Grasping the complexities of Pakistani educators' pedagogical approaches and students' needs

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Abstract:

This study explored the relationships between perceived motivating and demotivating teaching styles and students' need satisfaction and frustration in the context of Pakistani middle and high school students. A sample of 1,715 students completed surveys assessing their self-reported and perceived experiences with motivating and demotivating teaching styles, as well as their levels of need satisfaction and frustration. The findings revealed that students' perception of motivating teaching styles was positively linked to their need satisfaction; while demotivating teaching styles were associated with increased need frustration. Additionally, students' need satisfaction was found to have a positive relationship with their perception of a controlling teaching style. The study discusses the theoretical and practical implications of these results.

Keywords: Need satisfaction, need frustration, Teaching Self-determination, Motivating styles.

1. Introduction

Teachers play a significant part in the process of shaping student achievement, development, and motivation. İnce (2023) The teaching styles that teachers employ are a significant factor in this process. The manner in which teachers approach their teaching decisions affects the degree to which students' needs are satisfied, which in turn affects the students' level of engagement and overall development (Wang et al., 2024). Students have a greater likelihood of participating in learning activities, which are supported by both their peers and their teachers, when their fundamental psychological needs are met. For example, increased engagement, positive emotions, and intrinsic motivation are all outcomes that are promoted by this satisfaction (Arif et al., 2025a). The importance of teachers' teaching styles in fostering the well-being and development of their students is highlighted by the relationship between need satisfaction and

positive outcomes. Teaching styles that support autonomy and structure are positively correlated with students' need satisfaction, according to previous research (Amerstorfer & Freiin von Münster-Kistner, 2021; Chen & Huang, 2009). On the other hand, teaching styles that are controlling or chaotic are linked to increased disappointment and dissatisfaction among students (Pandita & Kiran, 2023). Prior studies like (Arif et al., 2025b) and others are just a few examples of the few studies that have been conducted in East Asian contexts. The majority of the research that has been done thus far has been carried out in Western countries. There are differences between Pakistan and other Asian countries in areas such as uncertainty avoidance, masculinity-femininity, and information processing styles (Zhou et al., 2023). This is even though Pakistan is considered to be countries that belong to the East Asian culture. In Pakistan, for instance, people have more personal freedom to determine the rationality of social rules, as found in this case.

The existence of these cultural differences emphasizes the need to develop a deeper understanding of how teaching styles affect student satisfaction and frustration across various cultural settings. This research aims to fill this gap by examining the links between inspiring and demotivating teaching techniques and the level of student satisfaction with their needs in Pakistan. It will explore how these pedagogical approaches are expressed within the context of Pakistani culture, which has its own unique values and norms. Through this study, contributions are made to advancing theoretical knowledge and offering practical recommendations for improving teaching practices in Pakistani educational environments to boost student motivation and well-being.

2. Literature Review

2.1 Pakistani (De) Motivating Teaching Styles

In the Pakistani educational context, teaching styles play a pivotal role in shaping students' motivation, engagement, and psychological well-being, with motivating approaches characterized by autonomy support, clear structure, and interpersonal involvement linked to greater need satisfaction and intrinsic motivation (Santana-Monagas et al., 2024; Zhou et al., 2023) While demotivating styles marked by control, unpredictability, or emotional detachment correlate with need frustration and disengagement (Ghosh et al., 2020a). This dynamic is further nuanced by Pakistan's cultural backdrop, where hierarchical norms and an exam-driven system

Often normalize controlling behaviors such as public criticism or rigid discipline, yet some students interpret teacher authority not as coercion but as care or guidance. However, the perception that may explain the unexpected positive link between controlling teaching and need satisfaction observed in recent findings (Santana-Monagas et al., 2024). Thus, effective pedagogy in Pakistan requires a culturally responsive balance that honors local values while promoting autonomy-supportive practices aligned with Self-Determination Theory (Înce, 2023).

