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Interplay of Personality Traits and Self-Regulation among Secondary School Teachers

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ABSTRACT: Present research explored the complexity of personality characteristics concerning self-regulation at the secondary level of the teaching profession in the government sector within the city of Lahore, Pakistan. With the quantitative, correlational type of design, a convenience sample of 300 teachers (male 150 and female 150) was surveyed through a structured questionnaire. The interdependence was investigated with the use of statistical methods, such as Pearson correlation and independent samples t-tests. Outcomes showed that self-regulation had a strong, positive relationship with each of the personality traits in the Big Five, with the highest values in conscientiousness ($r=0.512$, $p<0.001$) and emotional stability ($r=0.469$, $p<0.001$). It is also noteworthy that male teachers showed higher indicators in self-regulation and personality characteristics than female ones, and teachers aged between 31 and 40 received the best results on the main variables. The research findings show that personality variables are huge predictors of the ability of a teacher to self-regulate, which is why special needs-based professional development is a necessity. The evidence suggests that self-regulatory improvement efforts can be tailored as interventions to enhance teaching effectiveness and well-being, based on the teachers' personality profiles.

KEYWORDS: Secondary Education, Self-Regulation, Personality Traits, Conscientiousness, Emotional Stability

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Introduction

The profession of secondary-level teaching is a multifaceted and demanding endeavor, requiring educators to navigate a complex environment of academic, social, and emotional challenges (Pandey, 2024). Teachers at this level are not only responsible for delivering subject-specific curriculum but also for guiding students through a pivotal developmental period as they transition from childhood to adolescence. This role necessitates a high degree of adaptability and emotional resilience to manage diverse student behaviors, varied learning needs, and the pressures of curriculum delivery and standardized testing. The effectiveness of a teacher in this challenging environment is fundamentally linked to their ability to manage their thoughts, emotions, and behaviors, known as self-regulation (Jennings & Greenberg, 2009).

Teachers need excellent self-regulation since it helps them to maintain composure in challenging circumstances, demonstrate good behaviours, and create a supportive learning environment. Strong self

regulated teachers are better prepared to handle stress, prevent burnout, and make deliberate, informed judgments under pressure (Hwang et al., 2019). This capacity is also critical for effective classroom management, as it allows teachers to respond calmly and constructively to student misbehavior rather than reacting spontaneously (Emmer & Evertson, 2016). Beyond self-regulation, a teacher's underlying personality traits guide behavior and play an important role in shaping their professional practice (McCrae RaC, 2008) necessary for quality education (Abbas et al., 2021). Understanding the interplay between these two constructs is therefore vital for enhancing teacher performance, promoting well-being, and ultimately, improving student outcomes.

Notwithstanding the recognized need of self regulation in good teaching, a significant gap in academic literature exists concerning how personality traits particularly affect secondary-level teachers' self regulatory behaviors (Bhatti et al., 2018; Dignath & Büttner, 2018). Although prior studies have looked into these structures in other academic contexts, they have usually ignored the distinctive dynamics and stresses of the secondary classroom, which are defined by sophisticated adolescent behaviors, varied learning needs, and high-stakes administrative expectations (Fernet et al., 2012). Particularly within particular cultural and institutional settings, the lack of focused research prevents a thorough knowledge of this important dynamic. The current study addresses this gap by examining how personality characteristics and selfregulation among public sector secondary school teachers in Lahore, Pakistan, affect observable selfregulatory behaviors within a given educational system.

Objectives of the Study

The main objectives of this study were to:

1. Investigate the perceptions of teachers regarding personality traits at the secondary level.
2. Identify the perceptions of teachers regarding self-regulation at the secondary level.
3. Examine the relationship between personality traits and self-regulation at the secondary level based on demographic variables.

