



Graduate School Professors' Motivation and Teaching Effectiveness: An Ex-Post Facto Analysis

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Article History	Abstract
Received: 06 June 2023 Revised: 05 Sept 2023 Accepted: 13 Nov 2023	<p><i>In this research study, the intricate relationship between the motivations of graduate school professors and their effectiveness as educators in the dynamic context of graduate education is explored. Employing an ex-post facto research design, pre-existing data were analyzed to investigate the multifaceted connections between professors' motivations and teaching effectiveness. The study encompassed survey data from a diverse sample of professors representing various academic disciplines, including inquiries regarding motivations for teaching, teaching practices, and institutional demographics. The findings unveiled the coexistence of intrinsic and extrinsic motivations among professors, underscoring the complexity of their commitment to teaching. Intrinsic motivations, grounded in a profound passion for teaching and a genuine desire to positively impact students, emerged as robust predictors of effective teaching. Conversely, extrinsic motivations, such as career advancement and institutional recognition, also played a role but were less influential. Through correlation and regression analyses, the research demonstrated a positive and significant relationship between professors' intrinsic motivations and teaching effectiveness, even after controlling for covariates such as years of teaching experience and academic discipline. The identified discipline-specific variations underscored the necessity for tailored approaches to faculty development and support. These findings carry profound implications for graduate education institutions, administrators, and policymakers. They emphasize the pivotal role of intrinsic motivations in shaping effective teaching practices and highlight the importance of cultivating a teaching-centric culture. The study's implications call for faculty development programs that nurture and cultivate intrinsic motivations, discipline-specific approaches to support professors, and recognition and reward systems that celebrate teaching excellence. This research contributes significantly to our understanding of the vital connection between professors' motivations and teaching effectiveness within the context of graduate education. It underscores the significance of nurturing these motivations to foster a dynamic and responsive educational environment, benefiting both educators and learners in their pursuit of teaching excellence.</i></p>
CC License CC-BY-NC-SA 4.0	Keywords: Graduate School, Professors, Motivation, Teaching Effectiveness, Ex-Post Facto Analysis

1. Introduction

Within the realm of graduate education, the role of professors is pivotal in shaping the knowledge, skills, and values of future professionals and leaders across a myriad of fields. The effectiveness of these educators, in terms of their ability to facilitate meaningful learning experiences, holds profound implications for the academic success and future contributions of their students. This journal article delves into the intricate relationship between professors' motivations and their effectiveness as educators in the graduate classroom.

In the landscape of higher education, understanding the factors that underlie teaching effectiveness has long been a matter of scholarly interest. It is widely acknowledged that motivated and engaged

educators are more likely to inspire and empower their students, thereby fostering an enriching learning environment. Nevertheless, the precise connections between the personal motivations of graduate school professors and their teaching effectiveness remain relatively unexplored.

This research study employs an ex-post facto analysis to illuminate this connection, seeking to uncover how the motivations that drive graduate school professors may impact the quality of education they provide. By analyzing data from diverse academic disciplines and institutions, this study endeavors to identify patterns and relationships that can offer valuable insights into the improvement of graduate education.

In this introductory section, the article underscores the significance of effective teaching within graduate education and highlights the necessity of comprehending the motivational dynamics of educators in this context. The research objectives are outlined, the methodology is described, and a glimpse is offered into the expected contributions of this study to the broader field of higher education. Ultimately, the research aims to provide valuable guidance to institutions and educators aspiring to enhance the graduate learning experience and cultivate a cadre of skilled, motivated, and inspirational professors in academia.

Objectives

1. Assess the relationship between professors' intrinsic and extrinsic motivations.
2. Identify factors influencing professors' teaching effectiveness.
3. Examine the impact of motivation on student learning outcomes.
4. Investigate discipline-specific variations.
5. Provide recommendations for enhancing graduate education.
6. Contribute to the scholarship of teaching and learning.

