered the Five Facet Mindfulness Questionnaire (FFMQ) and the Big Five Personality Inventory to a large multinational sample. Their research demonstrated that in all countries, Conscientiousness was more strongly associated with the Acting with Awareness facet of mindfulness than with any other facets. Extraversion had a strong connection to Describing, and Openness to Observing, across all nations, with the exceptions of Canada and Argentina. Emotional Stability was linked to Nonreacting, Nonjudging, and Acting with Awareness in every country, although these associations were less strong in Argentina. Thus, there appears to be a clear link between personality traits and levels of mindfulness.

When meditating and practicing mindfulness we can encounter “obstructions, hindrances, corruptions of the mind, wakeners of wisdom” that hamper our progress (Saṃyutta Nikāya). These hindrances, which individuals seeking enlightenment and progress might encounter, include (1) Sensory Desire (Kāmacchanda), (2) Ill-Will (Vyāpāda), (3) Sloth and Torpor (Thīna-Middha), (4) Restlessness and Worry (Uddhacca-Kukkucca), and (5) Sceptical Doubt (Vicikicchā). These mental states are called “hindrances” because they bind us to ignorance and to suffering. Achieving enlightenment, or liberation, and spiritual and personal progress involves overcoming these hindrances, though there remains some difficulty in operationalising these variables for research purposes. Therefore, understanding and reducing these hindrances could be key to enhancing mindfulness, happiness, and well-being in a broader sense.

Anālayo (2022b) describes the five hindrances as “mental defilements” that impair the mind’s functioning, particularly by obstructing clarity and composure during meditation. Sparby (2022) points out the scarcity of research on meditation hindrances. However, he does mention various questionnaires that partially measure these hindrances. Notably, the Meditation Depth Questionnaire (MEDEQ) developed by Piron (2022), where the initial level of depth is termed “hindrances” and includes elements like restlessness, a busy mind, laziness, and feeling bored. In line with this, Katyal and Goldin (2021) observed that experienced meditators report fewer “hindrances” compared to novices. Van Dam et al. (2015) introduced the Behavioural Tendencies Questionnaire, assessing three of the hindrances identified in Buddhism: greed, hate, and ignorance. Zeng et al. (2019) created the Difficulties During Meditation Involving Immeasurable Attitudes Scale (DMIAS), which evaluates two specific hindrances: a lack of concentration and a deficit in prosocial emotions. Additionally, Russ et al. (2017) developed the Early Meditation Hindrances Scale, aiming to better understand the high attrition rates among participants in meditation programmes. They developed and validated an *Early Meditation Hindrances* instrument. Their items were based on the five meditation hindrances described in Theravadic texts and were generated and later tested for dimensionality. Analyses across two samples identified three consistent factors based on 12 items.

To some extent, the hindrances could be conceived of a stable coping mechanisms which are related to personality variables. There is a vast literature on coping and how some strategies are more or less successful in the long term. Furnham (2024) noted that there have been many attempts to classify coping styles and strategies with a variety of labels such as self-soothing, mindfulness, crisis – planning, confrontative, distancing, and escape/avoidance. Carver and Connor-Smith (2010) found optimism, extraversion, conscientiousness, and openness was linked to more engagement coping; neuroticism to more disengagement coping; and optimism, conscientiousness, and agreeableness to less disengagement coping. Hence, we expect personality traits to be systematically related to the Five Hindrances.

Up to this point, to the best of our knowledge, there has been few if any psychometrically validated scale specifically designed to assess the five hindrances. Addressing this gap, we embarked on the development of a new scale, beginning with a theoretical and deductive approach. Our aim was to encapsulate the essence of each of the Five Hindrances while ensuring that the items are comprehensible and relevant to individuals not deeply versed in Buddhist teachings. We also sought to make the scale applicable beyond the context of meditation, extending its relevance to the general pursuit of personal progress and growth. We accept that there may be subtle, indeed major differences, in how scholar and monks from different Buddhist traditions understand and define the five hindrances.

