

Review Article

Is Mindfulness Related To Altruistic Or To Socially Conservative Values? Exploring the ‘Mindful-Altruism Hypothesis’ In Indian Adult Novice-Meditation Practitioners

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Submitted: 28 December 2023

Accepted: 27 January 2024

Published: 30 January 2024

ISSN: 2334-2307

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OPEN ACCESS**Keywords**

- Mindful-Altruism Hypothesis
- Universal Human Values
- Conformity-Interpersonal
- Security-Personal
- Mindful-Autonomy Paradox

Abstract

The interplay between trait mindfulness (TM) and values was investigated within a cohort of 580 (291 Females; Mean Age: 22.5 years) novice Indian meditators. Drawing upon Schwartz's universal human values framework, the associations between TM and higher-order value quadrants (e.g., self-transcendence, conservation), as well as the nineteen narrowly defined values (e.g., universalism, conformity), were studied in the youth sample belonging to collectivistic cultural settings. Intriguingly, our findings unveiled a nuanced pattern in Schwartz's conservation value quadrant wherein the TM had significant yet small positive and negative associations with security-personal and conformity-interpersonal refined values, respectively, even after controlling for personality traits. Contrary to expectations, the hypothesized associations between TM and self-transcendence quadrant values did not reveal themselves prominently. Overall results might suggest a potential "Mindful-Autonomy Paradox" wherein individuals with higher TM prioritize individual safety-security whilst exhibiting a divergence from strict conformity to societal norms, instead of the forecasted "Mindful-Altruism Hypothesis" which seems as a natural extension of C. Daniel Batson's "Empathy-Altruism Hypothesis". These nuanced associations underscore the complexity inherent in understanding how mindfulness relates to diverse value orientations; however, further exploration into the multifaceted nature of aforementioned values-mindfulness constructs within the realm of the prevailing cultural intricacies is warranted.

INTRODUCTION

Historically Rokeach et al. [1], posited values as one's intrinsic guiding principles, whereby one's actions are being directed by the pivotal role of one's values. Schwartz et al. [2], conceptualised values as beliefs navigating one's consistent pursuit of goals across situations, being associated with one's moral compass and ideals-driven motivations. However, the need to identify factors bridging one's values and one's behaviours were stated as crucial in apriori research by Bardi and Schwartz [3], having found only a moderate association between values and the behaviours reflecting them. Fitzpatrick and colleagues [4] emphasised the significance of exploiting the intricate effect on one's actions of one's values whilst proposing veritable pathways via which behaviour can be impacted by values such as relevance, personality traits, self-control, increased awareness owing to life experiences, etc. The necessity for further clarity is being

endorsed in the literature concerning the vicinity of values to attitudes in the sense of their formal operational definitions [5]. In summary, a need to pinpoint the factors that exist, especially in the Indian context, given the previously found modest correlation between human values and the actions embodying them [3,6].

Values-Behaviour Concordance (VBC) and Extrinsic-Intrinsic Values

Values being the navigating principles that vary from one individual to another [1], form the core of the personal identity [7]. However, despite the cruciality of value endorsement, behavioural congruence cannot be predicted by it [5]. Previously another framework, the 'moral personality theory', posited that prosocial behaviour is promoted by salient accessible moral information via repeated cognitive activations of moral schemas [8]. Besides, related studies also observed enhanced value-expressive behaviours with mental activation of values achieved

through writing-related value priming exercises in adolescents [9,10]. Hence in the sense of value-behaviour concordance (VBC), achieving congruence between values and behaviours requires active engagement in the value clarification process, often involving intermediary stages like goal setting to align actions accordingly. Deci & Ryan [11], in the self-determination theory (SDT), categorised values into two primary categories, intrinsic values, which align with an individual's basic psychological needs (self-acceptance, community feeling, affiliation, etc), and extrinsic values addressing an individual's need indirectly (financial success, social recognition, attractive appearance, etc). The current study explored human values in the Indian context from the perspective of Schwartz's values theory [2,12] which structures human values in a spectrum portraying their conflicts and compatibilities in the underlying motivations. Thus in the Schwartz framework, the four primary quadrants carry structural-functional relationships, as example the self-enhancement values quadrant (power, achievement, hedonism) is antagonistically placed to the self-transcendence values quadrant (universalism & benevolence) but adjacently placed to the conservation and openness-to-change values quadrant [13]. VBC-related research has been emphasising the advantages of intrinsic values and the drawbacks of extrinsic values [14,15], suggesting that consistent behavior aligned with intrinsic values probably enhances meaning and life satisfaction whilst extrinsic values undermine the stated indicators of flourishing.

