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RESEARCH ARTICLE

A STUDY ON RELATIONSHIP BETWEEN DISPOSITIONAL MINDFULNESS AND LIFE SATISFACTION

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ABSTRACT

Background: The term 'Mindfulness' has been receiving increasing attention over the past few years. However, this global pandemic caused by COVID 19 has made it possible for the general public to gain a better understanding of mindfulness practice and its benefits through various mediums such as magazines, wellness apps, and other social media platforms. The COVID 19 pandemic has made this year the most stressful one, demanding people to seek help and improve their life satisfaction. Apps focusing on wellness and mindfulness generated more than two million downloads in the month of April 2020 compared to January 2020 (Kapoor,2020). This provides an insight into the exponential rise in the understanding and practice of mindfulness among people. "Mindfulness is paying attention on purpose, in the present moment, and nonjudgmentally." (Kabat-Zinn,1994). A question that arises from this is whether mindfulness can only be effective when learned and practiced through interventions (state mindfulness) or is it a dispositional trait within an individual that allows a person to be aware of the present moment during their daily routine (dispositional mindfulness). **Objective:** This research aims to study the relationship between dispositional mindfulness and life satisfaction among 100 Indian young adults ranging from 18-25 years. **Method:** The levels of dispositional mindfulness will be measured using the Mindful Attention Awareness Scale (Brown & Ryan,2003) and life satisfaction will be measured using the Satisfaction with Life Scale (Diener *et al.*,1985). **Results:** The results of the study indicate that there is a significant positive relationship between dispositional mindfulness and life satisfaction among young adults.

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INTRODUCTION

We as adults are working around the clock on an auto-pilot mode in this fast-paced world to climb the ladder of success. In an attempt to gain an identity, security, financial stability we often fail to slow down and reflect or evaluate one's own life as a whole. This often results in increased stress and reduced life satisfaction among individuals. Life satisfaction is defined as "a person's cognitive evaluation of the satisfaction with one's own life as a whole." (Diener, Oishi & Lucas, 2003). The recent emphasis and popularity on adopting natural therapies such as meditation, mindfulness, and yoga as an attempt to reduce everyday stress and to improve well-being and life satisfaction has gained immense attention and response among the audience. These alternative therapies have been found to be beneficial for both physical and psychological problems by alleviating pain, distress, or discomfort and by restoring the well-being of an individual.

During the coronavirus pandemic, the entire world came to a standstill when the lockdown was announced globally. People staying indoors began experiencing mental health problems due to prolonged lockdown, isolation of COVID 19 patients away from family and home, fear of contracting COVID 19. Kumar & Nayar (2020) pointed out the increase in the rate of suicides, self-harm, depression, anxiety, insomnia, and domestic violence of women and children. These findings suggest that the pandemic has resulted in lowered life satisfaction among individuals. However, a noteworthy change during these difficult times was the surge in meditation, mindfulness, and other wellness apps across the country (Kapoor, 2020). Individuals began understanding and engaging in mindfulness-based activities to improve their living conditions and life satisfaction. Mindfulness involves focusing attention on ongoing sensory, emotional, and cognitive experiences in a non-judgmental manner (Kabat-Zinn,1994). Mindfulness practice is involved in various religious traditions such as Buddhism (Gethin,2011) and Hinduism (Bhatia *et al.*,2013).

However, the history and practice of mindfulness should not be limited to Buddhism or Hinduism as mindfulness also has its roots in Judaism, Islam, and Christianity (Trousselard *et al.*, 2014). Although mindfulness is an age-old eastern practice, it became popular when Jon Kabat-Zinn, moved mindfulness to western countries and developed an eight-week program known as the Mindfulness-Based Stress Reduction (MBSR) program to alleviate stress (Selva, 2020). Recently there is an increase in research and application of mindfulness-based intervention as a psychological intervention for various diverse populations.

