

Humor, Mindfulness and Aggression in College Students

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ABSTRACT

Background: The professional courses such as engineering, medical, paramedical and architecture are demanding and intense in nature. Similarly, it is observed that not only do students indulge in aggressive behaviour but also use humour as a coping mechanism. The purpose of this study was to understand the relationship between humour, mindfulness and aggression and also to assess if these variables had an effect on the participants gender and the courses they were enrolled in.

Methodology: The sample consisted of 80 people between 18 to 25 years of age who were enrolled in professional courses (such as, engineering, architecture, medical and paramedical) from Maharashtra, India. The scales used were the Sense of Humour Scale (SOH), Mindfulness Attention Awareness Scale (MAAS) and Brief Aggression Questionnaire (BAQ).

Results: A significant low positive correlation was observed between SOH and BAQ and a significant moderate negative correlation was observed between BAQ and MAAS. However, an insignificant relationship was found between SOH and MAAS. Furthermore, no significant difference was observed in males and females for mindfulness and aggression. However, a difference was found in males and females for sense of humour. Another test result represented no significant differences between the participants enrolled in engineering, architecture and healthcare courses in consideration with sense of humour, mindfulness and aggression.

Conclusion: This study stated that an increase in sense of humour leads to an increased level of aggression whereas, an increase in mindfulness would lead to a decrease in the level of aggression. However, no significance was found between humour and mindfulness.

Key words: sense of humour, mindfulness, aggression, engineering, architecture, healthcare.

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INTRODUCTION

According to McGhee, humour incorporates a general attitude of playfulness and a coinciding ability to play on ideas. The cognitive ability to manipulate and reframe ideas playfully enables individuals with a sense of humour to view unpleasant events as funny instead of frightening, annoying, or stressful [1].

Martin and Ford explain that humour is not unique to certain personalities rather people express it in their daily lives in ways that reflect their broader personalities [2]. Alongside, it is an as a coping mechanism in stressful, difficult or even awkward situations. Furthermore, it plays an important role in forming social bonds as well as attract a mate in some cases [3]. According to the superiority theory of humour, people tend to laugh about others misfortune and look down on them by judging their inferiority. This not only helps develop a sense of joy and a feeling of being superior to others but is also a display of self-ignorance [4]. On the other hand, the Relief theory studied by Sigmund Freud states that humour serves to facilitate relief [5]. According to Brown and Ryan, mindfulness is an open or receptive awareness of and attention to what is taking place in the present [6]. It includes maintaining moment by moment awareness of our thoughts and

feelings and staying in touch with. When individuals acknowledge their thoughts and feelings without judging them, they are called to be mindful. There are times when we lose touch with our body and our minds wander which further leads to obsessive thinking. In such cases, mindfulness plays an important role where it keeps us grounded; as it is an inherent state of consciousness [7]. The Metacognitive Model of Mindfulness by Tomasz Jankowski and Pawel Holas, is based on five main hypotheses that help us understand what happens in the mind of a person who intentionally induced a state of mindfulness. Whereas, the Two-Compound Model, as the name suggests, has two components of mindfulness. Self-regulation of attention being the first component and adopting a particular orientation (that is present moment being the second component [8-9].

Another model of mindfulness called the Five-Aggregate Model is an ancient one. It helps us to understand a moment to moment manifestation of subjective conscious experience. The five aggregates being the material form, feelings, perception, volition and sensory consciousness [10]. Any harmful behaviour which includes intentions to harm another person or violates any type of social conventions is called aggression. It is either a covert or an overt behaviour that can be expressed verbally or non-verbally. Different triggers such as blocked goals, feeling frustrated or frustrations can cause aggression [11]. It is argued that aggression serves as an evolutionary function. Different psychological theories have different explanations to why aggression exists. Such as, the Social Learning Theory states that the development of aggressive behaviour occurs through both observational learning and direct experience. During the phase of social learning, cognitive inferences of what is observed are made, this leads to changes in expectations and beliefs that further guides our future social behaviour [12]. Whereas, the Social Interaction Theory by Tedeschi and Felson states that individuals decide whether or not to get angry based on the expected cost or reward of the success. It is also a well-suited theory to explain proactive aggression which is usually motivated by reactive aggression and higher goals that stems from threat to self-esteem [13]. Both animals and humans use aggression as a means of survival to maintain and defend their territory. Aggression is automatic and instinctual. Sigmund Freud proposed the Instinct Theory of Aggression. He states that aggression is an innate biological drive. That is, we are born with it and must adapt to it as a means to control them. Humans control their anger most of the time to avoid animalistic chaos [14].