2.2 Evaluating Motivating and Demotivating Teaching Styles in the Pakistani Context

Recent theoretical advancements have refined our understanding of how teaching behaviors influence student motivation. Moè & Katz (2021) introduced a two-dimensional circumplex model that differentiates motivating from demotivating instructional styles by mapping them along two axes: (1) support for versus frustration of students' basic psychological needs (horizontal axis), and (2) degree of teacher directiveness or structure (vertical axis). This model has since been validated across diverse educational domains, including secondary schools, higher education, physical education, and clinical training (Wang et al., 2024). Nonetheless, its applicability within non-Western contexts, particularly in Pakistan, remains underexplored.

2.3 Teaching Approaches and Psychological Need Dynamics

Self-Determination Theory (SDT) posits that student motivation and well-being are rooted in the satisfaction of three universal psychological needs: autonomy (feeling volitional), competence (feeling effective), and relatedness (feeling connected) (Escriva-Boulley et al., 2021). Furthermore, teachers create environments that nurture these needs, and students exhibit higher levels of engagement, intrinsic motivation, and prosocial behavior (Moè & Katz, 2021a). In contrast, instructional practices that undermine these needs, such as excessive control, unpredictability, or emotional coldness, can lead to disengagement, anxiety, and academic underperformance (Escriva-Boulley et al., 2021). Crucially, recent cross-cultural studies confirm that autonomy-supportive and well-structured teaching consistently fosters need satisfaction, whereas controlling or chaotic styles heightened need frustration, even in high-power-distance societies (Collie, 2022; Zhu et al., 2024a)

2.4 A Dual-Process Understanding of Teacher Influence

Importantly, the absence of autonomy support does not necessarily equate to controlling behavior. Bong et al. (2024) argue that teachers may adopt a passive or indifferent stance, neither

empowering nor overtly oppressive, which fails to activate student motivation. The dual-process model (Zhu et al., 2024a) clarifies this distinction: autonomy support operates primarily through pathways of need satisfaction to enhance engagement, while controlling behaviors trigger need frustration, leading to disaffection. Similarly, structured instruction can promote adaptive outcomes when delivered in a need-supportive manner, whereas chaotic teaching (e.g., inconsistent expectations, lack of clarity) tends to frustrate needs and impair learning (Dunlap et al., 2000).

2.5 The Pakistani Educational Landscape

In Pakistan, classroom instruction is often marked by large class sizes, teacher-centered pedagogy, and cultural norms that emphasize respect for authority and compliance (Zhu et al., 2024b). Traditional teaching practices position educators as definitive knowledge holders, with limited opportunities for student voice or choice (Moè & Katz, 2021b). Despite this context, emerging evidence indicates that autonomy-supportive strategies, such as offering meaningful choices, providing rationales for tasks, and acknowledging student perspectives, can significantly enhance motivation and perceived relevance of learning among Pakistani students (Ahmed et al., 2023). This suggests that SDT principles may transcend cultural boundaries, even in settings where directive teaching is normative.

2.6 Research Aims & Hypothesis

While research on teaching styles and psychological needs has expanded in East and Southeast Asia (e.g., Arafat et al., 2024; Hall et al., 2024), empirical studies in South Asia, particularly Pakistan, are scarce. Given Pakistan's unique blend of collectivist values, hierarchical classroom dynamics, and resource-constrained educational infrastructure, findings from other regions cannot be assumed to generalize. Investigating how autonomy-supportive, controlling, structured, and chaotic teaching styles relate to students' need satisfaction and frustration in Pakistan is therefore essential. Such research can inform culturally responsive teacher development initiatives aimed at fostering student motivation, resilience, and academic success in this understudied context. Hence, two hypotheses are proposed:

H1. Students' perception of motivating teaching styles is positively related to the satisfaction of their psychological needs.

H2. Students' perception of demotivating teaching styles is positively linked to the frustration of their psychological needs.