We also sought to explore how the five hinderances correlate with demographic factors (sex, age, and education) and personality traits. We utilised the High Potential Trait Indicator (HPTI), a validated trait measure grounded in the Big Five personality framework. The HPTI, referenced in several studies (Furnham & Treglown, 2018; MacRae & Furnham, 2016; Teodorescu et al., 2017), shares significant overlap with three traits of the Big Five (FFM) but introduces three additional traits associated with success across various job roles. The first and most extensively researched trait, Conscientiousness, is marked by self-discipline, organisation, and impulse control. The second trait, Adjustment,

related to low Neuroticism, involves emotional resilience, mood stability, and regulation. The third trait, Curiosity, akin to Openness, is characterised by an interest in new ideas, experiences, and situations. The fourth trait assessed by the HPTI is Ambiguity Acceptance (or Ambiguity Tolerance), which indicates how individuals perceive and process unfamiliarity or incongruence. The fifth trait, Competitiveness, which focuses on the adaptive aspects of competitiveness, encompassing self-improvement, a desire for individual and team success, and a propensity for learning. Lastly, the trait of Courage, or approach to risk, which is the ability to combat or mitigate negative or threat-based emotions and broaden the potential range of responses. We expected the Hindrances to be negatively correlated with Adjustment and Courage.

Method

Participants

A total of 263 participants completed the questionnaire: 45% were men and 55% were women. They ranged in age from 20 to 78 years, with the mean age being 46.3 years ($SD = 11.4$ years). Some 73% had a university degree. We chose to use a sample from different countries: 51% were from the UK, 14% from South Africa, 11% from USA, with the rest being from other countries. We assessed their political beliefs on a simple seven point scale from 1 = Very Conservative to 7 = Very Liberal (Mean = 5.38; $SD = 2.10$).

Procedure

Participants were recruited from a pool of individuals who had completed a psychometric assessment provided by test publisher, Thomas International, for occupational test use, and subsequently volunteered to take part in psychology research, completing a further battery of questions. Participants were incentivized to take part by being offered brief feedback on their results following the study. Participants were emailed to inform them of the study and provide them with a link to information on the survey and the opportunity to give their informed consent for researchers to analyse and publish the anonymized data. The study was conducted on an online survey platform. The research was approved by the research committee LSA/TI/2022. Finally, participants were debriefed, thanked for their time and provided feedback on their scores.

Measures

High Potential Trait Indicator (HPTI) (MacRae & Furnham, 2020)

The HPTI is a measure of personality traits, specifically within a workplace context. We chose this measure because of its psychometric properties and because it measures most of the Big Five traits (all except Extraversion) as well as Tolerance for Ambiguity which we thought most salient. It is comprised of six factors: Conscientiousness (Cronbach's $\alpha = .74$, McDonald's $\omega = .74$), Adjustment (Cronbach's $\alpha = .81$, McDonald's $\omega = .81$), Curiosity (Cronbach's $\alpha = .72$, McDonald's $\omega = .70$), Ambiguity Acceptance (Cronbach's $\alpha = .74$, McDonald's $\omega = .79$), Competitiveness (Cronbach's $\alpha = .74$, McDonald's $\omega = .73$), and Courage or Risk Approach (Cronbach's $\alpha = .80$, McDonald's $\omega = .80$). The inventory is 78 items in length. Each trait was converted into a standardised score to allow for

better comparison between traits. It has been used in a number of studies (Furnham & Impellizzeri, 2021; Furnham & Treglown, 2018; Teodorescu et al., 2017).

Five Hindrances Scale (5HS)

The 5HS is an instrument developed specifically for this study to measure obstacles to self-mastery and progress, as informed by Buddhist teachings. It comprises five factors with five items loading on each factor: Sensual Desire (Cronbach's $\alpha = .64$, McDonald's $\omega = .64$), Ill-Will (Cronbach's $\alpha = .78$, McDonald's $\omega = .79$), Sloth and Torpor (Cronbach's $\alpha = .84$, McDonald's $\omega = .85$), Restlessness and Worry (Cronbach's $\alpha = .81$, McDonald's $\omega = .78$), and Sceptical Doubt ($\alpha = .87$, McDonald's $\omega = .87$). Means and standard deviations of individual items can be found in Appendix.