Human Values & its Connections with Mindfulness

Parallely, mindfulness, defined as the non-judgemental awareness of thoughts, feelings, and sensations in the present moment [16], forms a huge part of our ancient knowledge tradition systems. Similar to the mechanisms expressed in moral personality theory, VBC or SDT, mindfulness involves an attentive focus on one's thoughts, feelings, surroundings, and actions [17], employing comparable mental processes. Mindfulness might aid in bridging the gap between values and behaviour amongst young individuals, especially by offering them a more frequent connection to their values, heightened recognition of behaviours incongruent with those values, and assistance in identifying behavioural opportunities aligned with their values [18]. Apriori studies also support this notion, as adolescents demonstrating mindfulness showed reduced problematic internet usage [19], and adults practising mindfulness exhibited decreased impulsive eating behaviours [20]. Some mindfulness-based programs such as 'Acceptance & Commitment Therapy (ACT)' [21], 'Mindfulness Self-Compassions (MSC)' [22] have previously incorporated into their curriculums the practice of identifying and clarifying values. Moreover, considering the association between (in)congruence in values and well-being [23], this prompts an exploration of the efficacy of mindfulness in nurturing values and its correlation with overall well-being. Several studies thereby have investigated the relationship between mindfulness and values, such as mindfulness' association with well-being having been influenced by actions congruent with one's values [24], improved moral reasoning following a 2-month 'Mindfulness-Based Stress Reduction' program [25], a greater values-action congruence in

high-frequency meditators [26], and a slight decrease in repeat offences following values focussed mindfulness intervention in male inmates [27].

Is a 'Mindful-Altruism Hypothesis' Plausible?

C. Daniel Batson's [28], empathy-altruism hypothesis has been explicated successfully in various empirical studies that consistently support the idea that individuals with increased empathy tend to participate in behaviours that benefit others, displaying altruistic inclinations [29,30,31]. Past research has also emphasised the critical need to delve into the relationship between empathy and values, pointing out empathy as a crucial factor for individual and societal moral development and decision-making [32,33]. Developing a 'mindfulness-altruism hypothesis' as an extension of the 'empathy-altruism hypothesis' can be an intriguing avenue for research especially given the latter's rather successful explication. The current study aimed to explore the potential link between mindfulness and altruistic behaviour; whereas the empathy-altruism hypothesis focused on empathy as a driver for altruistic actions, the mindfulness-altruism hypothesis might propose that mindfulness practices/states and/or mindfulness traits could influence or enhance altruistic behaviour in individuals. Investigating the association between trait mindfulness and altruism plausibly could yield valuable insights into how mindful mental states and/or practices might influence prosocial behaviour, adding depth to our understanding of the psychological mechanisms underlying altruistic acts beyond empathy alone. A recent study [34] stated high context modularity (factors as education & age modulated) in human altruism, however overarching finding was that the respondents who engaged in mindful meditation were engaging more in altruistic actions than the respondents who did not. Besides other studies [35-37] previously have reported favourable results to meditation-based interventions on altruism-promoted social decision-making.

Mindfulness-Values Associations beyond Personality Traits

Another study [38], in explication of the empathy-altruism hypothesis, explored and established the associations between empathy and altruistic values, after controlling for personality factors from a Western cultural context. The hypothesis has also been established in an Indian sample [39]. Both studies have demonstrated that empathy does play a crucial role beyond the canonical factor of an individual's personality traits, explaining a considerable proportion in both the Indian (~10%) and Western (~30%) samples. Besides, our 'mindful-altruism hypothesis' might propose that individuals who regularly practise mindfulness and/or have higher dispositional mindfulness [40,41] coefficient might exhibit increased empathic concern, emotional regulation, or perspective-taking abilities. These qualities, in turn, could enhance their inclination towards altruistic behaviour akin to apriori established 'empathy-altruism hypothesis' [42,33,43]. Moreover, the associations of personality traits with dispositional mindfulness (DM) have been previously studied [44,45], wherein

clusters of self-regulation traits (positive conscientiousness & negative neuroticism), self-awareness traits (positive openness), and conscientiousness traits had emerged, albeit in an unclear fashion [46]. Conjunctively a huge quantum of research [47,48,49] has investigated the relationships amongst the five-factor personality model (FFM) and Schwartz's universal human values. Delineating from the scopes of studying personality-value associations and personality-mindfulness associations, the present study investigates the prediction of universal human values by trait dispositional mindfulness beyond FFM traits in the Indian novice meditation-practitioners sample.

