



Impact of Supervisor-Scholar Relationships in Shaping PhD Motivation

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Abstract

Research supervisors play a very significant role in the doctoral journey of a Ph.D. scholar. The interaction between a supervisor and a research scholar is essential in the academic and research worlds. A supervisor's duties include assisting a research scholar with all aspects of their study and offering feedback and guidance on their work. The current paper aimed to study the effect of supervisory-scholar dynamics on the motivation of scholars. The study was conducted on scholars, aged 24-39 years, living in Bangalore. Standardized scales were used to measure the variables. The result shows that there is a significant positive correlation between the helping/friendly scale and intrinsic regulation, the helping/friendly scale and introjected regulation, and the leadership subscale and intrinsic regulation. There was a significant negative correlation between the dissatisfied subscale and intrinsic regulation and the dissatisfied scale and identified regulation. The results show that positive supervisory traits, such as being helpful, friendly, encouraging, and leadership-oriented, increase motivation, whereas negative traits, like dissatisfaction, decrease it. This study focuses on the relationship between supervisors and students, which is important for PhD students' academic journeys.

Keywords: *PhD, supervisor, research scholar, motivation.*

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Ph.D. is considered one of the highest degrees in the academic journey, characterized by its rigorous curriculum that demands significant time, dedication, and intellect. The path to earning a PhD can often be a lonely and time-consuming experience. On average, it may take about 4 to 6 years to complete a PhD, and in some cases, it can extend up to 10 years. It is certainly challenging to maintain motivation throughout this process, which can be exhausting and may lead to dropouts as well. Doctoral dropouts are not anything new in the field of research. It is a matter of concern in higher education, and it may vary across disciplines. There are multiple factors of dropout, such as personal interest, supervision style and support, and interaction across the research community. Students with greater personal interest and better supervisory practice and community support are less likely to drop out when compared to others (Cornér et al., 2024).

The success and overall quality of doctoral research are significantly influenced by the effectiveness of supervision, as noted by Gill and Burnard (2008), which highlights the significant role supervisor-scholar dynamics play in determining the research process. Effective supervision needs open communication, consistent support, and positive reinforcement, which can boost scholars' academic progress and overall success throughout their doctoral journey (Prazeres, 2017), which promotes satisfaction among scholars about their supervision and doctoral skills development (Lê et al., 2021). According to Jones (2013), 15% of doctoral studies research is concerned with the interaction between students and their supervisors. However, a lack of communication and proper collaboration between them can become a major reason for student attrition (Can et al., 2016). As a result, the motivation of doctoral scholars is significantly influenced by the supervising style. Thus, the purpose of this paper is to investigate how the dynamics between supervisors and scholars affect scholars' motivation.

Supervisor-scholar relationship

Supervisors play an important role in students' PhD journeys. A supervisor-researcher relationship that works requires effective communication. A supervisor should serve as a mentor and role model for the research researcher in addition to offering academic support and also offer advice on career development and networking possibilities for professionals. The key responsibility of supervisors involves tracking progress, mentoring, and coaching of PhD scholars, including the processes of selecting a research topic from methodology to thesis writing. Supervisors possess in-depth knowledge of the subject matter (Almusaed & Almssad, 2020).

The method by which a supervisor oversees a research endeavour is referred to as supervision. The supervisor is thought to "make or break" a PhD (Lee, 2008). To be effective supervisors, they must be proficient in several skills to assist PhD students in completing their PhD candidature on time, such as communication skills and support-oriented skills, which imply being able to identify when students require assistance and providing appropriate assistance (Le et al., 2021). According to Armstrong (2004), unhappiness with supervision and a bad supervisor-Ph.D. student interaction has resulted in high failure rates for doctoral studies in social sciences. Studies on the causes of PhD student satisfaction have focused on the direct influence of the department's intellectual atmosphere and access to adequate equipment (Pearson and Brew, 2002), student qualities (Wiers-Jenssen et al., 2002), and supervisory responsibilities (Erichsen et al., 2014).

According to Almusaed & Almssad (2020), the few primary responsibilities of a supervisor are as follows: one who respects his scholars from the beginning of the PhD journey till the end, who provides assistance that fosters a deeper understanding of the subject matter of research, and who, in planning and scheduling, which leads to discipline and better organization for both supervisor and scholar, provides partnership opportunities to students that

are based on equality. Benmore (2026) describes the importance of primary and secondary boundaries in the supervisory journey, where the primary boundary includes temporal and cognitive and the secondary journey includes physical, emotional, and relational, to navigate the transitions in the journey and maintain a productive relationship with their scholars. Therefore, a scholar needs to have good supervision to ensure good quality work and positive doctoral experience. Based on their interactions with scholars, Ahmed et al. (2010) divided supervisors into six groups: editor, delegator, friend, expert mentoring, coach, and quality controller.