3. Methods

Participants in this study were drawn from six middle and high schools in Punjab Province and three in Sindh Province of Pakistan. The sample included 1,550 teachers who volunteered to take part (566 male, 36.5%), with an average age of 39.00 years (SD = 8.61; age range: 20–72) and an average of 15.86 years of teaching experience (SD = 9.40; range: 0–46 years); 757 (48.8%) taught in middle schools and 793 (51.2%) in high schools, covering subjects such as Urdu (16.2%), mathematics (16.1%), English (13.5%), physics (7.7%), Pakistan Studies (6.3%), and other disciplines (40.2%). Additionally, 1,715 students, 852 of whom were male (49.7%), voluntarily completed the questionnaires, with an average age of 15.57 years (SD = 1.57; age range: 11–18). All participants, both teachers and students, were Pakistani nationals.

3.1 Measure Scale

3.1.1 Teacher Measures

3.1.2 Teaching Styles:

The SIS (Aelterman et al., 2019a) was used to measure the teaching styles and consists of 15 teaching scenarios (e.g., during a class assignment, you have noticed some students demonstrating signs of anxiety). You feel their responses and react by... coming with four possible answers that represent the various teaching strategies: autonomy supportive (e.g., "Acknowledge the anxiety of the students and ask them to share their feelings about it), structuring (e.g., "Break down the task in smaller parts so they will find it easier to manage it), controlling (e.g., "Make the students cope with it without displaying anxiety), and chaotic (e.g., "This is so chaotic, just ignore it and leave it to the students to manage on their own). Teachers were requested to indicate on a 7-point Likert scale with 1 = does not describe me at all and 7 = describes me extremely well how similar each of these reactions is to their own response to such situations.

3.1.3 Teacher Need Satisfaction and Frustration:

The psychological needs of teachers were measured based on the scale of Basic Psychological Need Satisfaction and Frustration Scale (BPNSNF; Chen et al., 2015). BPNSNF is a 24-item measure of the level of satisfaction (e.g., I feel a sense of choice and freedom in the things I can

undertake) and frustration (e.g., I feel forced to do many things that I would not otherwise choose to do) on the autonomy, relatedness, and competence levels. The teachers were requested to judge each statement on a 5-point Likert scale, where 1 corresponded to the opposite of the response, i.e., completely disagree, and 5 to completely agree. In order to make it more in line with the school context, the item stems were born with the phrase at school. The scores of satisfactions and frustration were obtained by adding the answers of the responses to each category and then dividing the sums by 12.

3.1.4 Teacher Social Desirability:

The Balanced Inventory of Desirable Responding (BIDR; Paulhus, 1991; Hart, Ritchie, Hepper, and Gebauer, 2015) was used to measure social desirability. The BIDR comprises 16 items which measure two types of social desirability: self-deceptive enhancement (SDE) and impression management (IM). SDE is the process of responding in a disproportionately positive way without/consciously, whereas IM is the conscious way of representing people positively to a certain degree. Teachers rated every item on a 6-point Likert Scale, 1 = strongly disagree, 6 = strongly agree. The scores on SDE and IM have been obtained by adding the items to each scale and dividing them by 8.

3.2.1 Student Measures

3.2.2 Perceived Teaching Styles:

In order to determine how students perceived the teaching styles of their teachers, the 15 teaching vignettes of the SIS were marginally changed to present the view of the students (Aelterman et al., 2019). Students were requested to rate the level of the response of the potential teacher that would fit their perception of their teacher's actions under those circumstances on a 7-point Likert scale, with 1 = "does not describe my teacher at all" and 7 = "describes my teacher extremely well" being the extremes.

3.2.2 Student Need Satisfaction and Frustration:

Student need satisfaction and frustration were also measured using BPNSNF (Chen et al., 2015), and the phrase at school was added to the stem to reflect the teaching environment better.

3.2.3 Student Social Desirability:

Student social desirability was measured by the short version of the BIDR (Hart et al., 2015). The students were asked to rate each item using a 6-point Likert scale, where 1 = strongly disagree and 6 = strongly agree.

