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ENTERING THE MENTAL BACKSTAGE: MINDFULNESS AND MIND-WANDERING AMONG PERFORMING ARTISTS

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Abstract

Existing literature has explored the role of mindfulness and mind-wandering on creative processes. However, it has overlooked the diversity in the creative domains as well as the experience of the artist while accounting for their relationship. In the present study, mindfulness and mind wandering- deliberate and spontaneous were explored among performing artists, i.e. musicians, theatre artists, and dancers. The study also looked at the artists' experience in their field. After an initial screening using a creativity tool, 66 performing artists were recruited, following which two self-report indices that assessed mind wandering and mindfulness were administered. The data collected was subjected to quantitative data analysis in SPSS.A Oneway ANOVA showed significant effect of the creative domain on mindfulness for the three groups, with a significant difference between musicians and dancers. Among the musicians, a significant negative relationship between mind wandering spontaneous and years of experience was seen. Among the dancers, there was a significant positive association between mind wandering spontaneous, mind wandering deliberate and years of experience. The current study highlighted the need to approach the study of creativity using a contextual perspective.

Introduction

Ever since their existence, human beings have relied on their ability to find useful and innovative solutions to problems in order to survive. Over the course of time, such a creative expression has found its outlet in numerous forms of art that are known to mankind today as dance, music, visual arts, theatre, architecture, etc.- the list goes on. Along with this expansion in creative diversity, the term "artist" has also taken on a different meaning today, encompassing every individual- professional or amateur- as long as they create a novel product of value and utility [1]

There are certain considerations that must be kept in mind while studying creativity. Firstly, there are factors apart from the creative person that influence creativity. Mooney (1963) [2] understood the problem of creativity in four significantly different, but interlinked ways, consisting not only of the creative person, but also the creative environment, the creative product, and the creative process. Such a contextual perspective was also shared by Csikszentmihályi (1997), [3] who stated that one cannot remove the creative person from their social and historical context. With the increasing diversity in the creative domains today, it therefore becomes a matter of importance to study the artist and their art from a contextual lens. Secondly, there is now a significant shift in the study of creativity from a focus on the creative genius with extraordinary capabilities and achievements, to an appreciation of the everyday creative activities of any given individual [4,5]. For this reason, the current research includes professional as well as amateur performing artists, and seeks to explore the relationship, if any, in years of experience and their engagement in mindfulness or mind-wandering.

Finally, there are several conflicting viewpoints regarding the factors that drive and stimulate creativity. While some believe that creative breakthroughs happen by letting our minds wander,others happen to support the idea that being mindful and aware of the present helps them be more creative. The former is called mind wandering, while the latter is a popular concept, called mindfulness. Mind wandering has shown to consist of two different constructs- i.e. deliberate mind wandering, which is either a conscious choice to deliberately pay attention to events away from the task at hand, and spontaneous mind wandering, which is a spontaneous capture of attention away from the present events [6]. On the other hand, mindfulness, as explained by Brown & Ryan (2003), [7] is a state of being present and attentive to the present events. Just like these individual preferences, research on creativity has also succumb to this dichotomy, [8] displaying a one-sided picture. One is left to wonder whether there could be any relationship between mindfulness and mind wandering, especially when they are both considered to be opposing [9]but essential components for creativity. It therefore becomes vital to establish an agreement regarding these constructs of mindfulness and mind-wandering, and their relationship with creativity.

Mindfulness and Creativity

As one of the most well-known practices, mindfulness has shown to have many beneficial effects, such as emotional regulation, increased response flexibility, interpersonal as well as intrapersonal benefits [10].Increased mindfulness has been linked to creativity; [11,12]specifically to creative achievement as well as creative thinking [13-15].Certain abilities that are linked to mindfulness are also related to creativity, such as an increase in the capacity to provide novel responses, [16] increased ability to change perspectives, [17] increased working memory capacity [18] as well as an improvement in management of stress [19].

Mind-Wandering and Creativity

Mind-wandering as a concept has been infamous in scientific literature as it has shown to disrupt performance and cognition [20,21]. However, it is now known that human beings spend about fifty percent of their waking hours engaging in some sort of mind-wandering activities [22-24].The benefits of such a seemingly disruptive activity[23] lie in its role in creative problem solving, especially during the incubation period [25].Mind wandering has shown to be related to creative thinking, and may also play an important role in successful incubation leading to creative problem solving[22].