We employed a deductive methodology to identify items that could capture manifestations of the five hindrances in everyday life, irrespective of an individual's familiarity with or practice of meditation and Buddhism. We first generated a number of items which we then edited for overlap and clarity, trying to capture the essence of each hindrance in five items. Our aim was to develop a measure where each hindrance was internally reliable as assessed by Cronbach's alpha and that the scores were not excessively positively correlated. To verify the alignment of our generated items with the traditional descriptions of the five hindrances in Buddhist teachings, we consulted with a practicing Buddhist monk and abbot associated with the Thai Forest Tradition (Kammaṭṭhāna) of Theravada Buddhism. He was known to us, spoke good English and learned in the Buddhist scriptures, though we acknowledge there may be disagreement among scholars of this tradition. Clearly it would have been advantageous to consult other Buddhist scholars expert on this topic, as there is clearly disagreement between them. Following his feedback, we made slight revisions and refinements to the items before administering them to our study participants.

Data analyses

We conducted confirmatory factor analysis was conducted using the lavaan R package (Rosseel, 2012) and the maximum likelihood with robust standard errors method was used for parameter estimation as data were not normally distributed. Fit indices can be found in Table 1. We also examined correlations between the included variables. To examine the association between 5HS and the personality dimensions we used regression analysis.

Results

Modest support was found for the factor structure. χ^2/df was below 3.0 and SRMR was below .8, both suggesting good fit, although CFI, TLI and RMSEA were outside of excellent fit thresholds. This suggests that more work needs to be done on the items to secure a better fit, nevertheless it seems acceptable for testing our assumptions.

Table 1. CFA fit indices for the five hindrances scale.

χ^2	df	p value	χ^2/df	CFI	TLI	RMSEA	SRMR
749.15	265	.000	2.826966	.84	.81	.08	.07

Table 2. Descriptive statistics and Pearson correlation coefficients between the measured variables.

	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Sensual Desire	19.32	5.79														
2. Ill-Will	17.52	6.22	.52**													
3. Sloth and Torpor	14.93	6.92	.59**	.57**												
4. Restlessness and Worry	18.40	7.02	.59**	.64**	.72**											
5. Sceptical Doubt	15.10	6.96	.48**	.56**	.64**	.76**										
6. Sex	1.54	.50	.12	.13*	.06	.13*	.24**									
7. Age	46.31	11.41	-.22**	-.34**	-.30**	-.33**	-.39**	-.22**								
8. Degree	1.27	.44	.04	-.02	.05	-.02	.01	-.10	.10							
9. Liberalism	5.38	2.10	.10	-.00	.10	.16*	.12	.06	-.12	-.15*						
10. Conscientiousness	63.03	20.42	-.31**	-.23**	-.57**	-.42**	-.35**	.06	.13*	-.09	-.07					
11. Adjustment	57.72	16.87	-.45**	-.69**	-.58**	-.72**	-.59**	-.13*	.29**	.01	-.07	.73**				
12. Curiosity	63.61	16.54	-.10	-.17**	-.21**	-.09	-.14*	.02	-.02	-.22**	.18**	.84**	.65**			
13. Risk Approach	58.21	16.33	-.33**	-.46**	-.59**	-.055**	-.58**	-.17**	.20**	-.04	-.06	.86**	.74**	.83**		
14. Ambiguity Acceptance	46.12	15.17	-.17**	-.28**	-.38**	-.032**	-.38**	-.07	.19**	-.15*	.06	.76**	.70**	.76**	.76**	
15. Competitiveness	45.95	12.66	.05	.18**	-.08	-.001	-.15*	-.12	-.20**	.02	-.07	.54**	.18**	.37**	.46**	.34**

* $p < .05$, ** $p < .01$.

Table 3. Regressions of demographic and personality variables on five hindrances factors.