4. Data Analysis

4.1 Analyses and Results

4.2. Internal validity and Psychometric Properties.

The data was represented using two dimensions, and both the sample of teachers and the sample of students supported this. This was evidenced by a significant decrease in normalized raw stress between the one-dimensional solution and a two-dimensional solution. The results of the Generalizability Profile Analysis (GPA), also showed that this two-dimensional structure was able to be constant and consistent between the two sets of respondents.

Primary efforts to model an 8-factor model produced poor performance in both samples. In the case of teachers, the model gave the following fit measures: $\chi 2(1682) = 9164.664$, p = 0.001; CFI = 0.792; TLI = 0.781; RMSEA = 0.054 with factor loading values of between 0.38 and 0.79. On the same note, model fit did not work well among the students: $\chi 2(1682) = 7723.779$, p < 0.001; CFI = 0.799; TLI = 0.788; RMSEA = 0.046, and loading range of 0.28 to 0.78. Also, there was the identification of a non-positive definite covariance of the model's latent variables, indicating model instability.

In order to fix these problems, we rolled subscales: the four subscales that showed autonomy-supportive and structuring teaching practices were summarized in one factor, which was termed as motivating, and the two subscales of controlling teaching were combined into one factor which was termed as controlling. Based on this reasoning, the two subscales of chaotic teaching were also summed up into one item, which led to a new model of 3 factors, which included motivating, controlling and chaotic teaching styles. Despite this simplification, the model fit was still below acceptable levels- teachers: $\chi 2(1707) = 9799.718$, p < 0.001; CFI = 0.775; TLI = 0.767; RMSEA = 0.055 (loadings: 0.10-0.79); students: kh2(1707) = 8630.149, p < 0.001. The model fit was enhanced significantly by further using the Mplus JRule correction (Oberski, 2013). Teachers: $\chi 2(1539) = 5473.082$, p =0.001; CFI = 0.891; TLI = 0.874; RMSEA = 0.041 (loadings: 0.12-0.80). Students: $\chi 2(1518) = 4482.065$, p =0.001; CFI = 0.901; TLI

=0.885; RMSEA = 0.034 (loadings: 0.15-0.77). Nevertheless, some of the fit indices were below the recommended levels (Hu & Bentler, 1999). Furthermore, after developing the model, we dropped the items with the least loadings, i.e., Items 1 and 4. The resulting fit of this adjustment in each group gave a satisfactory model fit was given: Teachers: $\chi 2(1151) = 3850.341$, p < 0.001; CFI = 0.911; TLI = 0.897; RMSEA = 0.039; the loadings varied in the range of 0.40-0.80. Students: $\chi 2(1130)$: 3264.258, p < 0.001; CFI = 0.917; TLI = 0.902; RMSEA = 0.033; Mgr loadings were between 0.20 and 0.78.

These last models had good psychometric properties and were adopted in further analyses.

4.2 Descriptive and Correlations

To ensure agreement with existing methodologies and allow direct comparison to earlier studies, we decided to only calculate partial correlations, which is the method used by Aelterman et al. (2019) when initially validating the instrument. This approach allows studying the relationships among variables and adjusting them to the impact of covariates. We decided to do so to correlate our results with the original study conducted by Aelterman et al. (2019). Despite the possibility of other forms of analysis, partial correlations have been chosen since it are consistent with the methodological framework of the study in question, which will guarantee the alignment of our research to the larger portion of the research on motivating and demotivating teaching styles. We conducted Pearson correlations between the variables and to identify the adequate control variables to consider, we used the past studies (e.g., Aelterman et al., 2019; Chen et al., 2015), which involved age, gender, and social desirability. Since these variables have significant correlations with most of the research variables.