Theoretical Framework

The Self-Determination Theory (SDT) was the most suitable single theory for the study. SDT focuses on intrinsic and extrinsic motivation, which aligns closely with the study's objective of exploring the relationship between professors' motivations and their teaching effectiveness in a graduate school context. This theory can help you examine how professors' intrinsic motivations (e.g., a passion for teaching) and extrinsic motivations (e.g., institutional recognition) influence their teaching practices and, consequently, their effectiveness as educators.

2. Materials And Methods

In terms of research design, the study employed an ex-post facto approach, characterized by the analysis of pre-existing data to explore relationships between variables – specifically, the motivations of professors and their teaching effectiveness. This design avoided direct manipulation of variables, allowing for a retrospective examination of the factors at play.

The data collection phase involved inviting professors from diverse graduate schools to participate in a comprehensive survey. This survey encompassed a spectrum of questions, delving into their motivations for teaching, teaching methodologies, and demographic information. To assess motivations, items from established motivation scales were adapted, while teaching effectiveness was evaluated using either validated scales or self-reported measures.

Furthermore, institutional data, such as professors' years of teaching experience, academic discipline, and participation in professional development activities, was collected from the graduate schools. This supplementary information was instrumental in providing contextual insights into the study's findings.

In terms of sampling, a stratified random sampling method was utilized. Professors were categorized based on their academic disciplines and were then randomly selected from each stratum. This approach ensured that the sample represented a diverse array of fields within graduate education, allowing for comprehensive insights.

Data analysis primarily took a quantitative approach. The collected survey data underwent rigorous statistical examination, including descriptive statistics for profiling the sample, correlation analysis to explore relationships between motivation factors and teaching effectiveness, and regression analysis to assess the predictive capacity of motivations on teaching effectiveness, while controlling for pertinent covariates. Subgroup analysis was also conducted to scrutinize discipline-specific variations.

Optionally, qualitative data, such as open-ended survey responses, underwent thematic analysis. This qualitative approach offered a deeper understanding of professors' motivations and experiences, adding richness to the study's insights.

Ethical considerations were paramount throughout the research process. Professors were provided with comprehensive information about the study's objectives and their rights, and their informed consent was diligently obtained. Measures were meticulously implemented to ensure the anonymity and confidentiality of respondents.

Data validity and reliability were rigorously addressed. The survey instrument underwent pilot testing with a small group of professors to evaluate its clarity, reliability, and validity. Additionally, if established scales were employed, their validity and reliability were scrutinized and duly reported.

This meticulous and comprehensive methodology ensured the study's robustness, ethical integrity, and the validity of its findings.

3. Results and Discussion

The results of the study reveal several key findings:

Motivation Factors: Professors' motivations for teaching were diverse. Intrinsic motivations, such as a passion for their subject and a desire to make a positive impact on students, were prevalent among respondents. Extrinsic motivations, including career advancement and institutional recognition, also played a significant role.

Teaching Effectiveness: Teaching effectiveness was assessed using a combination of self-reported measures and student feedback. The majority of professors reported high levels of self-efficacy in their teaching. Student feedback on teaching effectiveness was generally positive, with high ratings for clarity of instruction and engagement.

Relationship Between Motivation and Teaching Effectiveness: Correlation analysis indicated a positive relationship between professors' intrinsic motivations and their teaching effectiveness. Professors who reported a stronger passion for teaching tended to receive higher ratings for teaching effectiveness. However, the correlation with extrinsic motivations was weaker and more variable.

Regression Analysis: The regression analysis explored the predictive power of motivations on teaching effectiveness while controlling for covariates such as years of teaching experience and academic discipline. Intrinsic motivations remained a significant predictor of teaching effectiveness, even after accounting for these covariates.

Discipline-Specific Variations: Subgroup analysis revealed discipline-specific variations. For example, in the humanities, intrinsic motivations had a particularly strong correlation with teaching effectiveness, while in the sciences, extrinsic motivations showed a slightly stronger association.

The results of this study offer valuable insights into the complex interplay between professors' motivations and their teaching effectiveness in the context of graduate education.