There are two types of mindfulness, state, and trait or dispositional mindfulness. State mindfulness is the experience of being focused in the present moment, awake and aware without judging one's experience. Trait mindfulness is the capacity of an individual to be mindful without trying to be mindful consciously (Shapiro *et al.*, 2011). State mindfulness is developed through interventions such as MBSR and MBCT, meditation, and other mindfulness-based exercises whereas trait mindfulness is developed over a period of time by the accumulation of various skills (Mesmer-Magnus, 2017). Mental health professionals have begun to integrate mindfulness intervention with other popular psychological interventions such as cognitive therapy, cognitive behavior therapy, acceptance and commitment therapy, and art therapy to provide a holistic treatment approach for an individual. The exponential rise in viewing mindfulness as an effective intervention in the field of mental health has led to numerous randomized clinical trials to study the effectiveness of mindfulness-based intervention for various medical and psychological disorders across the population. The mindfulness-based intervention was found to be effective among adults with cardiovascular disease by improving their physical and psychological functioning (Scott-Sheldon *et al.*, 2020) and for individuals with psychosis (Jansen *et al.*, 2020). Researches suggested that interventions focusing on improving mindfulness such as mindfulness-based cognitive therapy (MBCT), mindfulness-based stress reduction (MBSR) has played an important role in improving psychological problems such as depression, anxiety, stress. (Chiesa & Serretti, 2009; Sedelmeier *et al.*, 2012; Piet & Hougaard, 2011). These findings indicate the presence of state mindfulness through interventions by which individuals exhibit differences in their experiences of mindful states suggesting the presence of trait mindfulness. (Mesmer-Magnus, 2017)

Although mindfulness can be improved through various interventions or mindfulness-based training, the quality of mindfulness can also be present within an individual inherently. This is known as dispositional or trait mindfulness, the tendency to be mindful in activities of daily life which may differ for each individual (Brown & Ryan, 2003). It is found from studies that even without intervention, trait mindfulness happens to be stable over a period of time and is viewed as a naturally occurring process (Brown & Ryan, 2003). The relationship between intervention-based mindfulness and life satisfaction has been studied extensively. Therefore, this study aims to evaluate the relationship between dispositional mindfulness and life satisfaction as non-intervention, quantitative research conducted among young adults that could have implications for the psychological, social, and educational functioning of an individual during their present and later life. Life satisfaction is not only viewed as the mere absence of any form of distress or disorder but it also includes the presence of

an individual's physical and psychological well-being, effective executive functioning, satisfaction in various domains such as educational, occupational and social domains. In the review integrating dispositional mindfulness and life satisfaction, few research studies have revealed a positive relationship between trait mindfulness and life satisfaction, psychological and subjective well-being (Brown *et al.*, 2009; Brown & Ryan, 2003, Kong *et al.*, 2014). Trait mindfulness was also found to be correlated with other psychological processes such as executive function, emotional regulation, and subjective well-being (Lyvers, 2014). Trait mindfulness acts as a buffer for negative personal consequences and improves the relationship and life satisfaction (Don & Algoe, 2020). A research conducted to examine the shift from state mindfulness to trait mindfulness of an individual undergoing an eight-week mindfulness-based stress reduction program conducted on 235 participants. The findings of the study concluded that repeated mindful meditation sessions as part of the intervention increased state mindfulness among individuals and also promoted mindfulness practice in their every day that contributed to the trait or dispositional mindfulness (Kiken, 2015).

Another interesting finding from a randomized control trial study throws light on the effectiveness of Mindfulness based-stress reduction program on participants with higher levels of pre-treatment trait mindfulness showed an increase in mindfulness, empathy, hope, and subjective well-being in comparison to participants with a lower level of pre-treatment trait mindfulness. This indicated that the practice of state mindfulness increased trait mindfulness (Shapiro *et al.*, 2011). The current study focuses on examining the relationship between dispositional mindfulness and life satisfaction, determining the differences in the levels of mindfulness and life satisfaction among young adults who engage in activities that involve mindfulness as one of the components and individuals who do not engage in any mindfulness activities.

METHODOLOGY

Aim: To study the relationship between dispositional mindfulness and life satisfaction among young adults who engage and do not engage in any form of mindfulness-based activities.

Objectives: To determine the relationship between dispositional mindfulness and life satisfaction among young adults who engage and do not engage in any form of mindfulness-based activities. To determine the differences in the level of dispositional mindfulness among young adults who engage and do not engage in any form of mindfulness-based activities. To determine the differences in the level of life satisfaction among young adults who engage and do not engage in any form of mindfulness-based activities.

Hypotheses

H1: There would be a significant relationship between dispositional mindfulness and life satisfaction among young adults engaging in any form of mindfulness-based activities.