The findings showed that need satisfaction of the teachers had a positive association with the adoption of motivating teaching style (r = 0.14, p < 0.001), but the need frustration was positively associated with controlling (r = 0.13, p < 0.001) and chaotic teaching style (r = 0.15, p < 0.001). The perceived motivating teaching style was found to be related positively to need satisfaction in the sample of students (r = 0.36, p < 0.001), but the perceived demotivating styles were associated with need frustration (r = 0.13, p < 0.001 and r = 0.20, p < 0.001 in relation to the controlling and chaotic styles, respectively). Moreover, we never discovered that need satisfaction and demotivating teaching style are significantly linked (r = 0.00, p = 0.88 to control, r = 0.03, p = 0.21 to adopt motivating teaching style) and nor the experience of need

frustration and adoption of a motivating teaching style among teachers (r = 0.01, p = 0.75). No meaningful difference existed between satisfaction with needs and the perception of chaotic teaching style on the student side (r = 0.04, p = 0.08). Correlation between the student need frustration and the perception of motivating teaching style, however, was negative (r = -0.26, p < 0.001). Surprisingly, the need satisfaction of the students was positively connected to the perception of the teaching style of control (r = 0.07, p < 0.01). These findings are described graphically.

Moreover, t-tests on paired samples found that teachers were much more inclined to use a motivating style of teaching than a controlling (t(1549) = 31.23, p < 0.001, Cohen d = 0.85) and chaotic (t(1549) = 45.01, p < 0.001, Cohen d = 1.51) styles. Moreover, it was found that teachers tended to adopt the controlling style as compared to the chaotic style (t(1549) = 35.35, p < 0.001, Cohen d = 0.68). The same tendency was present in the sample of students, in which perceived motivating teaching styles were the most frequently used, followed by the control (t(1714) = 28.23, p < 0.001, Cohen d = 0.88) and chaotic (t(1714) = 59.22, p < 0.001, Cohen d = 2.25) teaching styles. Also, controlling styles were more often viewed by the students as compared to chaotic styles (t(1714) = 52.21, p < 0.001, Cohen d = 1.33). Figure 4 shows these results visually.

5. Discussion

The present research was aimed at investigating student need satisfaction and frustration concerning the perceived motivating and discouraging teaching methods within the framework of Pakistani schools. The results showed that there were significant positive relationships: the perception of motivating instructional styles among students was correlated with a higher level of need satisfaction, whereas the perception of demotivating instructional styles was correlated with a higher level of need frustration, which is consistent with the previous findings in the Western educational settings (e.g., Aelterman et al., 2019). Need satisfaction was not significantly connected with a chaotic teaching style in conformance with the dual-process model (Arif et al., 2025b). Interestingly, the need frustration was also negatively related to the perceptions of motivating instruction. Of particular interest, strong positive relationships were also found between student need satisfaction and regulating (i.e., structuring) teaching approach, which should be the focus of further theoretical consideration.

Another secondary goal was to verify the Pakistani adaptation of the Student-Involved Survey (SIS). The evidence was in favor of the reliability and validity of the instrument when used with both teacher and student samples and is comparable to the psychometric attributes of the original measure. Cronbach's alpha was utilized to examine the internal consistency following the methodological precedent of Aelterman et al. (2019), which allows the researcher to have comparability with the existing literature. Despite the admitted limitations of Cronbach's alpha, especially in its use with congeneric measurement models, it is still extensively used in the field and therefore should be used in this case. Internal validity was also high, as confirmed by dimensionality analyses. Our analyses did not recreate the original 8-factor structure but instead found a more parsimonious 3-factor model based on motivational, regulating, and chaotic dimensions of teaching. This alignment coincides with the new research pointing to the conceptual and empirical overlap between autonomy-supportive and structuring practices (Wang et al., 2024; Zhou et al., 2023).