Immense amount of work and effort is donned on the candidates enrolled in professional courses like engineering, medical, paramedical and architecture. These courses because they are demanding in nature, require the students to constantly engage in mindfulness. Similarly, it is observed that these intense courses motivate the students to use humour as a coping mechanism. However, the college going youth are generally labelled as the most aggressive age groups because they indulge in showcase of aggression under peer pressure, socially learned aggression, aggression to maintain a social image and so on. Therefore, studying the variables humour, mindfulness and aggression with this population will not only support but also strengthen these observations.

A research was done on Indian medical students to understand stress, burnout and coping in them. It was found that humour and various other factors were correlated with lower levels of stress [15]. In another study, conducted by Heppner and others aimed at mindfulness as a medium to reduce aggressive behaviour. The results of the study stated that dispositional mindfulness that was negatively correlated with self, reported to have greater aggression and hostile attribution bias. It was also found that the behaviour was less aggressive when the participants were made mindful of receiving a social rejection [16].

In a study conducted to understand the relationship between mindfulness and different forms of humour in healthcare professionals. The results stated that there was a positive relationship between light forms of humour and mindfulness and a negative relationship between dark forms of humour and mindfulness [17]. A study by Hofmann, Heintz, Pang & Ruch was done on the relationship between light and darker forms of humour and mindfulness. The results stated that mindfulness and light and darker forms of humour mutually foster each other and found to be significant [17].

An interesting study was done by Scharrer, Bergstrom, Paradise and Ren where they aimed to understand the relationship between humour and aggression in television commercial content. The results stated that the majority of these commercials were made by combining humour and aggression. When aggression was unplanned, humour was more common in that situation [18].

METHODOLOGY

Hypotheses

- There will be a positive correlation between humour and mindfulness in undergraduate students.
- There will be a positive correlation between humour and aggression in undergraduate students.
- There will be a negative correlation between mindfulness and aggression in undergraduate students.

Variables:

There are three variables under study in this research, namely: Humour, Mindfulness and Aggression.

Sample Size: 80 undergraduate students enrolled in professional courses in Maharashtra.

Inclusion Criteria

Students who were currently enrolled in engineering, architecture and healthcare (i.e. pharmacy, medical and paramedical) courses during the time of data collection; undergraduate students who were studying in colleges from Maharashtra; and the ones who identified as female, male and others.

Exclusion Criteria

Enrolled in any comedy/drama course, a member of stand-up comedy community and diagnosed with clinical aggression.

Research Design: Correlational Design with 3 variables (Humour, Mindfulness and Aggression)

Sampling Methods: Purposive and snowball

Tools:

- **The Sense of Humour Scale:** In 2010, Paul E. McGhee published a 7-point scale called The Sense of Humour Scale. This scale consists of 24 items in total that not only assesses the humour quotient but also six subtypes of it, such as, enjoyment of humour, laughter, verbal humour, finding humour in everyday life, laughing at yourself and humour under stress [19].
- **The Mindful Attention Awareness Scale:** The Mindful Attention Awareness Scale (MAAS) was published in the year 2003 by Kirk Warren Brown and Richard M Ryan. It is a 15-item self-report instrument with a single factor. It has a 5-point Likert scale response style [20].
- **The Brief Aggression Questionnaire (BAQ):** The shorter version of the Buss Perry Aggression Scale called the Brief Aggression Questionnaire (BAQ) is a 12 items instrument used to assess aggression. This scale uses 4 3-item subscales: Physical Aggression, Verbal Aggression, Anger, and Hostility [21].

The entire procedure of data collection was done online due to the situation of pandemic. A google form was used and circulated on various social media platforms. The participants were briefly informed about the study on the first page of the form and only after their consent to participate were they directed to further sections of the form. They were assured about confidentiality throughout the study by asking them to only fill in the initials of their names. The form was designed in such a way that only the participants who met all the criteria were allowed to go forward and fill the form. Participants who did not meet any of the requisites were redirected to the last page where they were debriefed and later thanked for their time. The participants who met the requisites were asked to fill the form where the data for the three tools used was collected along with a few post-task questions. In the end, the participants were debriefed and later thanked for their participation.

