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HUMOUR IN CLASSROOM: DEVELOPMENT AND VALIDATION OF TEACHER'S HUMOUR ORIENTATION SCALE

Vandna Maini*, Shruti Dhawan**

**Professor, Department of Evening Studies, Panjab University, Chandigarh, India.*
Email: vandnamaini@yahoo.com

***Visiting Faculty, Department of Evening Studies, Panjab University, Chandigarh, India.*
Email: shrutidhawansd96@gmail

Abstract: *The concept of humour orientation refers to how individuals utilise humour in various everyday situations. In the classroom setting, the way a teacher uses humour can significantly impact student engagement and learning. This study aimed to develop and validate a scale that measures teacher's humour orientation. The study used students' perception of their teacher's sense of humour to measure humour orientation. The sample included 161 students from colleges in Punjab and Chandigarh. A list of key humour orientation measures was developed and filled out by the participants. The scale was created using exploratory factor analysis, and four dimensions were identified: "perceptivity to humour," "use of humour," "humorous attitude," and "in-class humour." These dimensions explained 64.07% of the total variance. The scale also showed good composite reliability. The results of this study provide support for the validity of the proposed teacher's humour orientation scale, but more research is needed to better understand the attributes of a teacher's humour orientation and its impact on classroom performance.*

Keywords: *Classroom, Humour Orientation, Learning, Student, Teacher*

Introduction

"Laughter and humour are indeed like an invitation, be it an invitation to dinner or an invitation to start a conversation: it aims at decreasing social distance" (Cosner, 1959).

Humour is strategically used in many of our routine interactions. We use humour to break the ice and gain a liking among our friends. At work, humour helps in reducing tension and boredom. In health care and business contexts, higher humour-oriented individuals report greater coping effectiveness (Rizzo, Wanzer & Booth-Butterfield). In classrooms, humour has been observed to enhance students' engagement and performance. Student motivation is a major problem in college classrooms today. Many students are bored, distracted, and unable to see much connection between the course and their lives outside the classroom. Their boredom reduces attention and academic performance (Hootstein, 1994). Most college professors would agree that motivated students are easier to teach and that the students who are interested in learning learn more. One effective way instructors can motivate students is by incorporating humour while teaching. It would not only improve their attention but also enhance their motivation, which in turn would increase learning (Christophel & Gorham, 1995). From students' point of view, a long, monotonous lecture would hinder their interest as well as learning. From the teachers' point of view, "how" to teach effectively is a challenging task. It demands ingenuity and imagination to capture students' attention and interest. Gorham and Christophel (1990) found that humour use within the classroom augmented student learning outcomes.

Traditionally, humour has received little attention and that too negative. Humorous people have been looked down on and are known to have lesser self-control and are considered non-serious. It has been perceived as useless and a major source of distraction that reduces classroom seriousness and efficiency. But in today's classroom, humour has a substantial place and has been encouraged as an important teaching tool across all academic levels (Ziv, 1988). Humour is a desirable characteristic of teaching and learning. It aids in holding the attention of students, creating interest, and managing disruptive behaviours in class. Garner (2006)

also noted that humour made students enjoy lectures as well as retain them. Humour is an important tool for creating a conducive environment in the classroom.