Motivation

Motivation is a complex phenomenon. It accompanies humans in everyday endeavours. According to Pintrich and Schunk (2002), motivation is defined as “a process in which direct target activity is started and maintained.” Academic motivation encourages people to accomplish a task, reach a goal, or earn a certain level of qualification in their professions. A study conducted on Tehran University students found that there is a positive and significant correlation between academic motivation and academic achievement (Amrai et al., 2011).

The Self-Determination Theory (SDT) distinguishes between two types of motivation: extrinsic and intrinsic. The urge to do something for its own sake is known as intrinsic motivation, whereas the desire to do something to receive a reward is known as extrinsic motivation (Deci & Ryan, 1985). Extrinsic motivation is divided into 5 subtypes: external regulation, introjected regulation, identified regulation, integrated regulation, and Amotivation. The most extrinsic form of motivation is external regulation, in which individuals engage in an activity solely to receive a tangible reward or avoid punishment. Introjected regulation entails engaging in an activity to alleviate feelings of guilt or shame or to boost self-esteem. Individuals engage in identified regulation when they value the outcomes of an activity but do not necessarily enjoy the activity itself. Integrated regulation entails the value of an activity

and is distinguished by a sense of harmony between the individual's values and goals. Amotivation refers to the lack of intention, desire, and willingness to participate in an activity, which is frequently accompanied by the emotions of boredom, helplessness, and loss of control (Deci & Ryan, 2000).

The supervisor-student relationship is important for the academic success of PhD scholars, the supervisor-student interaction is crucial, and an efficient supervision strategy raises motivation and academic objectives (Hussain & Ali, 2019). According to Khosa et al. (2024), self-disclosures by PhD students foster relatedness, which improves autonomy, competence, motivation, and general well-being. Positive interpersonal attributions and situational factors, including aspects such as the environment, formality, and length of the relationship, significantly influence relational outcomes. Relational outcomes are strongly influenced by situational circumstances, including the surroundings, formality, and duration of the relationship, as well as positive interpersonal attributions. A lack of prior positive experiences and dispositional, interpersonal, and environmental variations are among the reasons associated with relationship failures. The motivation and general wellbeing of pupils may suffer because of these breakdowns. Like doctor-patient interactions, the supervisor-student relationship is complicated and calls for excellent communication, negotiation, and time commitment. Supervisors can enhance students' motivation by organizing regular meetings, improving coping skills, and encouraging funding opportunities (Prazeres, 2017).

Method

The current study uses a quantitative approach employing a correlational research design to study how the supervisor-scholar relationship affects scholars' motivation to continue their PhD.

Research Objective

1. To understand the nature of interaction between supervisors and PhD scholars.
2. Understand how different supervisory styles and practices influence motivation.

Hypothesis

H0: There is no significant association between the supervisor-scholar relationship and level of motivation among PhD scholars.

H1: There is a significant association between supervisor-scholar relationships and level of motivation among PhD scholars.

Participants

A total of 30 PhD scholars living in Bangalore participated in the study. They were aged 24-39 years. Convenience sampling was employed to collect data from the participants, followed by snowball sampling.

Measures

1. **Questionnaire of Supervisor-Doctoral Student Interaction Scale** (QSID) was used to assess the supervisor-doctoral student relationship across dimensions such as helping/friendliness, dissatisfaction, and leadership. Which has 41 items. Each item is rated based on a five-point Likert-type scale ranging from 1 (never) to 7 (always).
2. **Motivation in PhD student scale** (MPhD) was used to assess the motivation (intrinsic, integrated, identified, introjected, and external) to continue PhD studies in Ph.D. scholars, which has 15 items. Each item is rated based on a five-point Likert-type scale ranging from 1 (doesn't correspond at all) to 5 (corresponds exactly).

Procedure

Participants were using convenience sampling, followed by snowball sampling. Inclusion criteria included the participants being residing in Bangalore and pursuing their PhD. Participants were given an overview of the study and its objectives, and consent was obtained

for participation. Two standardized scales were administered using an online platform. Ethical considerations such as confidentiality and rights to withdraw from participating were ensured to the participants. Upon data collection, data was analyzed using correlation analysis to study the relationship between the supervisor-scholar relationship and the motivation of PhD scholars.