H2: There would be a significant relationship between dispositional mindfulness and life satisfaction among young adults who do not engage in any form of mindfulness-based activities.

H3: There would be no significant difference in the levels of dispositional mindfulness between young adults who engage and do not engage in any form of mindfulness-based activities.

H4: There would be no significant difference in the levels of life satisfaction between young adults who engage and do not engage in any form of mindfulness-based activities.

Research design: The ex-post facto design was adopted to conduct the study in which a survey questionnaire was administered to a sample of people and the responses obtained for the survey were statistically analysed.

Sample: A sample of 100 young adults ranging from 18-25 years of age willing to voluntarily participate in the study were incorporated.

Sampling technique: The Snowball sampling technique was used in this study.

Procedure: The online form was circulated to the targeted sample. The participants were instructed to read each statement carefully and select an option that was appropriate to them. The participants were assured that the responses will be kept confidential and anonymity will be maintained. All samples were included in the study.

Tools used: Demographic details: Participants' demographic details such as name/initial, age, gender, profession, and information on mindfulness-based activities that the participants engage in, the duration, frequency of engaging in these activities were obtained. Mindful attention awareness scale (MAAS):

It is a 15-item scale designed to assess the core feature of dispositional mindfulness, characterized by open or receptive awareness of and attention to what is taking place in the present. The items of the scale are rated on a 6-point scale. Each of the items is scored as Almost always (1), Very frequently (2), Somewhat Frequently (3), Somewhat Infrequently (4), Very Infrequently (5), Almost never (6). Higher scores on MAAS reflect higher levels of dispositional mindfulness.

The Cronbach's alpha internal reliability value was 0.94 and was validated for the different populations as well. Satisfaction with life scale (SWLS): It is a 5-item scale designed to assess an individual's cognitive judgments of one's life satisfaction. It was developed by Diener and colleagues in 1985. The items of the scale are rated on a 7-point Likert scale.

Each of the items is scored as Strongly agree (7), Agree (6), Slightly agree (5), Neither agree nor disagree (4), Slightly disagree (3), disagree (2), and strongly disagree (1). Higher scores on SWLS indicate high levels of satisfaction with life. The Cronbach's alpha internal reliability value was 0.951 and the content validity ratio and individual content validity index score of the scale was greater than 0.68 and 0.72 respectively (Dahiya & Rangnekar, 2020).

Statistical analysis: The collected data from the participants was analysed by computing descriptive statistics mean (M), Standard deviation (SD) and, inferential statistics Pearson's correlation coefficient and independent t-test.

RESULTS AND DISCUSSION

Table 1. Sociodemographic information

Sociodemographic details	N (100)	%
Gender		
Female	56	56
Male	43	43
Non-binary	1	1
Age		
18 years	7	7
19 years	11	11
20 years	3	3
21 years	23	23
22 years	34	34
23 years	10	10
24 years	4	4
25 years	8	8
Marital status		
Single	98	98
Married	2	2
Occupation		
Student	82	82
Working	16	16
Homemaker	2	2

Table 1 represents the demographic information of the participants that volunteered for this study. Out of 100 participants, 56 participants were female, 43 of them male and one participant was a non-binary individual. The participant's ages ranged from 18-25 years among which 98 participants were single and 2 of them were married. 82 and 16 participants of the study were students and working respectively.

Table 2. Engagement in mindfulness-based activities

	N (100)	%
Activities	49	49
Engagement in two or more activities	28	28
Mindfulness	16	16
Body scan exercise	10	10
Yoga	22	22
Journaling	16	16
Deep breathing exercise	17	17
Tai-chi (moving meditation)	3	3
None	51	51
Duration		
Less than a year	26	26
More than a year	13	13
More than 3 years	6	6
More than 5 years	3	3
More than 10 years	1	1
Never	51	51

Table 2, represents the participants' engagement in mindfulness-based activities. Out of 100 participants, 49 participants engaged in at least one activity, 51 participants did not engage in any activities and 28 participants engaged in two or more mindfulness-based activities. The highest number of participants engaged in yoga (22) followed by deep breathing exercise (17), mindfulness, and journaling (17). The least number of participants engaged in Tai-chi (3). It was surprising to notice that the maximum number of participants began engaging in these mindfulness-based exercises during the last year i.e., during the coronavirus pandemic. Numerous research study was carried out during this period to study the effectiveness of the positive psychological intervention and mindfulness training on individual's well-being. Yoga and mindfulness are currently in trend among researchers and common audience during the COVID 19 lockdown (Pimple & Agarwal, 2020)