Humour Orientation

Since the early 1980s, researchers have shown an ongoing interest in the study of individual differences in humour. Much of the research on humour has focused on the potential benefits of humour on physical and psychosocial health and well-being (Lefcourt, 2001). Research on humour orientation (HO) started as an attempt to make sense of the contradictory findings of research on humour and learning. Booth-Butterfield and Booth-Butterfield (1991) identified humour orientation as a communication-based personality attribute that enables individuals to produce humorous messages regularly. They conceptualised humour orientation as deliberate verbal and non-verbal messages which produce laughter, chuckling, and other forms of spontaneous behaviour that cause pleasure, delight, etc., in the target receiver. Individuals having high HO perceive humour used to be appropriate in many life situations relative to low HO individuals. High HO individuals have a wide range of humorous behaviours and do not require any sort of planning to effectively produce funny messages. Generally, high HO individuals have also been found to be more socially attractive than individuals with low HO. They use a wide array of humorous behaviours like making faces, using witty language, nonverbal behaviours, and telling jokes (Wanzer, Booth-Butterfield & Booth-Butterfield, 1996). Thus, the appropriate use of humour had a positive impact on interpersonal relations and group cohesion. Kane, Suls and Tedeschi (1977) listed various functions of humour in reducing tension, relieving embarrassment, discussing sensitive topics, saving face, entertaining, alleviating boredom, etc.

After the introduction of the humour orientation scale, researchers have been studying the influence of teachers' humour orientation on student behaviours and perceptions. Various researchers have examined the pedagogical implications and cautions concerning the use of humour in teaching. They identified that the educators who used humour while teaching were more positively rated by their students. Some suggested that it enhanced learning (Berk, 1998). In the last decade, research on humour in educational settings focused on four primary areas, viz. the positive effects of humour on learning, retention, relieving performance anxiety and stress, and impact on teacher's likeability (Tamborini & Zillman, 1981).

Studies have found that students consider the best teachers as the ones who use humour in the class while teaching (Forston & Brown, 1998) because they start enjoying their educational experiences and, hence, learn more. One way to study humour in the classroom is by examining the humour orientation (HO) of teachers who use and employ different humour strategies frequently and effectively (Booth-Butterfield & Booth-Butterfield, 1991). The findings of numerous studies suggest that competent teachers use humour as a pedagogical tool. This is because when teachers are humorous, they are perceived as enjoyable, entertaining, caring, enthusiastic, and intellectually stimulating (Bolkan & Goodboy, 2009). Consequently, teachers who integrate good humour in their classroom interactions create an encouraging communication environment, enhance attention and information processing, and ultimately facilitate student learning.

Review of Literature

Humour orientation has been identified as being positively associated with communication competence (Wanzer, Booth-Butterfield & Booth-Butterfield, 1995). It was found that the individuals having high HO's frequently communicated using humour. Wanzer, Booth-Butterfield and Booth-Butterfield (1995) observed that those who scored high on HO reported frequent attempts to communicate humour through actions, jokes, and puns. High HO individuals were perceived as funnier when they enacted jokes than those scoring low. They possessed the ability to insert humour in their communication in a variety of situations and with a variety of people.

Researchers have identified various types of humour used by different individuals. Affiliative humour is used by individuals who tend to say funny things and engage in spontaneous, witty communication to amuse others, develop bonds and reduce interpersonal conflicts (Lefcourt, 2001). Self-deprecating humour refers to saying funny things about oneself and not taking oneself over-seriously while maintaining a sense of self-acceptance (Vaillant, 1977). People who use Self-enhancing humour have a humorous outlook toward life, even in the face of stress or adversity (Kuiper, Martin & Olinger, 1993). Aggressive humour relates to the use of sarcasm, "put-down," or disparagement humour (Zillman, 1983). In general, it relates to the predisposition to express humour without regard for its potential impact on others (e.g., sexist or racist humour).

Several studies have shown that a teacher's appropriate use of humour humanised the classroom, fostered creativity, enhanced student learning, and led to higher ratings of teacher effectiveness (Gorham & Christophel, 1990). Robinson and Kakela (2006) opined that "by creating a space for fun, interaction, and trust, teachers and students

can build a learning environment that promotes engagement, deep learning, and meaning." They observed that a joyful approach in the classroom fostered an appropriate climate to promote creativity among students.

Wanzer, Frymier and Irwin (2010) conceptualised the instructional humour processing theory (IHPT) to study how teachers' humorous messages were processed by the students and their impact on student learning. The theory explains the variability in student perceptions of the appropriateness of their teacher's humour. If the funny message has elements that are related to the subject or it makes the content relevant, then student learning would be augmented. Offensive humour tends to reduce motivation, and also distract students from the lecture.

