Practices and Challenges for Academic Career Management in Cambodian Public Higher Education

By

HUM Chan

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Statement of Originality

I, HUM Chan, hereby declare that I am the sole author of the thesis entitled: *Practices and Challenges for Academic Career Management in Cambodian Public Higher Education*. The content and the material presented in this thesis are my original works except those indicated in the acknowledgement. I further declare that I have followed the university's policies and regulations on Academic Honesty, Copyright, and Plagiarism in writing the thesis. This thesis has yet to be submitted for a degree in this or other universities.

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HUM, Chan

September 2023
Members of the Thesis Examination Panel approved the thesis of HUM, Chan defended on
…………./…………../ 2024.

Principal Supervisor
Professor LO, Sing-Kai
Chair Professor of Social Research
The Education University of Hong Kong

Associate supervisors
Professor YU, Wai Mui Christina
Department of Social Sciences and Policy Studies
The Education University of Hong Kong

Associate Professor CHOI, Tae-Hee
Southampton Education School
University of Southampton, UK

Dr. SOK, Say
Royal University of Phnom Penh, Cambodia

External Examiner
Professor HUANG, Futao
Research Institute for Higher Education,
Hiroshima University, Japan

Prof LIN, Tzu-Bin
Department of Education, National Taiwan
Normal University, Taiwan

Internal Examiner
Prof BRYANT, Darren
Department of Education Policy and
Leadership, EdUHK

Approved on behalf on the Thesis Examination Panel:

______________________________
Chairperson, Thesis Examination Panel
Dr LEE, Kwai Sang
Associate Dean, Graduate School, EdUHK
Abstract

The changing parameters arising from globalisation, massification and diversification of higher education (HE) have reconfigured the academic career system, globally, especially in less developed nations such as Cambodia, where the management of academic careers in public higher education institutions (HEIs) is being reformed from state control to managerial governance. However, limited research attention to the management of academic careers does not well inform policymakers and academic leaders about the issues underlying the reform process. Therefore, Cambodia remains a potential case to examine the management of academic careers, investigate the alignment features of management practices, and explore key challenges in such an evolving space of public HEIs.

A cross-pollinated theoretical framework combined a sociological theory of academic careers (Hermanowicz, 2012; Musselin, 2013) with a theory of academic human resource management in HE (Fumasoli, 2015; Kekale, 2015; Pausits et al., 2022) was used to examine the research problem to address the research questions. Mixed-methods research (MMR) with an exploratory sequential design adopted from Creswell (2014) and Creswell and Clark (2018) was used to collect data at four public HEIs from two phases. The first phase was qualitative research, which used semi-structured interviews and focus group discussions (FGDs) to collect data. The interviews were conducted with 18 Cambodian academic leaders, including 4 senior leaders and 14 mid-level leaders, and the FGDs were carried out with 25 academic teachers, including 13 civil servants and 12 contracted employees in the four HEIs. The second phase was quantitative research, conducted to collect data through an online survey with 200 academic teachers, including 100 civil servants and 100 contracted employees in the same HEIs. Quantitative results were analysed to verify the actual practices of academic career management, alignment features and key challenges explored and discussed in the qualitative research phase. Thematic Analysis was applied using NVivo
software to generate codes and themes of qualitative SPSS was performed using *Descriptive Statistic Analysis, independent-sample t-tests and ANOVA tests* for quantitative results.

The findings drawn from qualitative and quantitative analyses show variant practices in academic career management within and between the four public HEIs. Of the four HEIs, the management of academic careers is highly centralised by state agencies through the selection, promotion, and compensation of academic civil servants, while the academic self-rulled system is inconsistently carried out to hire contracted employees at young HEIs A and B. In addition, the management of academic civil servants at Institution C is not only centralised but also perpetuated by different state agentic roles and power relations, while the academic self-regulated system is inconsistently implemented. In contrast, the management of academic staff at Institution D appears more decentralised yet remains following an inbreeding model to hire its graduates for teaching and research positions.