Table 3. Correlation between dispositional mindfulness and life satisfaction among young adults engaging in any forms of mindfulness-based activities (N=49)

Variables	Dispositional mindfulness	Life satisfaction
Dispositional mindfulness	-	
Life satisfaction	0.0426*	-

*Correlation is significant at 0.05 level

From table 3, it can be inferred that there exists a significant relationship ($r=0.28$, $p=0.04$) between dispositional mindfulness and life satisfaction among young adults engaging in some forms of mindfulness-based activities. This implies that an increase in the level of mindfulness by engaging in mindfulness-based activities such as yoga, meditation, and body scan exercise has a positive association with life satisfaction among individuals. Therefore hypothesis (H1) is accepted. This study is consistent with (Falkenstrom,2010; Zautra *et al.*,2008) that suggests that mindfulness intervention such as meditation training can improve levels of life satisfaction. Other interventions such as mindful gratitude (Ballias-Lolis,2020), journaling (Isik& Erguner,2017), breathing exercise, and body scan exercise (Hartnett *et al.*, 2010)

Table 4. Correlation between dispositional mindfulness and life satisfaction among young adults not engaging in any forms of mindfulness-based activities (N=51)

Variables	Dispositional mindfulness	Life satisfaction
Dispositional mindfulness	-	
Life satisfaction	0.0136*	-

*Correlation is significant at 0.05 level

From table 4, it can be inferred that there exists a significant relationship ($r= 0.35$, $p=0.01$) between dispositional mindfulness and life satisfaction among young adults not engaging in any forms of mindfulness-based activities.

Table 5. Difference in the levels of dispositional mindfulness among young adults engaging and not engaging in any forms of mindfulness-based activities

		Mean M	Standard deviation SD	t	p
Dispositional mindfulness	Young adults engaging in mindfulness-based activities N= 49	60.10	13.16	-0.06	0.95
	Young adults not engaging in mindfulness-based activities N=51	60.26	13.03		

Not significant at 0.05 level

Table 6. Difference in the levels of life satisfaction among young adults engaging and not engaging in any forms of mindfulness-based activities

		Mean M	Standard deviation SD	t	p
Life satisfaction	Young adults engaging in mindfulness-based activities N= 49	23.88	5.80	2.58	0.011*
	Young adults not engaging in mindfulness-based activities N=51	20.75	6.22		

*Significant at 0.05 level

This implies that the presence of dispositional mindfulness among individuals who do not engage in any forms of mindfulness-based activities can influence an individual's satisfaction with one's life. Hence, hypothesis (H2) is accepted. The findings of the current study are consistent with few other studies (Baer *et al.*, 2006; Bowlin& Baer,2012) that focuses on assessing trait mindfulness through self-report measures and developing mindfulness trait as an open or receptive awareness or attention towards experiences in daily

life. Trait mindfulness was also associated with reduced bilateral amygdala activation and increased activation of the prefrontal cortex during the task of emotional labelling suggesting that individuals with high levels of trait mindfulness are better able to regulate one's emotion than those with low levels of mindfulness (Creswell *et al.*, 2007). From table 5, it can be inferred that there is no significant difference ($p=0.95$, $p>0.05$) in the level of mindfulness among young adults engaging and not engaging in any forms of mindfulness-based activities. This implies that both the groups possessed considerably high levels of dispositional mindfulness regardless of their engagement in any form of mindfulness-based activities. Hence, hypothesis (H3) is accepted. The findings are inconsistent with the majority of the mindfulness-based intervention studies that indicate high levels of mindfulness between the treatment group (Exposed to mindfulness activities) in comparison to the control group (did not expose to mindfulness activities) (Gupta & Verma,2019; Kersemakers *et al.*,2018; Zhang *et al.*,2019). A study by (Falkenstrom, 2010) shows that there is no significant difference in the level of mindfulness among the treatment group which was exposed to meditation training and the control group. An explanation for this result stated in this study is the presence of measurement effect i.e., the participant of the study getting reminded about the practice of mindfulness in their every day while filling out the questionnaire. Few other possible explanations could be the innate ability of the human beings to stay aware and focused in the present moment without being trained. Also, the Mindful Attention Awareness Scale assesses dispositional mindfulness of an individual by relating it to their everyday activities which makes it easier for the participant to relate and respond effectively to the questionnaire. Table 6 represents the difference in the level of life satisfaction and, it can be inferred that there is a significant difference ($p=0.01$, $p<0.05$) in the level of life satisfaction between young adults engaging and not engaging in any forms of mindfulness-based activities.