Tews, Jackson, Ramsay and Michel (2015) contributed to educational research by providing a clearer picture of the nature and impact of humour on the learning outcomes of students. Fun delivery, which explained 14% of the total variance in student engagement, included: humour, creative examples, real-life examples, attention getters to generate student interest, instructor demonstration of course content, interactive lectures, and instructor storytelling. Embedding fun in the classroom environment made lectures more interesting.

Bryant, Comisky and Zillman (1979) investigated the role of humour in forming an individual's perceptions. They discussed the general attitude educational institutions had regarding incorporating humour in the classroom. They found that earlier, humour was perceived as having no place in the classroom and that the studies on humour had uncovered inconsistent findings regarding the effect of humour on learning. Their study found that teachers who used humour while teaching produced better learning outcomes among their students.

Stuart and Rosenfeld (1994) assessed students' perceptions of their teacher's humour and classroom climate and found that the amount and type of humour used within the classroom were extremely important when assessing its impact on classroom climate. They found that if a teacher did not use humour, the students perceived the classroom as low in supportiveness and innovation. Furthermore, White (2001) found that both students and faculty thought that humour should be used to gain attention, create a healthy learning environment and alleviate stress. Lei, Lei, Cohen and Russler (2010) also found that humour benefitted students' mental health and enhanced self-esteem, self-concept, attention, motivation, and creativity. Ziv (1988) also stated that humour facilitated information retention, enhanced learning speed, improved problem-solving, relieved stress, and increased perceptions of teacher integrity (Frymier & Thompson, 1992). West (1994) also supported the positive effects of humour on classroom learning and stated that teacher immediacy behaviours like using humour, showing interest in conversations with students in or outside the class, using personal examples, etc., are critical in student learning.

Askildson (2005) investigated the benefits of humour within the language classroom. He collected data from a diverse collection of language students and teachers and asked them to evaluate the use of humour in their classrooms. Results confirmed a significant role of humour in effective teaching and learning. The results strongly supported many of the beneficial effects of a teacher's humour orientation in the language classroom, which helped create a conducive learning environment. Students said humour reduced anxiety, improved the approachability of teachers, and increased levels of learning and engagement.

Gorham (1988) studied the influence of teacher immediacy behaviours on student learning. Results indicated a significant relationship between immediacy behaviours and effective learning. It was concluded that the use of humour was an important aspect of teacher immediacy. Similarly, Sudol (1981) observed that humour helped maintain student interest and comfort and emphasised the indirect advantageous impact of humour on learning. Welker (1977) found that humour served as an "attention getter" and tension reducer, as well as a means for dealing with student and teacher errors in a compassionate manner. He also remarked, "to err is human, but also, to err is Humorous".

Neuliep (1991) opined that humour aided in building teacher-student bonds and engaging students in the learning process. It helped students learn better, remember more, improve problem-solving, absorb and retain information more quickly, and reduce their anxiety about subjects like maths and science. Humour also reduced class management problems. His study examined the use of humour in teaching and provided strategies that teachers could use to bring more humour into their classrooms. He stated that the three main reasons for using humour in the classroom were to put students at ease, to gain their attention, and to show that the teacher is human.

Student perception of teachers' humour has also been associated with increased motivation and attention (Gorham & Christophel, 1990). Wanzer and Frymier (1999) found humour orientation as positively associated with affective learning and performance of students. They found a positive relationship between the humour orientations of the professors and student reports of learning; the results were sufficiently significant for the researchers to recommend that teacher education programs should incorporate a humour component.