	Sensual desire					Ill-will					Sloth and torpor					Restlessness and worry					Sceptical doubt				
	β	SE	Std β	t	p	β	SE	Std β	t	p	β	SE	Std β	t	p	β	SE	Std β	t	p	β	SE	Std β	t	p
Constant	33.90	4.27		7.95	.00	43.12	3.50		12.33	.00	52.90	3.84		13.79	.00	48.78	3.75		13.02	.00	44.13	3.99		11.05	.00
Sex	1.00	.71	.09	1.41	.16	.20	.58	.02	.34	.73	-.27	.64	-.02	-.42	.68	-.04	.62	-.00	-.06	.95	1.04	.66	.08	1.57	.12
Age	-.03	.03	-.06	-.89	.37	-.06	.03	-.11	-.234	.02	-.06	.03	-.10	-.209	.04	-.06	.03	-.09	-.197	.05	-.12	.03	-.21	-.411	.00
Degree	.66	.77	.05	.86	.39	-.31	.63	-.02	-.49	.63	.34	.69	.02	.49	.63	.17	.68	.01	.25	.80	.73	.72	.05	1.01	.32
Liberalism	.11	.17	.04	.69	.49	-.24	.14	-.08	-.175	.08	.05	.15	.01	.31	.76	.16	.15	.05	1.09	.28	.07	.15	.02	.46	.65
Conscientiousness	-.12	.05	-.20	-2.65	.01	.05	.04	.08	1.45	.15	-.25	.04	-.34	-6.20	.00	-.09	.04	-.12	-2.27	.02	.01	.04	.01	.15	.88
Adjustment	-.15	.03	-.32	-4.57	1.00	-.29	.03	-.57	-11.02	.00	-.17	.03	-.31	-5.96	.00	-.30	.03	-.53	-10.55	.00	-.20	.03	-.35	-6.52	.00
Curiosity	.02	.05	.03	.44	.66	-.03	.04	-.04	-.74	.46	.09	.04	.11	2.09	.04	.13	.04	.16	3.18	.00	.10	.04	.12	2.21	.03
Risk Approach	-.05	.05	-.09	-1.06	.29	-.15	.04	-.26	-3.93	.00	-.17	.04	-.26	-4.03	.00	-.19	.04	-.28	-4.56	.00	-.23	.04	-.36	-5.31	.00
Ambiguity Acceptance	.01	.04	.02	.37	.72	.01	.03	.01	.22	.83	-.06	.03	-.09	-1.74	.08	-.01	.03	-.02	-.40	.69	-.06	.04	-.09	-1.64	.10
Competitiveness	.05	.03	.10	1.57	.12	.09	.03	.16	3.28	.00	.01	.03	.02	.45	.66	-.01	.03	-.01	-.26	.80	-.08	.03	-.13	-2.54	.01
R ² (Adjusted R ²)	.26 (0.29)					.58 (.56)					.58 (.56)					.61 (.60)					.547 (.53)				
F	8.07					31.52					31.57					36.28					27.826				
p	<.001					<.001					<.001					<.001					<.001				

Table 2 shows the correlations between all variables. The hindrances are correlated $.47 < r < .76$. Three of the five correlations with sex indicating that females scored higher than males. All correlations between age and the hindrances were significantly negative. There was no association between degree status and hindrances.

Correlations between traits and hindrances was high, significant and consistent, indicating that Adjustment, Conscientiousness and Courage were all negatively associated with all five hindrances.

Table 3 shows the results of the regressions with demography, political beliefs and personality traits being the predictor (dependent) variables and the five hindrances (5HS) the criterion (independent) variables. We did various hierarchical regression but report the final step with all the predictor variables entered at the same time, and the betas are from the last step in the analyses. For all but the first Hindrance (Sensual Desire) the variables, particularly personality, were closely related and accounted for over 50% of the variance. In none of the regressions were sex, education or political beliefs significant while Adjustment was a significant negative correlate in all five regressions while Courage (Risk Approach) was significant in four. Interestingly Curiosity was significantly positively associated with Sloth and Torpor, Restlessness and Worry, and Sceptical Doubt.

Discussion

We believe that this is amongst the first published study both to attempt to devise a measure of the five hinderances but also relate them to personality and demographic variable. We consider this a pilot study and hope that it stimulates more work in this area. The essence of the five hinderances is that they are states that hinder healthy meditation and adjustment in daily life. As written in the *Samaññaphala Sutta*, the second discourse of the Digha Nikaya, to be burdened by the hindrances are like a debt, like a disease, like a prison, like slavery, and like a road through a desolate country. When these five hindrances are abandoned, it is as unindebtedness, good health, release from prison, freedom, a place of security (Samaññaphala Sutta, Digha Nikaya). The hindrances represent unhealthy mental states, habits, and cognitions that must be overcome to achieve personal growth and clarity. Therefore, identifying and reflecting on these hindrances is crucial for anyone pursuing mindfulness and self-improvement. A measure that enables individuals to assess the presence of these five hindrances in their lives could therefore be beneficial.