The state centralisation, coupled with weak institutional leadership, negligence, and tacit guidelines, is a potential issue of academic career management that misaligns the processes of academic recruitment, training, performance evaluation and compensation practices in the four HEIs. Consequently, the above structural challenges hinder the development of academic careers and their teaching and research competencies. The findings also indicated that the influence of state legitimacy and power, weak institutional capacity, and resource deficits challenge the management of academic careers and restrict the four HEIs to motivate and retain young, talented academics.

To conclude, the management of academic careers in Cambodian public HEIs, as indicated by this study, is regulated by state regulatory frameworks in the case of civil servants. Meanwhile, the management of contracted academic staff lacks local policy guidelines and resources for conducting rigorous recruitment, training, evaluation, and compensation.
Consequently, the management practices of academic careers were maligned to develop academic careers and their teaching and research competencies.

This study contributes to the debate on academic career management in Cambodian public higher education (HE) to inform policymakers, academic leaders, and development partners of the key challenges so that they can strengthen the efficiency and effectiveness of the academic career system. This study also contributes to theoretical and practical implications on academic career research and practice beyond the Cambodian HE context. However, using the exploratory sequential design, this study limits its findings to the selected institutions, participants, methods, and resources used within the research time framework from 2020 to 2023.

Further studies using comparative methods may generate different results and, therefore, provide more insight into the issue of academic career management, alignment features and key challenges cutting across institutional and national perspectives. Longitudinal studies may also provide significant results to understand the impact of management practices on academic career development, academic motivation, and commitment. Therefore, this study develops a path for comparative research on the under-researched topic in the evolving landscape of Cambodian public HE and other countries facing similar issues in the East and South Asian region.

**Keywords:** management, alignment, academic careers, Cambodia, higher education
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<tr>
<td>ASEAN</td>
<td>Association of Southeast Asian Nations</td>
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<td>FGD</td>
<td>Focus Group Discussion</td>
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<td>HE</td>
<td>Higher Education</td>
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<td>HEIs</td>
<td>Higher Education Institutions</td>
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<td>HRM</td>
<td>Human Resource Management</td>
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<td>MAFF</td>
<td>Ministry of Agriculture, Forestry and Fisheries</td>
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<td>MCS</td>
<td>Ministry of Civil Service</td>
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<td>MEF</td>
<td>Ministry of Economy and Finance</td>
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<tr>
<td>MLMUPC</td>
<td>Ministry of Land Management, Urban Planning and Construction</td>
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<td>MMR</td>
<td>Mixed-Methods Research</td>
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<tr>
<td>MoEYS</td>
<td>Ministry of Education, Youth and Sport</td>
</tr>
<tr>
<td>MoLVT</td>
<td>Ministry of Labour, Vocational and Training</td>
</tr>
<tr>
<td>PAIs</td>
<td>Public Administrative Institutions</td>
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<td>RGC</td>
<td>Royal Government of Cambodia</td>
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<td>SS</td>
<td>Secondary Schools</td>
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<td>SU</td>
<td>Soviet Union</td>
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<td>UNTAC</td>
<td>United National Transitional Authority in Cambodia</td>
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<td>WTO</td>
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CHAPTER 1: INTRODUCTION

This chapter provides the background of academic career management, identifies research problems, and formulates research questions. This chapter also highlights the significance, originality, limitations, research ethics, and definitions of key terms used in the study. Finally, this chapter outlines the thesis structure.

1.1 Background of the study

There have been paramount changes in academic career management in higher education (HE) across the globe (Altbach, 2000; Altbach et al., 2009; Whitchurch, 2019). These changes have caused tensions and controversies in academic career management and thus called for further research to unpack the underlying issues. As evident, good number studies have been conducted in the United States (Baruch & Hall, 2001; Finkelstein, 2006), the European Union (Fumasoli et al., 2015; Machado-Taylor et al., 2017; Musselin, 2005; 2013), the United Kingdom (Whitchurch, 2018; Whitchurch et al., 2021), New Zealand (Sutherland, 2018) and Asian-Pacific countries (Forest & Altbach, 2007; Shin, 2018) to trace the impact of these changing parameters on academic professions.