Christophel (1990) attempted to broaden the operationalisation of humour by identifying 13 categories of verbal and nonverbal humour behaviours from student descriptions of Humorous instructors, e.g., brief comments directed at students, brief comments directed at the entire class, personal anecdotes, jokes, etc. They found that both the amount and types of humour used were important in explaining the relationships between humour and learning. When asked to rank the most and the least-favoured teachers, the students favoured either "very Humorous" or "somewhat Humorous" faculty and least favoured "serious" faculty. Wanzer (2002) observed that the effective use of humour often resulted in student perceptions of liking for, and comfort with, his/her teacher. Hoad, Deed and Lugg (2013) reported humour as one of the instructive factors that triggered as well as enhanced students' emotional engagement and their learning outcomes. Students perceived that humour could increase their interest in classroom learning. It could also help them relax while learning and reduce stress in the classroom.

Humour breaks the communication barriers (psychological barriers) in the classroom and helps to create an environment that is conducive to learning. Teachers' lack of humour in the classroom is seen as a source of student de-motivation (Gorham et al., 1992).

Previous Scales

In the past two decades, researchers interested in the relationships between humour and various aspects of psychosocial and physical health and well-being have made use of several self-report measures (Ruch, 1998). These measures assess such aspects of humour as the degree to which individuals smile and laugh in a wide variety of situations (Situational Humour Response Questionnaire—SHRQ; Martin & Lefcourt, 1984), use of humour as a coping strategy (Coping Humour Scale—CHS; Martin & Lefcourt, 1983), notice and enjoy humour (Sense of Humour Questionnaire—SHQ-6; Svebak, 1996) etc. Sense of humour has been conceptualised in various ways, for example, as a cognitive ability (e.g., ability to make and remember jokes; Feingold & Mazzella, 1993); as an aesthetic response (e.g., humour appreciation, enjoyment of particular types of humorous material; Ruch & Hehl, 1998); as a tendency (e.g., tendency to laugh frequently, to amuse others, to laugh at others' jokes; Craik, Lampert & Nelson, 1996) as well as an attitude (e.g., habitual cheerfulness; Ruch & Kohler, 1998, positive attitude toward humour). The humour styles questionnaire (HSQ) takes into consideration four dimensions (self-enhancing, affiliative, aggressive, and self-defeating) related to individual differences in the use of humour (Martin, Puhlik-Doris, Larsen, Gray & Weir, 2003). The multidimensional sense of humour scale consists of six subscales, namely "humour comprehension", "humour creation", "use of humour in social contexts", "humour coping", "the attitude toward humour", and "the tendency to laugh" (Hsieh, Hsiao, Liu & Chang, 2005).

Although the existing humour scales were designed to assess various aspects of humour, they do not typically address the specific ways in which individuals use or express humour in their lives or their humour orientation. The Humour Orientation scale (Booth-Butterfield & Booth Butterfield, 1991) assesses how likely a person is to produce humorous messages such as funny stories, jokes, etc. Based on findings and recommendations published in the literature, we sought to develop and conduct an initial validation of a teacher's humour orientation scale.

Research Methodology

Research Design

The current study is exploratory and empirical in nature.

Sampling Methodology

Data was collected from 250 students from different colleges in Punjab and Chandigarh, out of which 161 students participated, yielding a response rate of 64.4%.

Data Analysis and Interpretation

Exploratory Factor Analysis

The dimensional structure of the teacher's humour orientation scale was identified through the exploratory factor analysis (EFA) technique using principal component analysis (PCA) and varimax rotation using IBM SPSS 23. EFA is an important technique in scale development and in identifying underlying factors/dimensions of a scale. A variable's communality, which indicates the amount of variance in each variable, was also assessed to ensure acceptable levels of explanation. The results show that all communalities were over .50. After an initial generation of twenty items, five items were removed during EFA. Removal of these items led to a four-factor solution with a total of fifteen items. Finally, factor analysis was re-run after removing items that failed to load substantially, and that did not load onto their respective factor. The factor solution derived initially yielded four factors of teacher's humour orientation, which accounted for 64.07% of the variation in the data. The result of EFA showed that Kaiser-Mayer-Olkin measure of sample

of adequacy was .822, meaning that the sample size was adequate. The overall significance of the correlation matrix was tested using Bartlett's test of sphericity. The results showed that, collectively, the correlations were significant.