Analysis of Data

Upon data collection, the data was scored and analysed using Jamovi software (version 2.4.11). Pearson's Product Moment Correlation was conducted for the data to study the effect of supervisory-scholar dynamics on the motivation of scholars. Before carrying out statistical analysis, the assumption of normality was checked.

Results

Table 1: *Descriptive table consisting of mean and standard deviation*

	N	Mean	SD
Helping / Friendly	30	23.33	3.67
Admonishing	30	6.0	3.04
Uncertain	30	12.2	4.16
Strict	30	14.27	3.96
Understanding	30	17.2	2.35
Dissatisfied	30	9.47	4.13
Leadership	30	23.37	5.01
PhD Student Responsibility / Freedom	30	15.63	2.71
Intrinsic Regulation	30	12.17	2.41
Integrated Regulation	30	11.63	2.47
Identified Regulation	30	12.37	2.55
Introjected Regulation	30	7.93	3.07

External Regulation	30	11.17	3.01
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Table 2: Shows the correlation between supervisor-scholar relationship and scholar motivation

	Helping/ friendly	Admonishing	Uncertain	Strict	Understanding	Dissatisfied	Leadership	PhD student responsibility/ freedom
Intrinsic regulation	0.407	-0.325	-0.303	0.053	-0.109	-0.431	0.518	-0.181
Integrated regulation	0.318	-0.041	0.111	0.074	-0.028	-0.081	0.17	0.304
Identified regulation	0.233	-0.222	-0.160	-0.04	-0.087	-0.399	0.213	-0.234
Introjected regulation	0.375	0.018	-0.088	0.115	0.14	-0.006	0.291	-0.276
External regulation	-0.065	-0.094	-0.074	-0.07	0.156	0.01	-0.162	-0.085

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 2 shows a significant correlation between dimensions of supervisor-scholar relationship and different types of motivation among PhD scholars. There was a significant positive correlation between the helping/friendly subscale and both intrinsic regulation ($r = 0.407, p < .05$) and introjected regulation ($r = 0.375, p < .05$), suggesting that the supportive and friendly nature of the supervisor improves intrinsic motivation and internalized external pressures. Additionally, there was a significant positive correlation between the leadership subscale and intrinsic motivation ($r = 0.518, p < .05$), suggesting that good leadership quality in supervisors can enhance intrinsic motivation in scholars. Conversely, there was a significant negative correlation between the dissatisfied subscale with intrinsic regulation ($r = -0.431, p < .05$) and identified regulation ($r = -0.399, p < .05$), suggesting that dissatisfaction with a supervisor can undermine intrinsic motivation and internalized goal alignment. No significant

correlation was found between other subscales such as admonishing, uncertain, strict and understanding, and other kinds of motivation.

Therefore, the null hypothesis that there is no significant association between the supervisor-scholar relationship and the level of motivation among PhD scholars is partially rejected. The findings support the alternative hypothesis for certain subscales such as helping/friendly, dissatisfied, and leadership, which have a significant correlation with some forms of motivation. However, for other sub-scales such as admonishing, uncertain, and strict, the null hypothesis could not be rejected because there were no significant correlations. Thus, the findings suggest that positive qualities of supervisors, such as supportive and leadership qualities, enhance motivation, while negative dynamics, such as dissatisfaction, diminish motivation. Therefore, this highlights the dynamic between supervisor and scholar, which plays an important role in the doctoral journey of PhD scholars.

Discussion

Findings suggest that a supportive, friendly, and leadership-oriented supervisory style improves motivation; however, dissatisfaction in the supervisor-scholar relationship is a barrier to scholars' motivation, highlighting the importance of supervisor-scholar relationship in the doctoral journey of PhD scholars. Kumar and Kaur (2019) found that autonomy, competence, and relatedness are supported by supervisory practices. Supervisors respect students' research interests of scholars, promote self-initiation, and are flexible to support autonomy. They should offer high-quality and timely feedback, which fosters competence. They should also provide emotional, professional, and personal support to foster relatedness among scholars. According to Kumar & Stracke (2007), high-quality positive, constructive, explicit, and timely feedback can give students tremendous self-efficacy to tackle difficult tasks. Giving difficult tasks and demonstrating trust in their abilities to do such tasks is a sure approach to boosting their competence and beliefs (Miller et al., 2017).