Statistical Analysis

A Pearson correlation coefficient analysis was done for the significant data and 4 independent groups

RESULTS

Table 1: Descriptive Analysis of SOH, MAAS and BAQ

	N	Range	Mean	Standard Deviation (SD)	Variance
SOH	80	109	124.13	21.804	475.427
MAAS	80	3.87	4.146	.8127	.660
BAQ	80	40	31.91	8.892	79.068

Note: SOH - Sense of Humour Scale, MAAS - Mindful Attention Awareness Scale, BAQ - Brief Aggression Questionnaire

Normality and homogeneity were checked before performing the correlation. Skewness and Kurtosis values were obtained for SOH which were -.515 and .484, for MAAS -.339 and -.408, and for BAQ .275 and -.360. The values remain in between the range of +1 to -1, which is an acceptable range. Since the sample is more than 30 and the statistics performed are robust in nature, the normality was assumed and further analysis were computed.

Table 2: Correlational analysis of variables

Variables	SOH	MAAS	BAQ
SOH	-	-	-
MAAS	-.016	-	-
BAQ	.236*	-.381**	-

*Pearson Correlation is significant at the 0.05 level (2-tailed)

**Pearson Correlation is significant at the 0.01 level (2-tailed)

N=80, SOH = Sense of Humour Scale, MAAS = Mindful Attention Awareness Scale, BAQ = Brief Aggression Questionnaire.

Table 3: Descriptive table for gender difference in Sense of Humour, Mindfulness and Global Aggression

Variable	Sex	N	Mean	SD
Sense of Humour	Female	37	122.70	27.119
	Male	42	126.36	14.904
Mindfulness	Female	37	4.041	.88602
	Male	42	4.248	.74750
Global Aggression	Female	37	31.92	9.057
	Male	42	31.95	8.958

Table 4: Independence groups t-test comparing levels of Sense of Humour, Mindfulness and Global Aggression between Female and Male

	t	Df	Sig. (2-tailed)
Sense of Humour	-.754	77	.453
Mindfulness	-1.122	77	.265
Global Aggression	-.016	77	.987

There is no significance seen in the levels of sense of humour, mindfulness and global aggression between females and males.

Table 5: Descriptive Analysis of students enrolled in 1, 2 and 3 with respect to SOH, MAAS and BAQ

	Course Category	N	Range	Mean	SD	Variance
SOH	1	43	100	122.74	20.147	405.909
	2	16	80	117.44	22.792	519.463
	3	21	78	132.05	23.025	530.148
MAAS	1	43	3.20	4.3101	.6966	.485
	2	16	3.13	3.9208	.9292	.864
	3	21	3.27	3.98095	.9029	.815
BAQ	1	43	38	30.95	9.268	85.903
	2	16	32	33.50	8.375	70.133
	3	21	32	32.67	8.645	74.733

SOH = Sense of Humour Scale, MAAS = Mindful Attention Awareness Scale and BAQ = Brief Aggression Questionnaire, 1 = Engineering, 2 = Architecture and 3 = Healthcare

Table 6: Analysis of Sense of Humour, Mindfulness and Global Aggression in Engineering, Architecture and Healthcare

	F	Sig.
Sense of Humour	2.298	.107
Mindfulness	1.971	.146
Global Aggression	.574	.565

No significance was found between sense of humour, mindfulness and global aggression in engineering, architecture and healthcare. However, if any significance was found between these variables then further a Tuckey's HSD could be calculated to understand the difference.