The factors identified as part of the factor analysis can be described as follows:

- Perceptivity towards humour
- Humorousness
- Humour use
- In-class humour

Table 1: KMO Measure of Sampling Adequacy and Bartlett's Test of Sphericity

KMO	.822
Bartlett's test of sphericity (Sig.)	.000

Table 2: Teacher's Humour Orientation Constructs and Loadings

Items	Factors			
	1	2	3	4
This teacher doesn't appreciate humour in class.	.805			
This teacher is serious all the time.	.764			
This teacher doesn't incorporate humour in his/her lectures.	.758			
This teacher believes humour reduces classroom efficiency.	.754			
This teacher believes humour creates non serious classroom climate.	.746			
This teacher has a natural humorous communication style.		.814		
This teacher lightens up the mood of the class.		.706		
This teacher has a good sense of humour.		.699		
This teacher asks students to feel relaxed during his/her lecture.		.689		
This teacher uses students in class as examples to explain some topics.		.649		
This teacher uses sarcasm in class.			.799	
This teacher makes certain gestures to make students laugh.			.750	
This teacher uses Humorous references from tv shows/movies in class.			.703	
This teacher uses Humorous props to illustrate a concept eg., uses funny images in a power point presentation etc.				.868
This teacher scolds students in a Humorous way.				.818

Confirmatory Factor Analysis

The measurement models were tested using the structural equation modelling technique. IBM SPSS AMOS 23 was used to assess the goodness of fit, composite reliability, convergent, and discriminant validity. A measurement model ascertains the relationship between the latent/unobserved variable and its corresponding observed measures and ascertains if the data fits the model well (Henseler, Ringle & Sinkovics, 2009).