The key traits of a good doctorate student are enthusiasm, curiosity, and tenacity, as well as a willingness to strive for perfection (Hockey, 1996). However, the difficulties associated with doctoral studies, which stem from a variety of sources ranging from personal characteristics to cognitive, physical, psychological, financial, social, and university environments (Pitchforth et al., 2014), may cause students to become frustrated and resentful of their studies as motivation wanes, students' performance suffers, or they drop out. As a result, the ultimate goal for supervisors is to increase students' intrinsic motivation for self-regulation and self-determination to maintain the momentum required by a lengthy and grueling trip to successful degree completion (Kumar & Kaur, 2019). Doctoral students' internal motivation for scholarly activities is influenced more by university-based need support than by close personal relationships. Students' motivation shifted from more external in the early stages of scholarly activities to more internal in the later stages, such as manuscript writing (Lynch et al., 2018). Supervisory support, including research-related support and voice autonomy support, had a significant positive impact on the intrinsic motivation of doctoral students. The study also provided insights into faculty mentoring and student professional socialization (Jacob et al., 2023).

Conclusion

The purpose of the current research was to investigate the impact of the supervisor-Ph.D. student relationship on motivation. The result shows that the hypothesis is partially proven since few components helping/friendly scale and intrinsic regulation, helping/friendly scale and introjected regulation, leadership subscale and intrinsic regulation, dissatisfied subscale and intrinsic regulation, and dissatisfied scale and identified regulation. Thus, the study intends to explain the importance of a supervisor's role and how a supervisor's relationship with a research scholar can have a substantial impact on the success of the research project and the scholar's entire experience. These are some strategies for strengthening the bond

between a supervisor and a research scholar. Effective communication between a supervisor and a research scholar is crucial for a strong connection. Respecting each other's time, providing constructive feedback, and being open to new ideas promotes growth and innovation in the research project.

The study also has its limitations. It is essential to emphasize the study's limitations. First, the sample size was only 30. There could have been less sampling bias if there had been more participants in the study. Second, the samples were only collected in the Bangalore urban region of India. If the same study were conducted on samples from different geographical regions, the results might vary. However, the study encompasses the various dimensions of supervisor-student interaction that could affect motivation levels in Ph.D. students; thus, future research can work towards improving supervisor-student relationships so that dropout rates can be reduced, and more students will be willing to enroll in and complete Ph.D. programs.

References

- Ahmed, W. A., Moyra, K., Ton, D., & Driekie, H. (2010). *Effective PhD Supervision – Chapter Five – The Relationship between PhD Candidate and Supervisor: Rozenberg Quarterly*. <https://rozenbergquarterly.com/effective-phd-supervision-chapter-5-the-relationship-between-phd-candidate-and-supervisor/>
- Almusaed, A., & Almssad, A. (2020). The Role of The Supervisor on Developing Phd Students' Skills. *Proceedings of iHSES 2020*, 25–36. <https://www.semanticscholar.org/paper/The-Role-of-The-Supervisor-on-Developing-Phd-Skills-Almusaed-Almssad/b3e812287fcec3d950c1306dbaffeaed932504d5>
- Amrai, K., Motlagh, S. E., Zalani, H. A., & Parhon, H. (2011). The relationship between academic motivation and academic achievement students. *Procedia - Social and Behavioral Sciences*, 15, 399–402. <https://doi.org/10.1016/j.sbspro.2011.03.111>
- Armstrong, S. J. (2004). The impact of supervisors' cognitive styles on the quality of research supervision in management education. *British Journal of Educational Psychology*, 74(4), 599–616. <https://doi.org/10.1348/0007099042376436>
- Benmore, A. (2016). Boundary management in doctoral supervision: How supervisors negotiate roles and role transitions throughout the supervisory journey. *Studies in Higher Education*, 41(7), 1251–1264. <https://doi.org/10.1080/03075079.2014.967203>
- Can, E., Richter, F., Valchanova, R., & Dewey, M. (2016). Supervisors' perspective on medical thesis projects and dropout rates: Survey among thesis supervisors at a large German university hospital. *BMJ Open*, 6(10), e012726. <https://doi.org/10.1136/bmjopen-2016-012726>
- Cornér, S., Tikkanen, L., Anttila, H., & Pyhältö, K. (2024). Personal interest, supervisory and research community support and dropout intentions among Finnish PhD candidates. *Studies in Graduate and Postdoctoral Education*, 15(1), 1–18. <https://doi.org/10.1108/SGPE-09-2022-0062>
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic Motivation and Self-Determination in Human Behavior*. Springer US. <https://doi.org/10.1007/978-1-4899-2271-7>