Literature Review

The theoretical basis of self-regulation in the given research is constructed based on the social cognitive approach to this issue that was developed by (Zimmerman, 2000). The process through which people control and evaluate their thoughts, emotions, and actions to accomplish personal and professional ambitions is termed self-regulation. It is not a constant characteristic but a dynamic and cyclic procedure having three components: forethought, performance, and self-reflection. This cycle is operating throughout the context of teaching. In the planning stage, a teacher develops ideas of what he expects of a lesson and prepares plans. During the performance stage, they implement these plans while monitoring both the students and them. Lastly, during the self-reflection stage, they assess the outcome of the teaching lesson, including its effectiveness and areas for future improvement. The ability of a teacher to successfully navigate such a cycle is the primary focus when discussing a teacher's professional efficacy and organizational commitment (Mohammad et al., 2022), as it plays a vital role in establishing a positive, productive, and stable learning environment where students can learn effectively with higher order and life skills (Jamil et al., 2024; Naseer et al., 2022)

This paper presents the Five-Factor Model, also referred to as an instrument in comprehending the latent traits moderating these self-regulatory practices (McCrae & Costa Jr, 1997). According to this model, the personality can be exhaustively explained using five general dimensions: Openness to Experience, Conscientiousness, Extraversion, Agreeableness, and Neuroticism.

The literature reviewed for this study establishes clear relationship between the personality traits and a teacher's self-regulatory capacity (Sautelle et al., 2015; Senler & Sungur-Vural, 2013). Conscientiousness, for example, is consistently identified as the strongest predictor of effective self-regulation (Mahama et al., 2022). A conscientious teacher, being inherently organized and goal-oriented, naturally excels in the planning, monitoring, and self-assessment phases of the self-regulation cycle. This trait acts as a fundamental enabling mechanism, providing the structure and discipline necessary for other self-regulatory behaviors to flourish.

Conversely, neuroticism is consistently linked to challenges in self-regulation (Dewe et al., 2017). Teachers high in neuroticism may struggle with emotional control, experience higher levels of stress, and find it difficult to maintain composure in challenging classroom situations (Roberts et al., 2005). It turns out that when teachers are all over the place emotionally, the kids pick up on it, start acting out, and then it just makes the teacher even more stressed. But when teachers are friendly and outgoing, it makes for a good vibe in the classroom. This helps cut down on drama and means the teachers don't have to work so hard to keep their emotions in check (Sáez-Delgado et al., 2022). Basically, if teachers are open to new things, they're more likely to think about their own teaching and try out new methods. That's super important, and it's the last step in Zimmerman's model of self-regulation (Capa-Aydin et al., 2009). This study investigates these specific relationships within the context of secondary education in Pakistan.

Research Methodology

A correlational research design was adopted in this quantitative study, which is most appropriate when examining associations between two or more variables without manipulation or experimental control (Bloomfield & Fisher, 2019). This design allowed the researcher to explore whether variations in teachers' self-regulation were statistically related to differences in their personality traits, providing evidence-based insights while maintaining natural settings.

The population of the study comprised secondary school teachers from public sector schools in Lahore, Pakistan. The population included both male and female teachers across the district. Given the large population size, a sample size of 300 teachers (150 male and 150 female) from 20 male female secondary schools in Lahore. This balanced representation was crucial to capturing gender-based perspectives in the analysis.

For participant selection, the study employed a convenience sampling technique, a non-probability method in which respondents are chosen based on accessibility and willingness to participate. Convenience sampling was considered suitable due to practical constraints such as time, accessibility of schools, and willingness of teachers to participate, while still enabling the researcher to collect sufficient data from a large, diverse group (Golzar et al., 2022). Although non-probability sampling has limitations in terms of generalizability, it is widely used in educational research where logistical and administrative constraints exist.

The instrumentation of the study consisted of a structured questionnaire comprising three parts: demographic information, a personality traits scale, and a self-regulation scale. The personality traits scale measured five dimensions—extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience—through 25 items rated on a five-point Likert scale. The self-regulation scale included 27 items measuring seven dimensions, such as goal setting, intrinsic interest, performance goal orientation, mastery goal orientation, self-instruction, emotional control, and self-assessment, also on a five-point Likert scale. A pilot study was conducted with 20 participants (10 male, 10 female) to test the validity and reliability of the instrument. The results confirmed strong internal consistency, with Cronbach's alpha values of 0.97 for the self-regulation scale and 0.86 for the personality scale, indicating high reliability. Based on this pilot, minor modifications were made to improve the clarity of items before administering the final questionnaire.

Data collection was conducted systematically, with 150 questionnaires distributed to male teachers and 150 to female teachers in both online and hard-copy formats to maximize accessibility. Participants were informed about the purpose of the study and assured anonymity, voluntary participation, and the right to withdraw at any stage, thereby adhering to strict ethical considerations.