Objectives of the Study- Towards 'Mindful-Altruism Hypothesis'

Limited research is available on the interplay between trait dispositional mindfulness and the basic values belonging to self-transcendence, self-enhancement, openness-to-change, and conservation quadrants as described in Schwartz's value framework [13] in the context of the Indian adult population. Traditional collectivistic societies like India pose higher salience due to their prioritisation of harmonious interpersonal relationships with others via adherence to societal norms [50]. The behavioural tendencies to adhere to socially established rules, traditions, norms, and customs of individuals are reflected in Schwartz's value systems of conformity and security [12]. On the other hand, altruistic values in Schwartz's spectrum belong to the self-transcendence quadrant, namely universalism and benevolence. Universalism refers to the importance of understanding, appreciation, tolerance, and conservation for the well-being of all people, nature, and the broader community around one, whilst benevolence refers to the stance of kindness, empathy, and the well-being of close others.

This investigation gains even more relevance, especially in collectivistic cultures, whereby the delicate balance between personal introspection and communal cohesion is at the forefront. Therefore, it raises the question of whether is there a potential relationship between Schwartz's conservation and tradition-oriented values with trait mindfulness. Will self-transcending values possess a positive association with mindfulness, akin to the 'empathy-altruism hypothesis'? The study thereby explores the dynamic relationship between trait mindfulness and the conservation quadrant values of security-conformity and self-transcending values of universalism-benevolence.

Hypotheses-1 (Higher Order Value Quadrant Based: Correlational)

H1.1_A: Trait DM will have a positive association with conservation values quadrant in the novice Indian meditators sample.

H1.2_A: Trait DM will have a positive association with self-transcendence values quadrant in the novice Indian meditators sample.

Hypotheses-2 (Higher Order Value Quadrant Based: Hierarchical Regression)

H2.1_A: Trait DM will predict conservation values quadrant positively beyond FFM personality traits in novice Indian mediators' sample.

H2.2_A: Trait DM will predict self-transcendence values quadrant positively beyond FFM personality traits in novice Indian meditators' sample.

Hypotheses-3 (19 Narrowly Defined Values Based: Correlational)

H3.1_A: Trait DM will have a positive association with security-, conformity-, and tradition-based narrowly defined values in novice Indian mediators' sample.

H3.2_A: Trait DM will have a positive association with universalism- and benevolence-based narrowly defined values in novice Indian meditators' sample.

Hypotheses-4 (19 Narrowly Defined Values Based: Hierarchical Regression)

H4.1_A: Trait DM will predict security-, conformity-, and tradition-based narrowly defined values positively beyond FFM personality traits in the novice Indian mediators' sample.

H4.2_A: Trait DM predict universalism- and benevolence-based narrowly defined values positively beyond FFM personality traits in novice Indian meditators sample.

METHOD

Data Acquisition

Data were collected from 580 adult participants (291 females, 289 males; Mean Age = 22.517y, S.D. Age = 4.45y) by administering 3 standardized scales (in English language) using the Google Forms platform. Three scales consisted of the 'Five Facet Mindfulness Questionnaire' [41] for mindfulness traits, the revised 'Portrait Values Questionnaire' [13] to assess personal values, and the 'Big Five Inventory' [51] for personality. Purposive and snowball sampling were used for recruiting respondents. Our stringent inclusion criteria required all respondents to be currently belonging to an Indian educational institution (bachelor's, master's, doctoral, or post-doctoral). It was ensured that participants knew English reading and comprehension skills apriori to participation. Apriori informed consent was obtained from all participants, instructions were clearly given, and the anonymity of personal information was assured. Responses that were error-laden or invalid were removed by flagging responses that were incomplete, had missing data, or had logically inconsistent content (suspiciously patterned/repetitive responses). The current study strictly adhered to the ethical protocols for research involving human subjects particularised by the the Indian Council of Medical Research (ICMR), obtaining the requisite approval from the Institute Ethics Committee of

the Indian Institute of Technology, Delhi (IEC-IITD; Proposal No. P021/P0101).