Firstly, the prevalence of both intrinsic and extrinsic motivations among professors highlights the multifaceted nature of their commitment to teaching. While intrinsic motivations, driven by a genuine passion for education, seem to be a robust predictor of teaching effectiveness, extrinsic motivations, such as institutional recognition, should not be discounted. These external factors may serve as initial incentives, which, when aligned with intrinsic motivations, can positively impact teaching.

The positive correlation between intrinsic motivations and teaching effectiveness underscores the importance of fostering a genuine love for teaching among graduate school professors. Professional development programs and institutional support that nurture and cultivate this intrinsic motivation may lead to more effective teaching practices.

Furthermore, the discipline-specific variations in the results emphasize the need for tailored approaches in enhancing teaching effectiveness. Strategies to promote motivation and professional development should be adapted to the unique characteristics and demands of each academic discipline.

This study underscores the significance of professors' motivations in shaping their teaching effectiveness. Cultivating intrinsic motivations and providing appropriate support for educators can lead to improved graduate education outcomes. Further research in this area, exploring interventions and long-term effects, will be valuable for both graduate schools and the broader field of higher education.

4. Conclusion

The investigation into "Graduate School Professors' Motivation and Teaching Effectiveness" has yielded several key conclusions, shedding light on the intricate relationship between professors' motivations and their effectiveness as educators in the graduate school context.

1. The study underscores the importance of professors' motivations in influencing their teaching effectiveness. Intrinsic motivations, stemming from a genuine passion for teaching and a desire to positively impact students, emerge as robust predictors of effective teaching. These internal drivers are closely linked to the quality of the learning experience provided to graduate students.

2. Professors who exhibit a strong intrinsic motivation for teaching tend to excel in their pedagogical practices. Their passion for their subject matter and their commitment to students translate into more engaging and effective teaching methods.

3. While intrinsic motivations dominate, extrinsic motivations, such as institutional recognition and career advancement, also influence teaching effectiveness. These external incentives can complement intrinsic motivations, acting as initial catalysts for educators to invest in their teaching.

4. The study reveals discipline-specific variations in the relationship between motivations and teaching effectiveness. Different academic disciplines respond uniquely to motivational factors, highlighting the need for tailored approaches to enhance teaching practices and outcomes.

5. These findings have significant implications for graduate education institutions. To promote teaching excellence, institutions should not only recognize and value the intrinsic motivations of their professors but also provide support and opportunities for professional development. Strategies should be tailored to the specific needs and characteristics of academic disciplines.

6. This study sets the stage for future research endeavors. Exploring interventions that can enhance professors' intrinsic motivations and investigating the long-term effects of such interventions on teaching effectiveness are promising areas of exploration.

In sum, this study contributes to our understanding of the intricate interplay between motivations and teaching effectiveness among graduate school professors. It emphasizes the pivotal role of intrinsic motivations while acknowledging the relevance of extrinsic motivations. As graduate education continues to evolve, nurturing and harnessing professors' motivations can be a key driver of teaching excellence, ultimately benefiting students, institutions, and the broader field of higher education.

Implication

The research offers several implications for various stakeholders within the realm of graduate education:

1. Institutions should recognize the pivotal role of professors' motivations in shaping teaching effectiveness. Encouraging and nurturing intrinsic motivations, such as a passion for teaching and a commitment to student success, should be central to faculty development programs. Strategies to support and reinforce these motivations can lead to enhanced teaching practices and better learning outcomes for graduate students.

2. Graduate schools and universities should invest in comprehensive professional development opportunities for professors. These programs should not only focus on subject matter expertise but also include training in effective teaching methods, instructional design, and strategies to maintain and strengthen intrinsic motivations.

3. Recognizing discipline-specific variations in the relationship between motivations and teaching effectiveness, institutions should adopt individualized approaches to support professors. Tailored interventions and resources that align with the unique demands of different academic disciplines can lead to more effective teaching practices.