- Deci, E. L., & Ryan, R. M. (2000). The “What” and “Why” of Goal Pursuits: Human Needs and the Self-Determination of Behavior. *Psychological Inquiry*, 11(4), 227–268. https://doi.org/10.1207/S15327965PLI1104_01
- Erichsen, E. A., Bolliger, D. U., & Halupa, C. (2014). Student satisfaction with graduate supervision in doctoral programs primarily delivered in distance education settings. *Studies in Higher Education*, 39(2), 321–338. <https://doi.org/10.1080/03075079.2012.709496>
- Gill, P., & Burnard, P. (2008). The student-supervisor relationship in the PhD/Doctoral process. *British Journal of Nursing*, 17(10), 668–671. <https://doi.org/10.12968/bjon.2008.17.10.29484>
- Hockey, J. (1996). Motives and Meaning amongst PhD Supervisors in the Social Sciences. *British Journal of Sociology of Education*, 17(4), 489–506. <https://doi.org/10.1080/0142569960170405>
- Hussain, M., & Ali, H. (2019). How to Supervise International PhD Students: A Narrative Inquiry Study. *International Journal of Higher Education*, 8(5), 143. <https://doi.org/10.5430/ijhe.v8n5p143>
- Jacob, J. T., Asokk, D., & Prasanna, S. (2023). Impact of academic support on students' intrinsic motivation: A transition economy perspective. *International Journal of Education Economics and Development*, 14(4), 449–464. <https://doi.org/10.1504/IJEED.2023.134216>
- Jones, M. (2013). Issues in Doctoral Studies - Forty Years of Journal Discussion: Where have we been and where are we going? *International Journal of Doctoral Studies*, 8, 083–104. <https://doi.org/10.28945/1871>
- Khosa, A., Wilkin, C., & Burch, S. (2024). PhD students' relatedness, motivation, and well-being with multiple supervisors. *Accounting Education*, 33(2), 131–163. <https://doi.org/10.1080/09639284.2023.2179889>
- Kumar, V., & Kaur, A. (2019). Supervisory Practices for Intrinsic Motivation of Doctoral Students: A Self-determination Theory Perspective. *International Journal of Doctoral Studies*, 14, 581–595. <https://doi.org/10.28945/4415>

- Kumar, V., & Stracke, E. (2007). An analysis of written feedback on a PhD thesis. *Teaching in Higher Education*, 12(4), 461–470. <https://doi.org/10.1080/13562510701415433>
- Lê, M., Pham, L., Kim, K., & Bui, N. (2021). The impacts of supervisor – PhD student relationships on PhD students' satisfaction: A case study of Vietnamese universities. *Journal of University Teaching and Learning Practice*. <https://www.semanticscholar.org/paper/The-impacts-of-supervisor-%E2%80%93-PhD-student-on-PhD-A-of-L%C3%AA-Pham/0c1c226d6c3a118a8baa3337ef75a418a94eaae3>
- Lee, A. (2008). How are doctoral students supervised? Concepts of doctoral research supervision. *Studies in Higher Education*, 33(3), 267–281. <https://doi.org/10.1080/03075070802049202>
- Lynch, M. F., Salikhova, N. R., & Salikhova, A. (2018). Internal Motivation among Doctoral Students: Contributions from the Student and from the Student's Environment. *International Journal of Doctoral Studies*, 13, 255–272. <https://doi.org/10.28945/4091>
- Miller, A. D., Ramirez, E. M., & Murdock, T. B. (2017). The influence of teachers' self-efficacy on perceptions: Perceived teacher competence and respect and student effort and achievement. *Teaching and Teacher Education*, 64, 260–269. <https://doi.org/10.1016/j.tate.2017.02.008>
- Pearson, M., & Brew, A. (2002). Research Training and Supervision Development. *Studies in Higher Education*, 27(2), 135–150. <https://doi.org/10.1080/03075070220119986c>
- Pintrich, P. R., & Schunk, D. H. (2002). *Motivation in Education*. Englewood Cliffs, NJ: Prentice Hall.
- Pitchforth, J., Beames, S., Thomas, A., Falk, M., Farr, C., Gasson, S., Thamrin, S. A., & Mengersen, K. (n.d.). Factors affecting timely completion of a PhD: a complex systems approach. *S. A.*, 12(4).
- Prazeres, F. (2017). PhD supervisor-student relationship. *Journal of Advances in Medical Education & Professionalism*. <https://www.semanticscholar.org/paper/PhD-supervisor-student-relationship-Prazeres/55aeb925394fea3ddcff041de9d9f32b5fc05039>

Wiers-Jenssen, J., Stensaker, B., & GrØgaard, J. B. (2002). Student Satisfaction: Towards an empirical deconstruction of the concept. *Quality in Higher Education*, 8(2), 183–195.
<https://doi.org/10.1080/1353832022000004377>