Instruments Used

The Revised Portrait Value Questionnaire (PVQ-RR): PVQ-RR was developed by Schwartz and colleagues in 2012 [12]. It consists of 57 items and is a self-report questionnaire aimed at measuring universal values. Cronbach Alpha for Schwartz's refined values dimensions computed for our sample (mean: 0.657, only the humility dimension had below-par reliability, range being 0.339 to 0.832); the same for security-personal and conformity-interpersonal refined values being 0.601 and 0.681, respectively, indicating sufficient internal consistency. For the value quadrants, the Cronbach Alpha were 0.859 (Self-Transcendence), 0.771 (Self-Enhancement), 0.857 (Openness to Change), and 0.850 (Conservation). The general psychometric properties of this scale have been previously cross-culturally validated across 49 cultural groups, including the Indian population [13].

Five Facet Mindfulness Questionnaire (FFMQ): FFMQ was developed by Baer and colleagues [41] and consists of 39 items designed to measure dispositional mindfulness with respect to its dimensions (observing, describing, and acting with awareness, non-judging, non-reactivity). The Cronbach's alpha coefficient obtained for the mindfulness trait was 0.814, illustrating good internal consistency in our sample. Previous studies have confirmed its good construct and conceptual validity in individualistic cultures [52]. However, some studies have reported 'observing' [53] and 'describing' [54] dimensions to have weak validity in collectivistic cultural contexts. Hence, we decided to solely utilize the total mindfulness score for the study and not the individual dimension scores.

Big Five Inventory (BFI): BFI, developed by Goldberg in 1993 [51], consists of 44 items that individuals rate on a five-point scale. This inventory is designed to measure personality across five domains for which Cronbach alpha values were obtained for our sample: Openness to experiences [$\alpha = 0.726$], Conscientiousness [$\alpha = 0.699$], Extraversion [$\alpha = 0.786$], Agreeableness [$\alpha = 0.689$], and Neuroticism [$\alpha = 0.815$]. The scale has shown stable internal consistencies across diverse cultural samples [55].

Procedure

Post-data collection, R-jamovi [56,57] was used to carry out the preliminary correlational analysis. This was followed by regression [58] to investigate relationships between the three variables, post probing for statistical assumptions like normality testing, multicollinearity, and homoscedasticity. After performing zero-order correlation analysis for hypotheses 1 and 3, we conducted a two-stage hierarchical regression analysis to explicate the contribution of mindfulness beyond personality factors to determine the incremental predictive relationship of trait DM on both the conservation- and self-transcendence-related values in hypotheses 2 and 4. In step 1, we input FFM-BFI personality traits as independent variables (IV) in the model;

and in step 2, we added mindfulness to personality traits to compute the combined predictive effect. In order to determine if mindfulness contributed to unique variance beyond personality, the net change in variance of Schwartz's values after accounting for the Big Five personality's contribution was illustrated by ΔR^2 . Additional change (Δ) in variance in values explained by mindfulness over personality was denoted as follows:

$$\Delta R^2 = \{\text{Variance Explained by Personality \& Mindfulness (Step 2)}\} - \{\text{Variance Explained by Personality (Step 1)}\} = \{\text{Percentage Variance Explained by Mindfulness on Values Exclusively}\}$$

RESULTS

The scope of our study involved focusing on testing the plausible 'mindful-altruism hypothesis' and relating hypothesis wherein the effects of trait mindfulness are investigated upon conservation-related personal values in novice meditators Indian adult sample. Bonferroni adjustments were employed to mitigate the risk of Type I errors and family-wise error rate linked with numerous comparisons for both the quadrant-level values' hypotheses (1&2) and refined-values-based hypotheses (3&4). This resulted in an adjusted p-value of 'p = 0.00263' and 'p = 0.0125' for refined-value level and quadrant-level, respectively, to maintain significance at the 'p = 0.05' threshold.

Hypotheses-1 (Higher Order Value Quadrant Based: Correlational)

Pearson-product moment correlation revealed that trait DM has a significant positive correlation with conservation values quadrant [$r(578) = 0.110, p < .01, \text{adjusted-}p < 0.0125$] in the novice Indian meditators sample, whereby we fail to reject H1.1_A. Trait DM also showed a significant positive correlation with self-transcendence [$r(578) = 0.191, p < .001, \text{adjusted-}p < 0.0125$], hence failing to reject H1.2_A as well.

Hypotheses-2 (Higher Order Value Quadrant Based: Hierarchical Regression)

Trait mindfulness did not exert any significant incremental predictive influence after controlling for personality factors, on either conservation or self-transcendence higher value quadrants after controlling for personality factors. Hence we failed to accept H2.1_A and H2.2_A.