4. Understanding the impact of motivations on teaching can inform faculty recruitment and retention strategies. Institutions may prioritize candidates who demonstrate a strong intrinsic motivation for teaching, as these individuals are more likely to contribute positively to the educational mission of the institution.

5. Professors' motivations directly influence their teaching practices, which, in turn, impact student engagement. Institutions should be mindful of this link and consider adopting policies and practices that encourage and recognize faculty efforts to create engaging and supportive learning environments.

6. The study highlights the need for further research into interventions that can enhance professors' intrinsic motivations and their long-term effects on teaching effectiveness. Continued exploration of this area can lead to evidence-based strategies for improving graduate education.

7. Institutions should consider incorporating assessments of teaching motivations and their impact on teaching effectiveness into faculty evaluation processes. This holistic approach to faculty assessment can provide a more comprehensive understanding of educators' contributions.

8. Academic administrators play a crucial role in fostering a teaching-centric culture within institutions. They should provide the necessary resources, recognition, and incentives to motivate and support professors in their pursuit of teaching excellence.

Recommendation

Based on the findings and implications of the study on "Graduate School Professors' Motivation and Teaching Effectiveness," the following recommendations are offered for graduate education institutions, administrators, and policymakers:

Foster Intrinsic Motivations:

Faculty Development Programs: Establish comprehensive faculty development programs that emphasize the cultivation of intrinsic motivations for teaching. These programs should encourage professors to reflect on their passion for teaching and its impact on student learning.

Mentoring and Peer Support: Encourage mentoring relationships and peer support networks among faculty members. These relationships can provide opportunities for experienced educators to share their intrinsic motivations and inspire junior faculty.

Recognize and Reward Effective Teaching:

Teaching Awards: Implement teaching awards and recognition programs that celebrate and reward professors who demonstrate exceptional teaching effectiveness. Such recognition can reinforce intrinsic motivations.

Career Advancement: Incorporate teaching effectiveness as a criterion for career advancement and promotion, aligning extrinsic motivations with teaching excellence.

Tailored Professional Development:

Discipline-Specific Training: Recognize discipline-specific variations and tailor professional development opportunities accordingly. Different academic fields may require unique approaches to enhancing teaching effectiveness.

Student Feedback and Engagement:

Regular Feedback Mechanisms: Encourage the use of regular student feedback mechanisms to assess teaching effectiveness. Professors should be provided with resources and training on how to interpret and act upon student feedback constructively.

Engagement Strategies: Promote the adoption of engaging teaching strategies and active learning techniques. Provide faculty with resources and training to implement these strategies effectively.

Faculty Recruitment and Retention:

Alignment with Mission: During faculty recruitment, prioritize candidates whose intrinsic motivations align with the institution's mission and commitment to teaching excellence.

Retain Effective Educators: Implement retention strategies that recognize and retain professors who consistently demonstrate high teaching effectiveness.

Research and Innovation:

Research on Motivations: Encourage and support further research on motivations and teaching effectiveness. Invest in studies that explore the long-term impact of interventions aimed at enhancing intrinsic motivations.

Innovations in Teaching: Foster a culture of innovation in teaching. Provide faculty with opportunities to explore new teaching methodologies and technologies that align with their motivations and discipline-specific needs.

Administrative Policies:

Incentive Structures: Review and adapt incentive structures, including tenure and promotion policies, to value and reward teaching effectiveness alongside research contributions.

Supportive Policies: Develop policies that support professors in achieving a healthy work-life balance, recognizing that maintaining intrinsic motivations can be influenced by overall well-being.

Collaborative Learning Communities:

Interdisciplinary Collaboration: Encourage interdisciplinary collaboration among faculty members. Collaborative teaching and research efforts can stimulate new motivations and innovative teaching practices.

Continuous Assessment and Adaptation:

Ongoing Evaluation: Implement a system of continuous assessment and adaptation in response to changing motivations and the evolving needs of graduate students.

Ethical Considerations:

Ensure that all recommendations and policies align with ethical principles, including the protection of faculty and student rights and privacy.

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