For data analysis, descriptive statistics such as frequencies, percentages, means, and standard deviations were applied to summarize demographic variables and questionnaire responses. The Pearson product-moment correlation test was used, as it is the most suitable statistical technique for examining linear relationships between continuous variables. This test enabled the researcher to determine the strength and direction of associations between self-regulation and different personality traits. The rationale for using Pearson correlation lies in its robustness and broad applicability in behavioral sciences, particularly in correlational studies involving Likert-scale data.

Results

The empirical findings of the study are presented here, beginning with a descriptive overview of the sample's self-regulation and personality profiles, followed by the results of the t-tests and correlation analyses. The data is synthesized from the provided tables and statistical outputs.

Table 1

Teachers' Personality Traits (Big Five Model)

Trait	Highest Rated Item (M)	Lowest Rated Item (M)	Overall Trend
Extraversion	Enjoy interacting with students (3.93)	Assertiveness (3.78)	High
Agreeableness	Positive learning environment (4.00)	Patience under challenging situations (3.89)	High
Conscientiousness	Being organized & prepared (4.01)	Time management (3.82)	High
Neuroticism	Worry about expectations (3.44)	Emotional control (3.13)	Moderate
Openness to Experience	Lifelong learning (4.00)	Using new technology (3.82)	High

Teachers' perceptions highlight strong agreeableness, conscientiousness, and openness, which are crucial for student-centred teaching. Extraversion is also evident, though assertiveness could be improved. Neuroticism remains the weakest trait, suggesting that some teachers may face challenges in managing stress and emotions.

Table 2

Teachers' Self-Regulation Dimensions

Trait	Highest Rated Item (M)	Lowest Rated Item (M)	Overall Trend
Goal Setting	Considering students' needs (3.95)	Considering student characteristics (3.85)	High
Intrinsic Interest	Students' learning brings happiness (4.09)	Enthusiasm for attending classes (3.96)	High
Performance Orientation	Liked by students (3.57)	Promotion (3.37)	Moderate
Mastery Orientation	Preparing students for life (4.18)	Career development (4.05)	High
Self-Instruction	Monitoring student expressions (3.93)	Time management (3.77)	High
Emotional Control	Thinking positively when stressed (3.76)	Avoiding panic (3.61)	Moderate
Self-Assessment	Evaluating goal achievement (3.88)	Comparing yearly performance (3.75)	High

Teachers demonstrated high levels of self-regulation, especially in mastery orientation, intrinsic interest, and reflective self-assessment. Emotional control scored slightly lower, suggesting professional training in stress management may further strengthen their regulation.

Table 3

T-Test Results

Variable	Groups Compared	Mean Difference	t-value	p-value	Effect Size
Personality Traits	31–40 yrs (M=4.30) 41–50 yrs (M=4.00)	0.30	3.25	.001	0.55
Teacher Self-Regulation	Male (M=3.50) Female (M=3.20)	0.30	2.90	.004	0.34
Personality Traits	Male (M=4.20) Female (M=3.90)	0.30	3.12	.002	0.36

Age and gender significantly influence teachers' personality traits and self-regulation. Younger (31–40) teachers and males show slightly stronger personality and regulation scores than older and female teachers.

Table 4

Correlation Results

Correlation Tested	r	p-value	Strength & Direction
Self-Regulation ↔ Conscientiousness	0.512**	.000	Strong Positive
Self-Regulation ↔ Emotional Stability	0.469**	.000	Moderately Strong Positive
Self-Regulation ↔ Openness	0.435**	.000	Moderate Positive
Self-Regulation ↔ Agreeableness	0.397**	.000	Moderate Positive
Self-Regulation ↔ Extraversion	0.288**	.000	Moderate Positive

Males showed slightly stronger correlations across all traits, particularly with conscientiousness (r = .538) and Emotional Stability (r = .481). Females also demonstrated significant relationships, but at slightly lower levels. The results confirm that teachers' self-regulation is positively linked with their personality traits, especially conscientiousness, emotional stability, and openness. Gender differences suggest that while both groups benefit, male teachers' regulation appears slightly more influenced by these traits.