Hypotheses-3 (19 Narrowly Defined Values Based: Correlational)

Interestingly, trait DM showed a non-significant correlation with all the universalism and benevolence-based refined values, viz. universalism-nature, universalism-concern, universalism-tolerance, benevolence-care, and benevolence-dependability. Therefore, we could not accept H3.2_A. However, trait DM was observed to be negatively correlated with conformity-interpersonal values [$r(578) = -0.253, p < .001, \text{adjusted-}p < 0.00263$] in a statistically significant manner. Besides, a marginally significant positive correlation was observed between

trait mindfulness with security-personal [$r(578) = 0.125, p < .01$] and security-societal [$r(578) = 0.134, p < .01$] values. Trait DM further showed a non-significant relationship with conformity-rules and tradition values. Therefore, we partially accepted H3.1_A.

Hypotheses-4 (19 Narrowly Defined Values Based: Hierarchical Regression)

After controlling for personality factors, mindfulness did not exert any significant incremental predictive influence on universalism-nature, universalism-concern, universalism-tolerance, benevolence-care, and benevolence-dependability. Therefore, we failed to accept H4.2_A. Hierarchical analysis indicated a significant percentage of variance in the values of security-personal ($\Delta R^2 = 2.29\%$) and conformity-interpersonal ($\Delta R^2 = 2.85\%$) explained by mindfulness alone beyond personality factors. Although trait DM could not account for any variance beyond FFM-BFI traits for the other conservation-tradition-security narrowly defined 19 values. Therefore, we partially failed to reject H4.1_A, albeit partially.

DISCUSSION

Our findings supported the correlation hypotheses (H1.2_A) as trait DM wherein a significant positive correlation with the self-transcendence values quadrant was observed, but the hierarchical regression analyses (H2.2_A, H4.2_A) could not reveal any incremental predictive power of trait DM on self-transcendence values beyond personality factors. Further, the results supported the correlational hypotheses (H1.1_A) as trait DM had a significant positive correlation with the conservation values quadrant. However, the mixed incremental predictive influence of trait DM on conservation values after controlling for personality factors was observed during the hierarchical regression analyses (H2.1_A, H4.1_A). The trait DM had no predictive power at the conservation quadrant level, wherein the values of tradition, conformity, and security are clubbed. Albeit at the magnified 19 refined values level, security-personal and conformity-interpersonal had subtle yet significant predictive influences of trait DM on them beyond FFM personality traits in the positive and negative directions, respectively.

The 'Mindful-Autonomy Paradox'!

Higher levels of trait DM are associated with a significant positive relationship between security-personal, implying that individuals higher on mindfulness may prioritise their own security as well as the security of those in their immediate environment. As people pay attention to the present moment, the increased awareness brought on by a higher level of mindfulness may promote a feeling of psychological security and subjective well-being [59]. According to Aldao et al. [60], heightened awareness of one's body and surroundings may aid in the control of unpleasant emotions like fear and anxiety, making people feel safer and more emotionally stable. Moreover, mindfulness showed a negative association with conformity-interpersonal, which can be potentially attributed to the development of an internal reference point while making decisions [61], and is less

susceptible to outside pressure, which lessens the need to fit in with societally established rules. A mindful person's behaviour may challenge or deviate from conformity as they embrace their true selves and free will [62].

The term 'mindful-autonomy paradox' embodies the idea that individuals possessing higher trait mindfulness might exhibit a paradoxical behavioural inclination, wherein they tend to emphasise on personal safety, security, and health, reflecting a mindful approach towards self-preservation, implying a reluctance or divergence from strict conformity, or adherence to rules, customs, and regulations. This paradoxical interplay denotes a nuanced relationship between a mindful approach to personal well-being and a tendency to not necessarily conform to societally established structures governing human behaviour.

Has the 'Mindful-Altruism Hypothesis' Failed in Our Sample?