Two vignettes that were excluded from the final version of the Pakistani SIS were due to statistical considerations: classroom rules and motivating students. Such adaptation indicates the uniqueness of the educative situation in Pakistan. Numerous schools are managed in terms of a teacher-centered, discipline-focused structure (Zhu et al., 2024b). The early years of education are based on respect for authority and high grades (Bong et al., 2024). As a result, classroom rule explicit discussion might become less salient, and motivating students' scenarios can fail to distinguish between motivating and demotivating pedagogical practices. In addition, some teachers might also resort to apparently chaotic methods not as negligence in high-stakes testing pressures but as an adaptation (Aelterman et al., 2019b)-a behavior that can be viewed as acceptable or even functional in local standards. Future qualitative investigations of interviews with teachers and students may assist in clarifying the dynamics that are embedded in cultures and in filling the gaps in international educational systems.

5.1. De-Motivating Teaching Style in Pakistan Schools.

It is true that, whereas autonomy-supportive and structuring teaching styles have conventionally been used as two distinct constructs, they are always positively correlated (Aelterman et al., 2019). According to our results, these two practices in the Pakistani context serve as a combined aspect of motivating instruction. This integration was arrived at by both the teacher's

and the students' perspectives. Although autonomy support is differentiated by the original SIS model and structure (Aelterman et al., 2019), other researchers have supported their combination, as there is high empirical covariance (e.g., Moe and Katz, 2020). We found the combination of these factors further justified by the changing relationship between the pedagogy traditionally teacher-centered in Pakistan and the new policy moves towards student autonomy. The problem with the traditional educators in Pakistan might be that they find it difficult to apply the autonomy-supportive strategies fully (khalid et al., 2020). Nonetheless, the complex of explicit organization and controlled autonomy may create the conditions conducive to the fulfillment of the most fundamental psychological needs of students, especially the ones of competence and the corresponding relatedness, but the autonomy may be cultivated over time even in the context of a hierarchical instructional culture.

5.2 Perceptions of teaching styles and need satisfaction/frustration in students.

The researchers found that students who perceived their teachers using motivating styles indicated more need satisfaction, and those using controlling or chaotic styles indicated more need frustration, as had been previously found in self-determination theory-based research (Aelterman et al., 2019; khalid et al., 2020). One of the most interesting results was the positive relationship between perceived controlling teaching and student need satisfaction. This could be a cultural rule of authoritative and directive teaching whereby it is seen as not autonomy-thwarting but rather supportive and facilitating academically.

Since behaviors in the educational environment of Pakistan, where teacher-centered education is the rule of thumb, disciplined behaviors can be considered as acts of caring and dedication to the achievement of students. Although controlling practices are thought to have negative effects in the Western environment (Aelterman et al., 2019). It can be moderated by culture. Such strategies may be seen as legitimate as opposed to undermining, when ingrained in respectful and supportive teacher-student relationships. The future studies must explore the moderating role of relational quality in the relationship between the perceived control and motivation, and well-being.

5.3. Limitations

The paper is a great source of information on the relationship between teaching styles and the psychological needs and experiences of students in Pakistani schools; however, it is

important to admit that the research has a number of limitations. First, the use of self-report measures could have biases such as social desirability and lack of recall. Even later research would be improved by the use of an objective measure of perceptions of teaching behavior (which could be classroom observations or video analysis). Second, teachers and students were sampled separately in different samples, eliminating the possibility of direct dyadic comparison of perceptions in the same classroom. A matched design should be chosen in further studies where the responses of teachers and their pupils are obtained to contend validity of measurements and contextual accuracy. Third, the research was done on only two aspects of teaching styles and satisfaction/frustration of basic needs. Extending the results to cover outcomes like intrinsic motivation, academic participation, teacher burnout, or emotional health would give a better view of motivational processes. Lastly, as the study was carried out in Pakistan, the sample was limited in both geographical and institutional backgrounds, and this limits generalizability. Further research ought to have a more nationally representative sample in different regions, types of schools (public/private), and educational levels. Moreover, since the educational culture in Pakistan is exam-centric, research can be conducted to determine the role of systemic forces, including high-stakes testing, in shaping pedagogical decisions and, through them, student motivation and experience of psychological need.

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