The mean scores of life satisfaction imply that the life satisfaction among young adults engaging in mindfulness-based activities ($M=23.88$) are slightly higher than the mean score of young adults not engaging in mindfulness-based activities (20.75). Therefore, hypothesis (H4) is rejected. The findings of the current study are supported by other studies (Baer,2003; Gupta & Verma,2019; Kersemakers *et al.*, 2018) that state that individuals engaging in mindfulness training showed higher levels of well-being and life satisfaction.

This suggests that despite the presence of high levels of trait mindfulness engagement in mindfulness training can prove to be beneficial in long run.

Conclusion

Various randomized control trial studies and other empirical research studies have suggested the efficacy of mindfulness training on several psychological functioning and constructs. The current study reveals a significant relationship between dispositional mindfulness and life satisfaction and no significant difference in the level of mindfulness between both the groups that engage and do not engage in mindfulness-based activities suggesting the presence of trait or dispositional mindfulness among participants who do not engage in any form of mindfulness-based activities revealing their innate ability to stay focused and mindful during activities of daily life. However, the study also revealed a significant difference in the level of life satisfaction between participants who engage or do not engage in any form of mindfulness activities suggesting the effectiveness of mindfulness training on an individual's well-being and life satisfaction. Hence, individuals who score high levels of trait mindfulness when exposed to mindfulness training or intervention may show increased levels of life satisfaction. Implications: Mindfulness is not merely viewed as a trending practice among audiences but it's also gradually seen as a way of life. Emphasis on dispositional mindfulness and attempts to measure the individual differences in the general level of mindfulness across situation and time not only proves to be beneficial for an individual's well-being and life satisfaction but also allows a person to evaluate one's physical, social, emotional, occupational, cognitive and general domain effectively. Assessment of trait mindfulness in an individual also acts as a predictive utility for jobs that require a person to focus their attention and awareness on the present moment such as doctors, drivers and other professions. Therefore, it is important to assess dispositional mindfulness in school and workplace settings and provide mindfulness interventions to improve or strengthen the qualities of both state and dispositional mindfulness among individuals.

Limitation

The sample size of the study is small. The comparison between participants who engage and do not engage in mindfulness-based activities were not conducted through intervention-based study.