The collectivistic settings of our sample might have been one of the reasons as to why the mindful-altruism hypothesis was unclear in our sample. Moreover, it explains why the mindfulness trait had weak but statistically persistent influences on autonomic values from a conservationist cultural point of view. However it is to be noted that the altruistic perspective did reflect in the self-transcendence quadrant association with mindfulness but with a small effect size with a statistically significant correlation. It is interesting to note that our previous study [39] was able to explicate C. Daniel Batson's empathy-altruism hypothesis [30] in the Indian cultural context with some notable differences. The current study's mindful-altruism findings warrant further explorations studying the associations at a deeper level with respect to trait mindfulness, warranting explorations with regards to sub-dimensions (observing, describing, acting with awareness, non-judgment), and may be at a broader level of 10 universal values with regards to the presently investigated level of Schwartz's nineteen refined values. Following from our results, the authors opine that with the current results, over-generalisation should be avoided with a special sensitivity to diverse cultural settings, simultaneously directing efforts to account for the confounding influence of factors such as personality traits, empathy, etc.

LIMITATIONS & FUTURE SCOPE

These findings have significant implications for understanding the interpersonal and societal aspects by acknowledging the role of mindfulness in shaping attitudes toward security and conformity values. The study has highlighted the integration of mindfulness into decision-making based on internal reference points and managing external pressure, pointing towards a possibility of enhanced autonomy values being linked intrinsically to enhanced mindfulness. Future researchers can use more refined measurement approaches to capture the nuanced aspects of complex constructs, such as mindfulness and autonomy-related values, alleviating concerns about construct validity. The results seen in this study can be further explored through qualitative interviews, delving deeper into the multifaceted interpretations

of 'noncompliance' in various cultural settings and deriving themes relevant to the 'mindful-autonomy paradox'. Additionally, employing longitudinal designs as well as conducting mediation and moderation analyses in subsequent studies can elucidate the causal dynamics and underlying mechanisms between mindfulness and autonomy, providing clarity on whether mindfulness influences the development of autonomy-related values or vice versa.