Mindfulness, Mind-Wandering and Creativity

Although the opposing nature of mindfulness and mind wandering constructs has already been established, [9] there is a possibility that mindfulness and mind wandering- deliberate and spontaneous play diverse roles during the different stages of the creative process. [12]Zedelius and Schooler (2015)[26] provided a potential explanation by differentiating between analytical and insight-based creative strategies. Insight based problem solving was seen to be linked to higher rates of mind-wandering, while on the other hand, in analysis based creative strategies, mindfulness was linked with better problem-solving capabilities. Furthermore, Agnoli et al. (2018) [8]showed that mindfulness and mind wandering are not mutually exclusive; in fact, they interact with each other to predict creativity- both separately and in combination. As these findings suggest, there is a possible role of both mindfulness and mind wandering in the creative processes of artists. The current study aims to explore the same among performing artists.

H_{01}: There are no group differences between dancers, musicians and theatre artists on mindfulness and mind-wandering- deliberate and spontaneous

H_{02}: There is no relationship between mindfulness and years of experience

H_{03}: There is no relationship between spontaneous and deliberate mind-wandering and years of experience

Material and Methods

Study Design

Participants and procedure.A cross sectional designwas used for the study. Potential participants were identified using purposive sampling technique and following an initial screening using the Inventory of Creative Activities and Achievements tool (ICAA), [27]66 performing artists consisting of dancers, musicians and theatre artists, with 22 in each group, were selected for the study (males = 24, females = 42, mean age = 20.95 years, *SD* = 1.589, range = 18 to 25 years). The participants were recruited from a university, as well as from art institutes in Udupi, and the study was conducted between August 2019 and March 2020. Following the initial screening, the mindfulness and mind-wandering tools were administered for the selected participants.

The present study was authorised by the Institutional Review Board and the Institutional Ethics Committee. Informed consent was taken from all participants and their data was stored in a confidential and anonymous manner. The tools used were translated to Kannada for the convenience of some participants and permission from the concerned authorities was sought.

Eligibility Criteria. Individuals between 18 and 40 years of age, who could read and write Kannada or English, and were actively participating in the creative domain of dance, theatre or music were chosen for the study. Level 2 of the Creative Achievements subscale of ICAA

[27] is about originality ("*I have already created at least one original work in this domain"*). Hence, for the study, it was selected as one of the criteria for inclusion in the study, and only those reporting Level 2 or above in the scale were selected further for the study. Individuals with less than one year of experience in their domain were excluded from the study.

Measures

Socio-demographics-This included the participants' age, gender, area of specialty, years of experience in the domain, and number of hours spent on activities related to the respective creative domain.

Creativity- Inventory of Creative Activities and Achievements (ICAA) [27]was used to measure everyday creative activities, as well as creative achievements. The scale has eight domains in total. The Creative Activities (CAct) and Creative Achievements (CAch) subscales showed satisfactory internal consistency (α = .78 for CAct and α = .71 for CAch). [28]The CAch scales correlated highly with the Creative Achievement Questionnaire (r = .68; r_S = .70) (29) thus establishing concurrent validity. The CAct has 6 items in each domain, and is scored using a 5-point Likert scale ranging from *Never* (0) to 4 *More than 10 times* (4). The CAch has 11 items, with increasing weightage, and is scored by summing all the checked items per domain, and summing across domains provides a domain-general score.

Mindfulness-The Mindful Attention Awareness Scale (MAAS) [7] was used to assess trait mindfulness.MAAS has good internal consistency for men (α= 0.87) as well as for women (α= 0.89). Furthermore, MAAS showed both convergent and divergent validity with other psychological well-being measures. [7]. With a total of 15 items, the MAAS is scored using a 6-point Likert scale, which ranges from *Almost always* (1) to *Almost never* (6). Scoring is done by computing the mean for all the items. Higher scores reflect higher dispositional mindfulness.

Mind-wandering-The Mind Wandering: Deliberate and Mind Wandering: Spontaneous Scales [6] were used to assess deliberate and spontaneous mind wandering, respectively.The spontaneous and deliberate scales showed high reliability at the first (α= 0.81 and 0.86 respectively), and at the second time (α= 0.81 and 0.90 respectively) of administration, done over two weeks. The scales also showed good convergent and discriminant validity(6,30). Each scale has four items each and is scored using a 7-point Likert scale, ranging from *Rarely* (1) to *A lot* (7), except for item 3 (on both scales) which ranges from *Not at all true* (1)to *Very true* (7). Scoring involves summing, and then averaging the responses for each scale. Higher scores reflect higher levels of deliberate or spontaneous mind wandering.

Data Analysis

The data was analysed using the Statistical Package for Social Sciences. The data was analysed using Descriptive Statistics, Oneway ANOVA, and Spearman's correlation.