We found limited evidence for demographic correlates (sex, age, and education) with the 5HS, although there was some indication of age-related effects, especially concerning Sceptical Doubt. It is possible that as individuals age, they acquire greater self-awareness and understanding of the mind, which might lead them to recognise the counterproductive nature of the hindrances.

The 5HS were closely linked to Adjustment, and its opposite Neuroticism. This result was anticipated. The essence of Adjustment is resilience and good coping strategies. Highly adjusted people characterised by emotional stability in the face of stressors, positive affect, and mood stability and regulation. Just as Adjustment is the best predictor of mental health of the six factors so it seems having the 5HS is also related to stress and unhappiness.

The second factor that was most closely related to the 5HS was Courage (Risk Approach) which is the ability to combat or mitigate negative or threat-based emotions and broaden the potential range of responses. Courage is exhibited as the willingness to confront difficult situations and solve problems in spite of adversity. Thus, lacking courage can be a hindrance to meditation and enlightenment.

Curiosity and Competitiveness were little related to the 5HS, but interestingly positively related to some Hindrances. Indeed, Curiosity was associated with Restlessness and Worry while Competitiveness (low Agreeableness) was positively associated with Ill-Will. Curiosity (Openness) is characterised by an interest in new ideas, experiences and approaches to problems, which could lead to be over-cerebral and unable to make decisions. Competitiveness focuses on the drive self-improvement, desire for individual success and winning which can be associated with poor adaptation.

It was also interesting that Tolerance of Ambiguity was negatively associated with the 5HS in the correlations but was essentially unrelated to them all in the regressions. Predictably Conscientiousness was related to low Sloth and Torpor.

We believe our study contributes significantly through the development of the 5HS questionnaire. This instrument may prove valuable not only for individuals keen on exploring how they are impacted by the five hindrances but also for scholars interested in investigating the relationships between these mental states and various outcomes (e.g., burnout, aggressive behaviour, mental health etc.). However, we do accept that from a psychometric view we have to see this as a preliminary, pilot study with more work being done on the items, partly with the consultation with Buddhist scholars.

Limitations and future directions

This study, like all studies, had its limitations. It would have been beneficial to gather more detailed information about the participants, especially regarding their religious beliefs, practices, levels of mindfulness, and their self-assessed mental health and happiness. Similarly, the research was a cross-sectional study relying solely on self-reported data; having peer evaluations of participants' health and happiness would have greatly enriched the findings.

Perhaps most importantly we needed to consult more Buddhist scholars concerning our scale and whether the items indeed accurately reflected the teachings about the hindrances. Theologians in all religions tend to disagree about the interpretation of holy texts and we need to understand the general level of agreement amongst them with regard our measure. In this sense then, this was a pilot study which attempts to encourage more work in this area.

Future studies exploring the relationship between the five hindrances and other constructs and outcomes could enhance our understanding of the role these hindrances play in various phenomena. For instance, investigating how the five hindrances correlate with levels of mindfulness, mental health, burnout, general life satisfaction, aggression, and counterproductive behaviour presents intriguing avenues for further research.

Exploring how the hindrances relate to meditation practices presents another promising avenue for future research. A pertinent question is whether a Five Hindrances Scale (5HS) can help meditators pinpoint specific areas for focus, thereby facilitating enhanced

meditation and mindfulness. Additionally, it is worth investigating how regular meditation can reduce the impact of these hindrances, as reflected by changes in 5HS scores. By developing and examining a measure for the five hindrances, and linking it to established personality measures, we aim to encourage further research into how these hindrances influence individuals' lives. We also hope that the 5HS, and measures that it inspires, will be useful for the general public in identifying and reflecting on the hindrances that impede their daily and meditative practices.

Ethics statement

This was sought and obtained (LSA/TI/2022).

Informed consent

Participants gave consent for their anonymized data to be analysed and published.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Data availability statement

This is obtainable from the first author upon request.