REFERENCES

- Rokeach M. The nature of human values. Free Press. 1973; 53: 659-660.
- Schwartz SH. Are there universal aspects in the structure and contents of human values? *J Soc Issues*. 1994; 50: 19-45.
- Bardi A, Schwartz SH. Values and behavior: strength and structure of relations. *Pers Soc Psychol Bull*. 2003; 29: 1207-20.
- Fitzpatrick M, Henson A, Grumet R, Poolokasingham G, Foa C, Comeau T, et al. Challenge, focus, inspiration and support: processes of values clarification and congruence. *Journal of Contextual Behavioral Science*. 2016; 5: 7-15.
- Hitlin S, Piliavin JA. Values: Reviving a dormant concept. *Annu Rev Sociol*. 2004; 30: 359-393.
- Finlay A, Wray-Lake L, Warren M, Maggs JL. Anticipating Their Future: Adolescent Values for the Future Predict Adult Behaviors. *Int J Behav Dev*. 2015; 39: 359-367.
- Hitlin S. Values as the core of personal identity: Drawing links between two theories of self *Soc Psychol Q*. 2003; 118-137.
- Karl JA, Prado SMM, Gračanin A, Verhaeghen P, Ramos A, Mandal SP, et al. A social-cognitive approach to the moral personality. In *Moral development, self, and identity*. Psychology Press. 2004; 201-224.
- Hulleman CS, Harackiewicz JM. Promoting interest and performance in high school science classes. *Science*. 2009; 326: 1410-1412.
- Maio GR, Pakizeh A, Cheung WY, Rees KJ. Changing, priming, and acting on values: effects via motivational relations in a circular model. *J Pers Soc Psychol*. 2009; 97: 699-715.
- Deci EL, Ryan RM. The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychol inq*. 2000; 11: 227-268.
- Schwartz SH. An overview of the Schwartz theory of basic values. *Online readings in Psychology and Culture*. 2012; 2: 11.
- Schwartz SH, Cieciuch J. Measuring the Refined Theory of Individual Values in 49 Cultural Groups: Psychometrics of the Revised Portrait Value Questionnaire. *Assessment*. 2022; 29: 1005-1019.
- Brown KW, Kasser T. Are psychological and ecological well-being compatible? The role of values, mindfulness, and lifestyle. *Social indicators research*. 2005; 74: 349-368.
- Sheldon KM, Gunz A, Nichols CP, Ferguson Y. Extrinsic value orientation and affective forecasting: overestimating the rewards, underestimating the costs. *J Pers*. 2010; 78: 149-178.
- Naik P, Harris V, Forthun L. *Mindfulness: An Introduction*. EDIS. 2013.
- Brown KW, Ryan RM. The benefits of being present: mindfulness and its role in psychological well-being. *J Pers Soc Psychol*. 2003; 84: 822-48.
- Warren MT, Wray-Lake L. Does mindfulness prepare adolescents for value-behavior concordance? Examining the role of value content. *Journal of Adolescence*. 2017; 58: 56-66.
- Gámez-Guadix M, Calvete E. Assessing the relationship between mindful awareness and problematic Internet use among adolescents. *Mindfulness*. 2016; 7: 1281-1288.
- Jordan CH, Wang W, Donatoni L, Meier BP. Mindful eating: Trait and state mindfulness predict healthier eating behavior. *Personality and Individual Differences*. 2014; 68: 107-111.
- Hayes L, Boyd CP, Sewell J. Acceptance and commitment therapy for the treatment of adolescent depression: A pilot study in a psychiatric outpatient setting. *Mindfulness*. 2011; 2: 86-94.
- Germer C, Neff K. Mindful self-compassion (MSC). *Handbook of mindfulness-based programmes*: Routledge. 2019; 357-367.
- Sagiv L, Schwartz SH. Value priorities and subjective well-being: Direct relations and congruity effects. *Eur J Soc Psychol*. 2000; 30: 177-198.
- Christie AM, Atkins PW, Donald JN. The meaning and doing of mindfulness: The role of values in the link between mindfulness and well-being. *Mindfulness*. 2017; 8: 368-378.
- Shapiro SL, Jazaieri H, Goldin PR. Mindfulness-based stress reduction effects on moral reasoning and decision making. *J Posit Psychol*. 2012; 7: 504-515.
- Franquesa A, Cebolla A, García-Campayo J, Demarzo M, Elices M, Pascual JC, et al. Meditation practice is associated with a values-oriented life: the mediating role of decentering and mindfulness. *Mindfulness*. 2017; 8: 1259-1268.
- Malouf ET, Youman K, Stuewig J, Witt EA, Tangney JP. A pilot RCT of a values-based mindfulness group intervention with jail inmates: Evidence for reduction in post-release risk behavior. *Mindfulness*. 2017; 8: 603-614.
- Batson CD. Empathy-induced altruism: friend or foe of the common good? In *For the greater good of all: Perspectives on individualism, society, and leadership*. New York: Palgrave Macmillan US. 2011; 29-47.
- Eisenberg N, Lennon R, Roth K. Prosocial development: A longitudinal study. *Dev Psychol*. 1983; 19: 846-855.
- Batson CD, Batson JG, Slingsby JK, Harrell KL, Peekna HM, Todd RM. Empathic joy and the empathy-altruism hypothesis. *J Pers Soc Psychol*. 1991; 61:413-426.
- Carlo G, Knight GP, Eisenberg N, Rotenberg KJ. Cognitive processes and prosocial behaviors among children: The role of affective attributions and reconciliations. *Dev Psychol*. 1991; 27: 456-461.
- Lönnqvist JE, Walkowitz G. Experimentally induced empathy has no impact on generosity in a monetarily incentivized dictator game. *Front Psychol*. 2019; 10: 337.
- Silfver M, Helkama K, Lönnqvist JE, Verkasalo M. The relation between value priorities and proneness to guilt, shame, and empathy. *Motivation and emotion*. 2008; 32: 69-80.
- Iwamoto SK, Alexander M, Torres M, Irwin MR, Christakis NA, Nishi A. Mindfulness meditation activates altruism. *Scientific reports*. 2020; 10: 6511.
- Condon P, Desbordes G, Miller WB, DeSteno D. Meditation increases compassionate responses to suffering. *Psychol Sci*. 2013; 24: 2125-2127.
- Leiberg S, Klimecki O, Singer T. Short-term compassion training increases prosocial behavior in a newly developed prosocial game. *PLoS One*. 2011; 6: e17798.
- Reb J, Junjie S, Narayanan J. Compassionate dictators? The effects of loving-kindness meditation on offers in a dictator game. In *The*