DISCUSSION

The first hypothesis stated that there will be a positive correlation between humour and mindfulness in undergraduate students. The results of the analysis displayed an insignificant relationship between the two variables. Thus, the results are not in line with the hypothesis. On contrary to the results obtained in the current study, Özyesil, Deniz and Kesici, conducted a study to understand the correlation between mindfulness and humour on 503 undergraduate students. The results of that study showed a positive correlation between mindfulness and two styles of humour, that is, affiliative and self-enhancing. However, a negative correlation was found between mindfulness and aggressive and self-defeating humour styles [22]. The second hypothesis stated that there will be a positive correlation between humour and aggression in undergraduate students. The results of the analysis aligned with the hypothesis. Furthermore, proving that an increase in sense of humour leads to an increased aggression level. Thus, the results are in line with the hypothesis. An interesting study was done by Bowker and Etkin to understand the mediating role of humour in association between relational aggression and popularity during early adulthood. The study was done on 265 students and the results stated that relational aggression was related to popularity indirectly through humour. Physical aggression, gender and ethnicity was also considered during the study. The study stated that relational aggression and humour were found to be significant only for boys and for young adolescents with highly relational aggressive friends [23]. In the current study, there were more male participants enrolled in engineering than female participants. This may also explain why there was a positive correlation between aggression and humour.

The third hypothesis stated that there will be a negative correlation between mindfulness and aggression in undergraduate students. The results of the analysis aligned with the hypothesis. Furthermore, it was observed that an increase in mindfulness leads to a decrease in aggression level. Thus, the results are in line with the hypothesis. A study was done on the same parameters by Singh, where he aimed to study the

relationship between aggression and mindfulness among youth. The results of this study stated that there was a negative significant correlation between aggression and mindfulness [24].

A few ancillary observations were conducted in the present study. First, a series of t tests were conducted to understand the significant difference between females and males in consideration with humour, mindfulness and aggression. The results suggested that there were no significant differences in the SD of males and females for mindfulness and aggression. Which means that the level of mindfulness and aggression in males and females is indifferent. However, a difference in the SD of males and females for sense of humour was observed. Which means that men and women use and perceive sense of humour differently. Some of the past studies support these findings. For instance, a study was conducted to understand the gender differences in terms of humour. In this study, the researcher examined the humour response to aggressive cartoons in males and females. The results stated that both young and elderly females rated high on funniness [25]. However, the need for further research focusing on gender differences in terms of humour, mindfulness and aggression is indicated. Another ancillary study was done where a series of t-tests were conducted to understand the significant difference between the participants enrolled in engineering, architecture and healthcare courses in consideration with sense of humour, mindfulness and aggression. As per the results, no significant differences were found in these variables.

As the current study was done during the time of a global pandemic, it had a few limitations of its own. For instance, finding participants online was a task. As it was a difficult time and a lot of immediate stressors were present, the sense of humour might have been compromised in the participants as they were experiencing stress. Not only was the state of mindfulness hindered but also, because of the global trauma, an increase in frustration levels was observed. The time when the data was collected seemed to clash with the exam schedule of most universities in Maharashtra. Furthermore, making it difficult to find the participants. The fact that a lot of healthcare students required on the frontline during the pandemic added up to the limitations because the medical and paramedical students were a part of the sample. A lot of people were affected economically during these tough times due to which majority of the youth started earning to support their families. Despite of work from home, these students were not able to find time to fill the questionnaire. The participants were not motivated enough to fill long questionnaires merely for survey purposes because their psychological well-being was also affected. Furthermore, leading to half-heartedly filled forms. Because the data was collected online, the researcher was unable to guide or instruct the participants which lead to filling of uneven responses such as, demographic details. Due to these limitations the researcher had to discard quite a few responses. Along with that, the sampling method was purposive and snowballing which reduces the robustness of the results as the sample does not truly represent the population.

CONCLUSION

Despite of all the limitations, this study contributes fairly to the previous researches. For instance, it provides supportive evidence for the relationship between humour, mindfulness and aggression interchangeably. Additionally, it helps us understand the role of gender on these variables.

However, further studies can be conducted to support and strengthen the results of the current study. Like, the sub-factors of humour as well as aggression can be studied to better understand the variables and their relationship. In the current study, an insignificant relationship between humour and mindfulness was observed, in this case, a cross cultural study can be conducted to understand if there are any cultural components to it. One of the ancillary observations of this study was that men and women are indifferent when it comes to level of mindfulness and aggression but there is a difference in how they use or perceive sense of humour. Therefore, an in-depth future study that mainly focuses on gender differences in these variables is encouraged. Future researchers are recommended to conduct an identical study in a different environment from that of a pandemic. Alongside, an unconcentrated study, that is considering the sample outside Maharashtra is suggested in the future.

Apart from these studies, future interventions can be designed to improve the psychological well-being of students enrolled in professional courses. These interventions can solely focus on strengthening mindfulness and positive humour in them.

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