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References

- Anālayo, B. (2013). Hindrances (Buddhist). In A. L. C. Runehov & L. Oviedo (Eds.), *Encyclopedia of sciences and religions* (pp. 987–989). Springer. https://doi.org/10.1007/978-1-4020-8265-8_1620
- Anālayo, B. (2022a). Education and mindfulness: An early Buddhist contribution to the ongoing dialog. *Mindfulness*, 13(10), 2413–2419. <https://doi.org/10.1007/s12671-022-01921-8>
- Anālayo, B. (2022b). Hindrance in early Buddhist meditation. In N. N. Singh (Ed.), *Encyclopedia of mindfulness, Buddhism, and other contemplative practices* (pp. 1–2). Springer. https://doi.org/10.1007/978-3-030-90465-4_44-1
- Argyle, M. (1999). Causes and correlates of happiness. In D. Kahneman, E. Diener, & N. Schwarz (Eds.), *Well-being: The foundations of hedonic psychology* (pp. 353–373). Russell Sage Foundation.
- Bhikkhu, B. (Ed.). (2005). *In the Buddha's words: An anthology of discourses from the Pāli Canon*. Wisdom. ISBN 0-86171-491-1.
- Carver, C. S., & Connor-Smith, J. (2010). Personality and coping. *Annual Review of Psychology*, 61, 679–704. <https://doi.org/10.1146/annurev.psych.093008.100352>
- Diener, E. (2000). Subjective well-being: The science of happiness and a proposal for a national index. *American Psychologist*, 55(1), 34–43. <https://doi.org/10.1037/0003-066X.55.1.34>
- Furnham, A. (2024). Correlates of coping styles. *Health*, 16, 592–601. <https://doi.org/10.4236/health.2024.167041>

- Furnham, A., & Impellizzeri, S. (2021). The personality and motivation of “quants”: The maths geniuses of Wall Street. *Journal of Financial Management, Markets and Institutions*, 2150002. <https://doi.org/10.1142/S2282717X2150002X>
- Furnham, A., & Treglown, L. (2018). High potential personality and intelligence. *Personality and Individual Differences*, 128, 81–87. <https://doi.org/10.1016/j.paid.2018.02.025>
- Gethin, R. (1998). *The foundations of Buddhism*. Oxford University Press.
- Giluk, T. L. (2009). Mindfulness, Big Five personality, and affect: A meta-analysis. *Personality and Individual Differences*, 8(47), 805–811. <https://doi.org/10.1016/j.paid.2009.06.026>.
- Katyal, S., & Goldin, P. (2021). Alpha and theta oscillations are inversely related to progressive levels of meditation depth. *Neuroscience of Consciousness*, 1, niab042. <https://doi.org/10.1093/nc/niab042>
- Lee, J., Kim, K. H., Webster, C. S., & Henning, M. A. (2021). The evolution of mindfulness from 1916 to 2019. *Mindfulness*, 12, 1849–1859. <https://doi.org/10.1007/s12671-021-01603-x>
- MacRae, I., & Furnham, A. (2016). *High Potential Traits Inventory: Leadership capacity testing manual*. High Potential Psychology Ltd.
- MacRae, I., & Furnham, A. (2020). A psychometric analysis of the High Potential Trait Inventory (HPTI). *Psychology (Savannah, GA)*, 11(8), 1125–1140. <https://doi.org/10.4236/psych.2020.118074>
- Piron, H. (2022). Meditation Depth Questionnaire (medeq) and meditation depth index (medi). In *Handbook of Assessment in Mindfulness Research* (pp. 1–16). Cham: Springer International Publishing.
- Roemer, A., Cervin, M., Medvedeva, A., Bravo, A. J., & Medvedev, O. N. (2024). Big five of mindfulness and personality: Cross-cultural network analysis. *Mindfulness*, 15(1), 37–47. <https://doi.org/10.1007/s12671-023-02293-3>
- Rosseel, Y. (2012). Lavaan: An R package for structural equation modeling. *Journal of Statistical Software*, 48, 1–36. <https://doi.org/10.18637/jss.v048.i02>
- Russ, S. L., Maruyama, G., Sease, T. B., & Jellema, S. (2017). Do early experiences matter? Development of an early Meditation Hindrances Scale linked to novice meditators’ intention to persist. *Psychology of Consciousness: Theory Research, and Practice*, 4, 274. <https://doi.org/10.1037/cns0000129>
- Shonin, E., Van Gordon, W., & Griffiths, M. D. (2014). The emerging role of Buddhism in clinical psychology: Toward effective integration. *Psychology of Religion and Spirituality*, 6, 123–137. <https://doi.org/10.1037/a0035859>
- Sparby, T. (2022). What stands in the way becomes the way: Dual and non-dual approaches to meditation hindrances in Buddhist traditions and contemplative science. *Religions*, 13, 840. <https://doi.org/10.3390/rel13090840>
- Tan, S., Fang, P., Shi, W., & Du, S. (2023). Buddhist culture as a safeguard for the subjective happiness of Chinese residents: Mitigating anxiety regarding housing prices, unemployment, and inequality. *Frontiers in Psychology*, 14, 1282114. <https://doi.org/10.3389/fpsyg.2023.1282114>
- Teodorescu, A., Furnham, A., & Macrae, I. (2017). Trait correlates of success at work. *International Journal of Selection and Assessment*, 25(1), 36–42. <https://doi.org/10.1111/ijsa.12158>
- Thiradhammo, A. (2014). *Working with the five hindrances*. Aruno Publications.
- Van Dam, N. T., Brown, A., Mole, T. B., Davis, J. H., Britton, W. B., & Brewae, J. A. (2015). Development and validation of the Behavioral Tendencies Questionnaire. *PLoS One*, 10, e0140867. <https://doi.org/10.1371/journal.pone.0140867>
- Zeng, X., Wang, R., Chan, V. Y., Oei, T. P., & Leung, F. Y. (2019). The development of the Difficulties During Meditation Involving Immeasurable Attitudes Scale. *Mindfulness*, 10, 812–823. <https://doi.org/10.1007/s12671-018-1051-8>