- Effects of Loving-Kindness Meditation on Offers in a Dictator Game. IACM 23rd Annual Conference Paper. 2010.
38. Persson BN, Kajonius PJ. Empathy and universal values explicated by the empathy-altruism hypothesis. *J Soc Psychol.* 2016; 156: 610-619.
 39. Brahmi M, Sharma G, Goswami S, Kumar J. Indian Human Values Talk About Cognitive Empathy as Well: An Exploration of 'Anekantavada' in the Light of Empathy-Altruism Hypothesis. Arnav Bhavsar, Chayan, Amit Prasad, Kunal Mooley (Eds.), *Mind, Brain, and Consciousness Conference. Indian Knowledge System and Mental Health Applications (IKSMHA) Centre, IIT Mandi.* 2023; 164-349.
 40. Kabat-Zinn J. Some reflections on the origins of MBSR, skillful means, and the trouble with maps. In *Mindfulness.* Routledge. 2013; 281-306.
 41. Baer RA, Smith GT, Hopkins J, Krietemeyer J, Toney L. Using self-report assessment methods to explore facets of mindfulness. *Assessment.* 2006; 13: 27-45.
 42. Balliet D, Joireman J, Daniels D, George-Falvy J. Empathy and the Schwartz Value System: A Test of an Integrated Hypothesis. *Individual Differences Research.* 2008; 6: 269-279.
 43. Myyry L, Helkama K. University students' value priorities and emotional empathy. *Educational Psychology.* 2001; 21: 25-40.
 44. Hanley AW, Li EL. Self-transcendence predicts better pre-and postoperative outcomes in two randomized clinical trials of brief mindfulness-based interventions. *Mindfulness.* 2022; 13: 1532-1543.
 45. Hanley AW, Nakamura Y, Garland EL. The Nondual Awareness Dimensional Assessment (NADA): New tools to assess nondual traits and states of consciousness occurring within and beyond the context of meditation. *Psychol Assess.* 2018; 30: 1625-1639.
 46. Haliwa I, Wilson JM, Spears SK, Strough J, Shook NJ. Exploring facets of the mindful personality: Dispositional mindfulness and the Big Five. *Personality and Individual Differences.* 2021; 171: 110469.
 47. Vecchione M. The five factors of personality and personal values: An update with the refined theory. *Personality and Individual Differences.* 2023; 203: 112033.
 48. Parks-Leduc L, Feldman G, Bardi A. Personality traits and personal values: A meta-analysis. *Pers Soc Psychol Rev.* 2015; 19: 3-29.
 49. Vecchione M, Schwartz SH, Davidov E, Cieciuch J, Alessandri G, Marsicano G. Stability and change of basic personal values in early adolescence: A 2-year longitudinal study. *J Pers.* 2020; 88: 447-463.
 50. Chadda RK, Deb KS. Indian family systems, collectivistic society, and psychotherapy. *Indian J Psychiatry.* 2013; 55: S299-309.
 51. Goldberg LR. The structure of phenotypic personality traits. *Am Psychol.* 1993; 48: 26-34.
 52. Karl JA, Prado SMM, Gračanin A, Verhaeghen P, Ramos A, Mandal SP, et al. The cross-cultural validity of the Five-Facet Mindfulness Questionnaire across 16 countries. *Mindfulness.* 2020; 11: 1226-1237.
 53. Mandal SP, Arya YK, Pandey R. Validation of the factor structure of the five facet mindfulness questionnaire. *IJHW.* 2016; 7: 61-66.
 54. Iqbal F, Iqbal F, Humayun GK. Factor structure of the Five Facets Mindfulness Questionnaire (FFMQ) (15 items) in a collectivist society—Pakistan. *Psychology in the Schools.* 2023; 60: 1-18.
 55. Migliore LA. Relation between big five personality traits and Hofstede's cultural dimensions: Samples from the USA and India. *Cross Cultural Management: An International Journal.* 2011; 18: 38-54.
 56. The jamovi project. *jamovi (Version 2.3) [Computer Software].* 2023.
 57. R Core Team. *R: A language and environment for statistical computing.* R Foundation for Statistical Computing. 2021.
 58. Fox J, Weisberg S. *car: Companion to Applied Regression. [R package].* 2020.
 59. McGarrigle T, Walsh CA. Mindfulness, self-care, and wellness in social work: Effects of contemplative training. *J Relig Spiritual Soc Work: Social Thought.* 2011; 30: 212-233.
 60. Aldao A, Nolen-Hoeksema S, Schweizer S. Emotion-regulation strategies across psychopathology: A meta-analytic review. *Clin Psychol Rev.* 2010; 30: 217-237.
 61. Karelaiia Reb. Improving decision-making through mindfulness. *Mindfulness in organizations: Foundations, research, and applications.* Research Collection Lee Kong Chia School of Business. 2015; 163-189.
 62. Moynihan AB, Igou ER, van Tilburg WA. Lost in the crowd: Conformity as escape following disbelief in free will. *Eur J Soc Psychol.* 2019; 49: 503-520.