

## Effects of Master's Learning Experience to Doctoral Degrees Transition

Jisun Jung<sup>1</sup>, Wenqin Shen<sup>2</sup>, Mingrui Zhou<sup>3</sup>

<sup>1</sup>The University of Hong Kong, Hong Kong, Hong Kong. <sup>2</sup>Beijing University, Beijing, China. <sup>3</sup>The Chinese University of Hong Kong, Hong Kong, Hong Kong

### Research Domains

Postgraduate scholarship and practice (PGSP)

### Abstract

A small number of master's graduates pursue their doctoral degrees, influenced by their master's learning experiences. How do master's students in Chinese universities perceive their learning experience? What factors affect their decision to pursue their doctoral degrees? What are the major differences between academic and professional master's in their intention to pursue doctoral degrees? This study is based on a large scale of survey data of Chinese master's students, entitled the 2021 National Master Graduates Student Feedback Survey. The data is based on 69,387 academic and 52,896 full-time professional master's students across academic disciplines and institutions. Descriptive statistics and logistic regression were applied. The results show that the individual backgrounds (i.e. gender and parent's educational level), institutional backgrounds (i.e. research university), intrinsic motivations for master's degree (i.e. interests in disciplinary knowledge), active research experiences such as publications, and academic networking experiences positively affect students' decisions to pursue the doctoral degrees.

### Full paper

Student enrolment at the master's level has steadily increased across higher education systems over the past decades, including in East Asia. In China, the master's programmes have dramatically expanded in academic and professional degrees (Li et al., 2024). The students and programme profiles at the master's level have been exponentially diversified, and most master's graduates today perceive the master's degree as their terminal degree and professional qualification rather than a stepping stone for the doctoral degree (Jung, 2022). A small proportion of master's graduates still choose to continue their studies and pursue their doctoral degrees, influenced by their master's learning experiences. What factors make them to pursue the doctoral degrees? Are they motivated for doctoral study since the beginning of their master's degree, or are their learning experience inspiring them? To respond to those questions, this research asks the following research questions. How do master's students in Chinese universities perceive their learning experience? What factors affect their decision to pursue their doctoral degrees? What are the major differences between academic and professional master's in their learning experiences and intention to pursue doctoral degrees?

Although many scholarships exist for learning experiences among doctoral students to identify the factors that influence their successful career transitions, there is a lack of studies that examine the relationship between master's and doctoral studies (Li et al., 2024). Master's education was regarded as

a stepping stone for PhD studies from a traditional perspective, emphasising research training (Jung & Lee, 2019). However, the nature of master's education has changed in recent years with more emphasis on professional skills development (Kiley & Cumming, 2015). What would the role of a master's degree be as a transition platform to PhD studies? This study is guided by Weidman's socialisation theory, which has been widely adopted to explain student's learning experiences and career development. The theory is adopted to describe the development process of master's students acquiring attitudes, beliefs, values, and skills needed to participate in doctoral education (Weidman et al., 2001).

This study is based on a large scale of survey data of Chinese master's students, entitled the 2021 National Master Graduates Student Feedback Survey. The data is based on 69,387 academic and 52,896 full-time professional master's students across academic disciplines and institutions. It covers a wide range of questions, such as master's students' motivation, learning experiences, perception of curriculum and supervisors, and their career plans. By applying descriptive and logistic regression analyses, the paper examines the factors that affect master's students' decision to continue their studies at the doctoral level. We applied the descriptive statistics and logistic regression. The findings show that individual backgrounds, institutional backgrounds, motivations for master's degrees, active research experiences such as publications, and academic networking experiences positively affect students' decisions to pursue doctoral degrees. More specifically, male students and students with higher parental education tend to continue their postgraduate studies, while the parents' economic status negatively influences their transition to doctoral study. Students in the STEM fields and research universities pursue doctoral degrees compared to students from non-STEM and teaching-oriented universities. However, the pattern is slightly different between academic masters and professional masters. Students with higher intrinsic motivations (i.e., interests in disciplinary knowledge) tend to pursue their doctoral degrees than those with higher extrinsic motivations (i.e., income, social recognition). Their positive learning experiences during the master's programmes, such as participation in research projects, publications, and engagement in academic networks, significantly influence the doctoral degree transition.

The findings provide implications for organising meaningful learning experiences for master's students based on their demands and identifying the significant transition factors from master's and doctoral degree studies. They are particularly relevant to the Chinese context, which has expanded the master's programmes in both academic and professional degrees in recent years to enhance students' knowledge and skills in the knowledge-based economy and resolve the unemployment issues among university graduates. They are also relevant for international postgraduate researchers to rethink the value of a master's degree as a research preparation for further studies or identify the factors for a smooth career transition from master's to doctoral degrees.

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