Results and Discussion

Table 1 Demographic profile of the participants

Demographic variable	Range	*n*	%
Years of experience	1 to 5	31	46.96
	6 to 10	21	31.81
	11 to 15	10	15.15
	16 to 20	4	6.06

Hours per week spent on activities related to the domain	1 to 10	52	78.78
	11 to 20	10	15.15
	21 to 30	3	4.54
	81 to 90	1	1.51

Note. Total = 66

A Oneway ANOVA was done to compare the three groups on mindfulness, mind-wandering spontaneous and mind-wandering deliberate. There was a significant effect of the creative domain on the mindfulness scores for the three conditions ($F(2, 63) = 4.823$, $p = .011$). On Tukey HSD post hoc test, a significant difference between musicians and dancers was seen ($p = .010$, mean difference = -.6686). This means that the dancers and musicians differed in their mindfulness scores, with dancers scoring significantly higher on mindfulness than musicians. Therefore, the first null hypothesis was rejected. Although existing research has explored the practice of mindfulness amongst dancers (31-33), the finding that dancers and musicians differ in mindfulness is unique to this research. Dance and mindfulness have also been combined in the concept of Dancing Mindfulness, an all-inclusive practise of wellbeing that draws on dance as a tool for focusing on the present(32).Certain aspects of mindfulness have also been included in dance therapy (31,33).Furthermore, research has shown that practising mindfulness during performance helps decrease performance anxiety (34,35).

For exploring the second and third hypotheses, correlation was conducted to see the relationship between the variables, as shown in Table 2. As is usually expected with creativity scores, they did not follow the normally distribution, and hence, Spearman's correlation was done. There were no significant relationships between mindfulness, mind wandering deliberate and mind wandering spontaneous among the performing artists in general. However, the negative association between mindfulness and spontaneous mind-wandering, as well as between mindfulness and deliberate mind-wandering, is in line with previous findings that have established the opposing nature of mindfulness and mind wandering(9).

Table 2 Spearman's correlations

	CAct[1]	CAch[2]	MAAS[3]	MW-D[4]	MW-S[5]	Experience[6]	No. hrs/week[7]
CAct[1]	-						
CAch[2]	.745**	-					
MAAS[3]	-.139	.080	-				
MW-D[4]	.190	.052	-.258*	-			
MW-S[5]	.275*	.086	-.383**	.486**	-		
Experience[6]	.225	.262*	-.090	.220	.077	-	
No. hrs/week[7]	.013	.142	-.176	-.037	-.059	.238	-

Note. *p< .05; **p< .01

[1]Creative activities

[2]Creative achievements

[3]MAAS: Mindful Attention Awareness Scale

[4]MW-D: Mind Wandering-Deliberate

[5]MW-S: Mind Wandering-Spontaneous

[6]Years of experience in the domain

[7]Number of hours per week spent in activities related to the domain

On domain specific correlations, a negative association between mind wandering spontaneous and years of experience among the musicians was seen ($r(21) = -.528$, $p < .05$), while amongst the dancers, there was a significant positive association between years of experience and spontaneous mind wandering ($r(21) = .507$, $p < .05$), and between years of experience and deliberate mind wandering ($r(21) = .554$, $p < .01$). Perhaps the more experienced dancers find a way to deliberately direct their mind towards novel thoughts, while also being open to spur-of-the-moment creative ideas. An important aspect of a creative product is its usefulness or utility in the real world(36,37).The authors speculate that occasionally, when one's mind wanders, an important idea may spontaneously appear. However, this idea could be far removed from reality and to be able to make it appropriate to one's earthly setting, some amount of deliberate thought is required as well. Thus, the second hypothesis was accepted while the third hypothesis was rejected for dancers and musicians, but not for theatre artists.

Implications

These findings may have vital implications in creativity education as well as in the psychology of creativity. Mindfulness or mind-wandering interventions can be developed, specific to the domain or creative field, and to better individuals with aptitude in their creative domain to enhance their potential. With a better clarity of the forces that influence creative processes, people can have better understanding of themselves and their creative potential.

Limitations and Future Recommendations

This research focuses only on the performing artists, there is also a need to look at how these relationships could differ among other forms of art as well, such as expressive arts, sports, scientific inventions, creative cooking, etc. As this research has only looked at trait mindfulness, future research can focus on the multiplicity of mindfulness facets as well. Finally, the correlational data and the small sample size could limit the generalisability of the findings, hence future research can explore such differences with larger sample size.

Conclusions

This study helped to fill the research gap by focusing on the differences between artists based on their creative fields, thus underlying the importance of the diversity and multiplicity of creative domains, as well as the experience of the creative individual, before reaching conclusions regarding the underlying processes involved in creativity mental approach.

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Declaration

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