Discussion

The most compelling finding of this study is the strong and statistically robust relationship between conscientiousness and self-regulation (Malanchini et al., 2019). This result confirms a central tenet in educational psychology: that self-regulation is not merely a collection of isolated skills but is fundamentally enabled by a teacher's disposition toward organization, discipline, and goal-directedness (Zimmerman, 2000). A highly conscientious teacher is predisposed to meticulously plan lessons, manage their time effectively, and persist through challenges—all core components of Zimmerman's self-regulation cycle. This trait essentially serves as a foundational engine that propels a teacher through the forethought, performance, and self-reflection phases. The strength of this relationship suggests that any intervention aimed at improving teacher self-regulation should strategically focus on cultivating the behaviors associated with conscientiousness, such as detailed planning, time management, and professional persistence.

The finding that male teachers reported significantly higher levels of both self-regulation and overall personality traits and also demonstrated slightly stronger correlations between the two constructs warrants a deeper examination beyond a simple numerical interpretation (Sáez-Delgado et al., 2022). This is not likely an inherent biological difference but rather a reflection of the socio-cultural and institutional environment of public sector education. In this setting, male teachers may have more freedom and authority, both formally and informally, allowing them to express and exercise leadership and assertiveness more freely than their female counterparts. Such empowerment can, subsequently, strengthen their self-regulatory potential since they feel better in control of and more effective in the classroom. Women working as professional teachers are committed to their tasks and are intrinsically motivated; however, they may work under a more limited and restricted framework of institute requirements, which could allow them less room to express specific character traits that may influence their self-evaluation in their self-report of self-regulation and personality.

The observation that the age range of 31 to 40 had the highest ratings on their personality traits also provides a profound level of insight (Ehm et al., 2019). This is perhaps the golden age in a teacher's career, when professionalism and years of experience have already brought the teacher to perfection, but with no sign of burnout and discouragement being at its height. This has implications in the sense that self-regulation is a skill that matures with experience. Still, unless one gets specific support and institutional feedback, these

improvements will not hold throughout the later stages of a teacher's career. The results indicate that the critical aspect in the development of teachers is a contextual and culturally sensitive approach to teacher development, which considers the issues that various demographic groups have to address during different periods in their professional lives.

The research indicates the depths of professional identity crisis within teachers, which primarily involves the gap between their strong intrinsic motivation and the mastery goals and barriers present in the institutions (Richardson & Watt, 2018). The most reported motivation of teachers was that they felt strongly that they wanted to see students succeed, as well as prepare them to live their lives, both of which are typical in the mastery-oriented state of mind. This self-motivation can, however, be suppressed by external forces, which include strict curricula, poor facilities, and evaluation being based on standardized tests. Such detachment is a considerable professional stressor that may translate into burnout and emotional exhaustion (Bien & Selland, 2018).

The results are associated with neuroticism as a direct expression of this conflict (Dewe et al., 2017). Those teachers who have indicated being more neurotic also recorded problems in regulating their emotions and responses in the classroom (Berkovich & Eyal, 2021). This implies that a poor institutional environment, where the intrinsic professional objectives of teachers lack support, renders their work a highly stressful reality that inhibits them emotionally and their self-management. It not only has adverse effects on the mental health of a teacher but also introduces a stressful and anxious atmosphere to the classroom, hampering the learning process of students (Gok et al., 2023). The evidence suggests that genuine teacher empowerment should involve reducing institutional rigidity and enhancing pedagogical independence, thereby allowing teachers to tap into their inherent motivation to deliver practical classroom lessons.

Conclusion

The current study was conducted to examine the correlation between self-regulation and personality traits among secondary school teachers, which makes a strong case to indicate a strong interaction between the two constructs. The results suggest that conscientiousness and emotional stability are the best predictors of self-regulatory capacity in a teacher. They also found that male teachers scored higher on both constructs than their female counterparts, and that teachers in the 31-40 age group recorded the highest scores. The study also revealed a professional identity conflict, where teachers' high intrinsic motivation is hindered by institutional demands, leading to emotional strain and potential incompetence in self-regulation.

Recommendations

- Educational institutions should implement structured systems that provide teachers with dedicated time and tools for self-reflection.
- Professional development programs should be re-imagined to be less about content delivery and more about skill development.
- Policymakers and school leaders must recognize the detrimental effect of rigid curricula and high-stakes performance metrics on teacher well-being and autonomy.
- Schools should establish formal peer mentorship programs where experienced and highly self-regulated teachers can guide their less experienced colleagues.
- Prioritizing teacher well-being by fostering a supportive school climate is essential.

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