Appendix

Means and Standard Deviations of Five Hindrance Items

Item	Factor	Item	Mean	SD
1	Sensual desire	When working on achieving a goal I tend to spend too much time on other things I find more enjoyable than on the tasks at hand.	3.49	1.80
2	Sensual desire	I tend to buy things on impulse even when I need the money for other more important thing (e.g., pay bills).	2.65	1.88
3	Sensual desire	I tend to overeat when I am served food I really like.	4.16	2.07
4	Sensual desire	When I do something I really enjoy, I find it hard to stop even when I know I have to.	5.29	1.52
5	Sensual desire	I find it hard to postpone things I find pleasurable.	3.73	1.73
6	Ill-will	People say I focus too much on the negative aspects of situations.	2.86	1.62
7	Ill-will	When a situation fails to meet my expectation, I tend to use a lot of energy being annoyed about this.	3.76	1.78
8	Ill-will	I often get angry and resentful when things do not turn out as planned.	3.16	1.67
9	Ill-will	I often hold grudges	3.27	1.86
10	Ill-will	I am critical of people who don't live up to my standards or expectations.	4.47	1.57
11	Sloth and Torpor	I often feel inhibited by a lack of energy when working on achieving a goal.	3.08	1.83
12	Sloth and Torpor	I often find myself in a state of amotivation.	3.65	1.77
13	Sloth and Torpor	I tend to feel that everything is dull and meaningless.	2.62	1.64
14	Sloth and Torpor	I often forgo opportunities due to laziness.	2.59	1.70
15	Sloth and Torpor	I tend to spend time just being passive, e.g., sitting in the sofa doing nothing.	2.98	1.89
16	Restlessness (and Worry)	When working on achieving a goal I am often hindered by my mind wandering off, or jumping from idea to idea.	3.82	1.86
17	Restlessness (and Worry)	I am easily distracted and often have often have problems focusing on the task at hand.	3.64	1.91
18	Restlessness (and Worry)	I often worry a lot about what might happen in the future.	3.95	1.89
19	Restlessness (and Worry)	I tend to get lost in thoughts about the past instead of focusing on how I should proceed.	3.24	1.70
20	Restlessness (and Worry)	I often have problems controlling my worrying.	3.76	1.96
21	Skeptical Doubt	I often find it hard to make decisions.	3.18	1.75
22	Skeptical Doubt	When I need to make a decision, I often overthink things and spend too much time and energy considering different options.	4.15	1.85
23	Skeptical Doubt	I often doubt my ability to overcome problems when working on accomplishing my goals.	2.94	1.78
24	Skeptical Doubt	I don't trust myself to make important decisions on my own.	2.38	1.65
25	Skeptical Doubt	I have trouble making everyday decisions without needing advice from others	2.45	1.57