Measurement Model

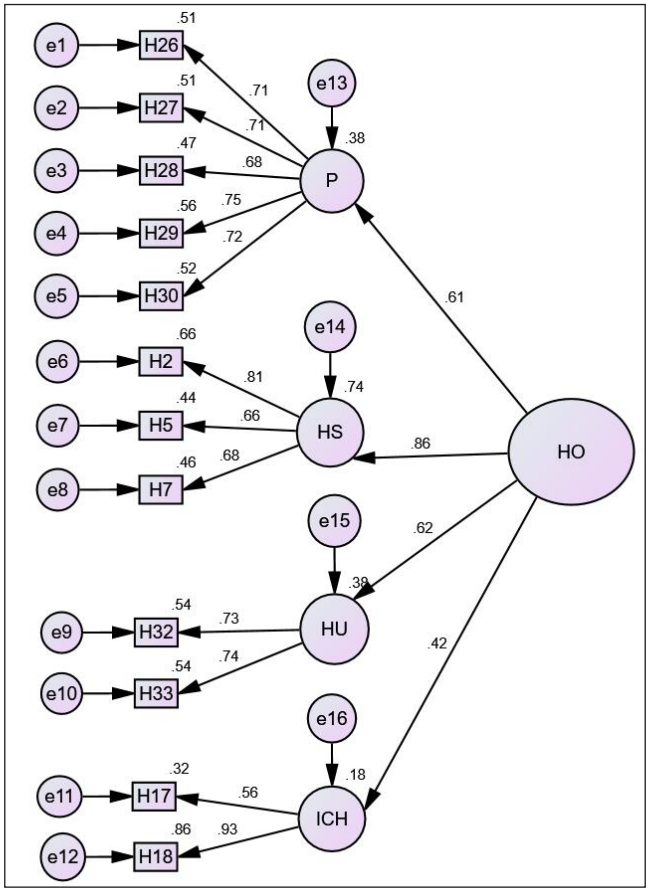

Fig. 1

Hu and Bentler (1998) asserted that it is important to consider the consistency of the model by evaluating various fit indices. In order to evaluate the goodness of fit of the specified model, the present study utilized CMIN (Chi square), NFI (normed fit index), GFI (goodness of fit index), TLI (Tucker–Lewis index) and RMSEA (root mean square error of approximation). These fit indices have a designated cut-off value. Hu and Bentler (1998) recommend that the value RMSEA should not exceed .08. Bentler (1990) suggested that NFI, GFI, and CFI values should

be in the range of .90 to .95. CMIN/df acceptance varies across researchers, ranging from less than 2 to less than 5 (Schumacker & Lomax, 2004).

A measurement model was developed based on the results of exploratory factor analysis. Twelve items were part of the structural model. Three items were deleted due to low loadings. The results of CFA with twelve items showed a good fit. The results are summarised in Table 3.

Table 3: Fit Indices

Fit Indices	Recommended Value	Value
$\chi 2$/df	<5	1.565
P		.000
GFI	>.90	.923
CFI	>.90	.951
TLI	>.90	.940
RMSEA	<.08	.059

When P for $\chi 2$ is above a certain value (usually set to P = .05), an exact fit of a model is indicated. The indices have values ranging between 0 and 1, with higher values indicating a better fit, except for RMSEA. RMSEA value of .059 indicated a fair fit to the data. The values for NFI, GFI and TLI were over .90. Therefore, it was concluded that the four-factor model fits the data well.

Reliability and Validity Analysis

Reliability analysis was conducted to examine the internal consistency of multiple indicators for each construct. A Composite Reliability Coefficient was reported to assess the reliability of the factors. It estimates the extent to which a set of latent/unobserved construct indicators share in their measurement of a construct (Hair, Mattews, Matthews & Sarstedt, 1998). Traditionally, Cronbach's Alpha has been widely used to measure the reliability of a construct. However, recently, Cronbach and Shavelson (2004) asserted that using the Alpha coefficient may not be sufficient alone to determine reliability. Hence, composite reliability is calculated using the standardised loadings and residuals of each item. All values of composite reliability were between .876 and .943, showing that measures in the study are reliable (Hair et al., 2012).

Average Variance Extracted (AVE) was calculated in order to assess the convergent validity of each construct; AVE was calculated by summing each squared factor loading and dividing it by the number of indicators. An AVE value of .50 or higher establishes convergent validity (Hair et al., 2012). Since AVE values for each of the constructs were over .50; thus convergent validity was established.

Table 4: Composite Reliability and Average Variance Extracted

Dimensions	Items	Estimates	CR	AVE
Perception towards humour	This teacher believes humour creates non serious classroom climate.	.723	.839	.514
	This teacher believes humour reduces classroom efficiency.	.747		
	This teacher doesn't incorporate humour in his/her lectures.	.684		
	This teacher is serious all the time.	.712		
	This teacher doesn't appreciate humour in class.	.715		
Humorousness	This teacher has a good sense of humour.	.693	.762	.520
	This teacher lightens up the mood of the class.	.666		
	This teacher has a natural Humorous communication style.	.810		
Humour use	This teacher uses Humorous references from tv shows/movies in class.	.721	.702	.540
	This teacher makes certain gestures to make students laugh.	.748		
In class humour	This teacher uses Humorous props to illustrate a concept eg., uses funny images in a power point presentation etc.	.868	.730	.590
	This teacher scolds students in a Humorous way.	.818		

Discriminant Validity

According to Zikmund, Babbin, Carr and Griffin (2013), discriminant validity is established when a scale that should not correlate too highly with a measure of a different dimensions actually does not correlate very highly. Discriminant validity is established when constructs' AVE is greater than the squared inter-correlations of other constructs. The results show that each constructs' AVE was greater than the squared correlation between each pair of constructs (Latif, 2018).