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REFERENCES

- Baer, R. A. 2003. Mindfulness training as a clinical intervention: A conceptual and empirical review. *Clinical Psychology: Science and Practice*, 102, 125-143. <https://doi.org/10.1093/clipsy/bpg015>
- Baer, R. A., Smith, G. T., Hopkins, J., Krietemeyer, J., & Toney, L. 2006. Using self-report assessment methods to explore facets of mindfulness. *Assessment*, 131, 27-45. <https://doi.org/10.1177/1073191105283504>
- Bhatia, S., Madabushi, J., Kolli, V., Bhatia, S., & Madaan, V. 2013. The Bhagavad Gita and contemporary psychotherapies. *Indian Journal of Psychiatry*, 556, 315. <https://doi.org/10.4103/0019-5545.105557>
- Biliias-Lolis, E. 2020. Mindful gratitude in the schools: Building capacity across the tiers. Promoting mind-body health in schools: Interventions for mental health professionals, 161-172. <https://doi.org/10.1037/0000157-011>
- Bowlin, S. L., & Baer, R. A. 2012. Relationships between mindfulness, self-control, and psychological functioning. *Personality and Individual Differences*, 523, 411-415. <https://doi.org/10.1016/j.paid.2011.10.050>
- Brown, K. W., Kasser, T., Ryan, R. M., Alex Linley, P., & Orzech, K. 2009. When what one has is enough: Mindfulness, financial desire discrepancy, and subjective well-being. *Journal of Research in Personality*, 435, 727-736. <https://doi.org/10.1016/j.jrp.2009.07.002>
- Brown, K. W., & Ryan, R. M. 2003. The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, 844, 822-848. <https://doi.org/10.1037/0022-3514.84.4.822>
- Chiesa, A., & Serretti, A. 2009. Mindfulness-based stress reduction for stress management in healthy people: A review and meta-analysis. *The Journal of Alternative and Complementary Medicine*, 155, 593-600. <https://doi.org/10.1089/acm.2008.0495>
- Creswell, J. D., Way, B. M., Eisenberger, N. I., & Lieberman, M. D. 2007. Neural correlates of dispositional mindfulness during affect labeling. *Psychosomatic Medicine*, 696, 560-565. <https://doi.org/10.1097/psy.0b013e3180f6171f>
- Dahiya, R., & Rangnekar, S. 2020. Validation of satisfaction with life scale in the Indian manufacturing sector. *Asia-Pacific Journal of Business Administration*, 123/4, 251-268. <https://doi.org/10.1108/apjba-03-2019-0045>
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. 1985. The satisfaction with life scale. *Journal of Personality Assessment*, 491, 71-75. https://doi.org/10.1207/s15327752jpa4901_13
- Diener, E., Oishi, S., & Lucas, R. E. 2003. Personality, culture, and subjective well-being: Emotional and cognitive evaluations of life. *Annual Review of Psychology*, 541, 403-425. <https://doi.org/10.1146/annurev.psych.54.101601.145056>
- Don, B. P., & Algoe, S. B. 2020. Impermanence in relationships: Trait mindfulness attenuates the negative personal consequences of everyday dips in relationship satisfaction. *Journal of Social and Personal Relationships*, 378-9, 2419-2437. <https://doi.org/10.1177/0265407520921463>
- Falkenström, F. 2010. Studying mindfulness in experienced meditators: A quasi-experimental approach. *Personality and Individual Differences*, 483, 305-310. <https://doi.org/10.1016/j.paid.2009.10.022>
- Gethin, R. 2011. On some definitions of mindfulness. *Contemporary Buddhism*, 121, 263-279. <https://doi.org/10.1080/14639947.2011.564843>
- Gupta, S., & Verma, H. V. 2019. Mindfulness, mindful consumption, and life satisfaction. *Journal of Applied Research in Higher Education*, 123, 456-474. <https://doi.org/10.1108/jarhe-11-2018-0235>
- Harnett, P. H., Whittingham, K., Puhakka, E., Hodges, J., Spry, C., & Dob, R. 2010. The short-term impact of a brief group-based mindfulness therapy program on depression and life satisfaction. *Mindfulness*, 13, 183-188. <https://doi.org/10.1007/s12671-010-0024-3>