Table 5: Discriminant Validity

	Perception Towards Humour	Humorousness	Humour Use	In-Class Humour
Perceptivity towards humour	.717			
Humorousness	.632	**.721**		
Humour use	.344	.409	**.734**	
In class humour	.138	.347	.213	**.768**

Discussion

Theoretical Implications

The Teachers' humour orientation scale has several theoretical implications, including:

- *Understanding the Relationship between Teacher Humour and Student Engagement:* A teacher's use of humour in the classroom has been found to be positively correlated with student engagement and motivation.
- *Assessing the Impact of Teacher Humour on Student Learning:* Research has shown that teacher humour can improve students' memory and recall of information, as well as their ability to make connections between different pieces of information.
- *Examining the Role of Teacher Humour in Classroom Management:* Humour can be used as a tool for managing student behaviour, reducing tension and conflict in the classroom, and promoting a positive classroom climate.
- *Investigating the Relationship between Teacher Humour and Teacher Burnout:* Some studies have suggested that humour can be used as a coping mechanism for dealing with the stress of teaching and that a high sense of humour may be associated with lower levels of burnout among teachers.
- *Understanding the Relationship between Teacher Humour and Student Well-Being:* Humour can promote well-being by reducing stress and anxiety, providing a sense of social connection, and fostering a positive self-image.

Practical Implications

Teachers' humour orientation scale can have several practical implications, including:

- *Teacher Selection and Hiring:* The scale could be used to assess the humour orientation of candidates for teaching positions, which could help identify those who are more likely to use humour in the classroom in a way that is beneficial for students.
- *Professional Development:* The scale could be used to identify teachers who could benefit from training in how to use humour effectively in the classroom.
- *Classroom Observation and Evaluation:* The scale could be used as part of a classroom observation protocol, allowing evaluators to assess the extent to which a teacher is using humour in the classroom, and whether it is being used in a way that is beneficial for students.

Conclusion

The purpose of this study was to develop and validate a "Teacher's Humour Orientation Scale" and then test its reliability and validity. The scale represents a new approach to assessing teachers' humour orientation measured from students' perspectives. The twelve-item multi-construct scale consists of four sub-constructs, namely Perceptivity towards humour, Humorousness, Humour use and In-class humour. The scale was constructed in accordance with exploratory factor analysis (EFA) steps. The four-construct model was also tested through confirmatory factor analysis (CFA). The model proved to be a good fit on the basis of measures like CFI, NFI, GFI, RMSEA, etc. The construct validity of the scale was good, as was its discriminant validity. Overall, the present findings offer encouraging evidence in support of the Teacher's Humour Orientation Scale.

Limitations

Since this study employed a cross-sectional research design, we were unable to assess changes in the humour orientation of teachers over time. Also, as this study is limited to students of colleges in Punjab and Chandigarh, findings can neither be generalized nor be taken as representative of all the teachers. More research is needed to explore the applicability of the Teacher's Humour Orientation Scale in diverse populations.

Future Research

There are several potential areas of future research that could be done on the humour orientation of teachers, including:

- *Longitudinal Studies:* Conducting longitudinal studies that follow the same group of teachers and students over time could provide insight into how the use of humour in the classroom changes over time and how it is related to student outcomes such as engagement, motivation, and learning.
- *Cross-Cultural Studies:* Investigating the use of humour in the classroom in different cultural contexts could provide insight into how cultural factors influence the use of humour by teachers and how it is perceived by students.
- *Investigating the Specific Techniques and Strategies*: Identifying specific techniques and strategies that teachers use to incorporate humour in the classroom, and how these can be used effectively to promote student engagement and learning.
- *Investigating the Impact of Humour in Virtual Classrooms:* Understanding how teachers can use humour in virtual classrooms, and how it compares to in-person classroom settings in terms of its impact on student engagement and learning.

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