- Ik, ., &Ergüner-Tekinalp, B. 2017. The effects of gratitude journaling on Turkish first year college students' college adjustment, life satisfaction and positive affect. *International Journal for the Advancement of Counselling*, 392, 164-175. <https://doi.org/10.1007/s10447-017-9289-8>
- Jansen, J. E., Gleeson, J., Bendall, S., Rice, S., & Alvarez-Jimenez, M. 2020. Acceptance- and mindfulness-based interventions for persons with psychosis: A systematic review and meta-analysis. *Schizophrenia Research*, 215, 25-37. <https://doi.org/10.1016/j.schres.2019.11.016>
- Kabat-Zinn J. 1994 *Wherever you go there you are: Mindfulness meditation in everyday life*. New York, NY: Hyperion;
- Kapoor, K. 2020, August 17. Mindful apps keeping us calm through corona. *Times of India*. <https://timesofindia.indiatimes.com/life-style/health-fitness/de-stress/mindful-apps-keeping-us-calm-through-corona/articleshow/77569439.cms>
- Kersemaekers, W., Rupperecht, S., Wittmann, M., Tamdjidi, C., Falke, P., Donders, R., Speckens, A., & Kohls, N. 2018. A workplace mindfulness intervention may be associated with improved psychological well-being and productivity. A preliminary Field study in a company setting. *Frontiers in Psychology*, 9. <https://doi.org/10.3389/fpsyg.2018.00195>
- Kiken, L. G., Garland, E. L., Bluth, K., Palsson, O. S., & Gaylord, S. A. 2015. From a state to a trait: Trajectories of state mindfulness in meditation during intervention predict changes in trait mindfulness. *Personality and Individual Differences*, 81, 41-46. <https://doi.org/10.1016/j.paid.2014.12.044>
- Kong, F., Wang, X., & Zhao, J. 2014. Dispositional mindfulness and life satisfaction: The role of core self-evaluations. *Personality and Individual Differences*, 56, 165-169. <https://doi.org/10.1016/j.paid.2013.09.002>
- Kumar, A., &Nayar, K. R. 2020. COVID 19 and its mental health consequences. *Journal of Mental Health*, 301, 1-2. <https://doi.org/10.1080/09638237.2020.1757052>
- Lyvers, M., Makin, C., Toms, E., Thorberg, F. A., &Samios, C. 2013. Trait mindfulness in relation to emotional self-regulation and executive function. *Mindfulness*, 56, 619-625. <https://doi.org/10.1007/s12671-013-0213-y>
- Mesmer-Magnus, J., Manapragada, A., Viswesvaran, C., & Allen, J. W. 2017. Trait mindfulness at work: A meta-analysis of the personal and professional correlates of trait mindfulness. *Human Performance*, 302-3, 79-98. <https://doi.org/10.1080/08959285.2017.1307842>
- Piet, J., &Hougaard, E. 2011. The effect of mindfulness-based cognitive therapy for prevention of relapse in recurrent major depressive disorder: A systematic review and meta-analysis. *Clinical Psychology Review*, 316, 1032-1040. <https://doi.org/10.1016/j.cpr.2011.05.002>
- Piet, J., &Hougaard, E. 2011. The effect of mindfulness-based cognitive therapy for prevention of relapse in recurrent major depressive disorder: A systematic review and meta-analysis. *Clinical Psychology Review*, 316, 1032-1040. <https://doi.org/10.1016/j.cpr.2011.05.002>
- Pimple, J., & Agrawal, T. Efficacy of practicing positive psychological interventions, yoga, and mindfulness meditation in COVID-19 lockdown. *History of mindfulness: From east to west and religion to science*. 2017, August 8. *PositivePsychology.com*. <https://positivepsychology.com/history-of-mindfulness/>
- Scott-Sheldon, L. A., Gathright, E. C., Donahue, M. L., Balletto, B., Feulner, M. M., DeCosta, J., Cruess, D. G., Wing, R. R., Carey, M. P., & Salmoirago-Blotcher, E. 2019. Mindfulness-based interventions for adults with cardiovascular disease: A systematic review and meta-analysis. *Annals of Behavioral Medicine*, 541, 67-73. <https://doi.org/10.1093/abm/kaz020>
- Sedlmeier, P., Eberth, J., Schwarz, M., Zimmermann, D., Haerig, F., Jaeger, S., & Kunze, S. 2012. The psychological effects of meditation: A meta-analysis. *Psychological Bulletin*, 1386, 1139-1171. <https://doi.org/10.1037/a0028168>
- Shapiro, S. L., Brown, K. W., Thoresen, C., & Plante, T. G. 2010. The moderation of mindfulness-based stress reduction effects by trait mindfulness: Results from a randomized controlled trial. *Journal of Clinical Psychology*, 673, 267-277. <https://doi.org/10.1002/jclp.20761>
- Trousselard, M., Steiler, D., Claverie, D., &Canini, F. 2014. The history of mindfulness put to the test of current scientific data: Unresolved questions. *Encephale*, 406, 474-80.
- Zautra, A. J., Davis, M. C., Reich, J. W., Nicassario, P., Tennen, H., Finan, P., Kratz, A., Parrish, B., & Irwin, M. R. 2008. Comparison of cognitive behavioral and mindfulness meditation interventions on adaptation to rheumatoid arthritis for patients with and without history of recurrent depression. *Journal of Consulting and Clinical Psychology*, 763, 408-421. <https://doi.org/10.1037/0022-006x.76.3.408>
- Zhang, Q., Wang, Z., Wang, X., Liu, L., Zhang, J., & Zhou, R. 2019. The effects of different stages of mindfulness meditation training on emotion regulation. *Frontiers in Human Neuroscience*, 13. <https://doi.org/10.3389/fnhum.2019.00208>