Some studies argued that the changing parameters such as globalisation, massification and diversification of higher education (HE) have contributed to misalignments between national policy and institutional practice in academic careers (Whitchurch et al., 2023). For example, Altbach et al (2009) found that the impact of globalisation has deteriorated the academic professions, while other scholars (e.g., Musselin, 2007; Whitchurch, 2018) argued that the massification and diversification of the workforce had large-scale effect on the academic career system. Other researchers (e.g., Dobbins et al., 2011; Musselin, 2013) argued that the changing institutional governance models, for example, from bureaucracy to collegiality...
(Rowlands, 2016; Tight, 2015), to managerialism and neoliberalism (Forest & Altbach, 2007; Fumasoli et al., 2015) were the potential parameters that created tensions and controversies in academic career management in Europe (Kwiek, 2019; Musselin, 2013) and Asia-Pacific region (Jarvis & Mok, 2019; Shin, 2018).

In Asia, especially the developing countries such as Cambodia, academic careers are underdeveloped and remain a virgin territory for research. Although several national initiatives have been introduced to reform the Cambodian higher education governance from state control to relative institutional autonomy, there is scant research on this research area. Therefore, the Cambodian government has recently implemented a project to improve the effectiveness of academic career system after it updated its Policy on Higher Education Vision 2030 (MoEYS, 2014). Following this policy formation, Cambodia has avowed in its reform framework to promote accountability, efficiency, and transparency of higher education (HE) governance and management (MoEYS, 2019), in supporting the National Strategic Development Plan (NSDP) (RGC, 2023), which was updated to be the Pentagon Strategy Phase I. The first key priority of the Pentagon Strategy is to develop human capital and to accelerate the economy to make Cambodia to become a middle-income country by 2030 and a high-income society by 2050 (RGC, 2023).

In so doing, Cambodia has implemented its Higher Education Improvement Project (HEIP) II,¹ aimed at enhancing the higher education quality and strengthening the governance sector

¹ The Higher Education Improvement Project (HEIP) for Cambodia has been co-funded by the World Bank with 90 US million dollars. The project aims to improve the quality and relevance of higher education and research in STEM and agriculture and to improve governance in the sector based on four components: (1) Improving learning and teaching capacity, (2) Improving research in STEM and Agriculture, (3) strengthening sectoral governance and project management, and (4) the contingent emergency response to allow
to improve financial and human resources management accountability and autonomy. In brief, the continuation of the HEIP has been aptly to establish a comprehensive framework for academic human resources management (HRM) in Cambodian HEIs. Therefore, Cambodia needs more research-based evidence to speed up the policy formulation and implementation to develop academic professions after its education system have been affected by historical, social, and political factors over several decades.

In addition, Cambodian HEIs need research to harmonising the academic career system at the institutional and operational levels due mainly to the rising tensions and controversies between the national policy reform to improve autonomy and the lack of accountability and resources at the institutional levels. Two decades ago, Ford (2006) found the development of Cambodian HE was as controversial as six blind scientists described a tricky elephant. Ford furthered that some governance actors may perceive that Cambodian HE was growing in quality and relevance, while other development partners may define its HE as growing in pain without coherence (also see Kitamura et al., 2016; Mak et al., 2019 for current literature). The controversial aspects of Cambodian HE remains a threat to policy formulation and implementation for improving education quality and strengthening governance autonomy these days. For example, current studies have noted that structural complexities such as political patronage (Brehm., 2019), weak leadership (Sok et al., 2019), and a lack of investment schemes (Sok & Bunry, 2021) are hindering educational quality improvement and management autonomy in Cambodia. The studies argued that the development of Cambodian immediate fund allocations (see at https://documents.worldbank.org/en/publication/documents-reports/documentdetail/380891524967269938/cambodia-higher-education-improvement-project).
HE, especially concerning academic career management, remains a key issue for research investigation. Therefore, Cambodia needs further studies for improving academic careers and professional development in teaching and research.

It is also noted that research on the management of academic careers is relatively thin; therefore, Cambodia needs more research on this topic to develop research capacity and culture. Five years ago, for instance, Ros and Oleksiyenko (2018) investigated policy misalignment and challenges to developing the academic profession; however, the study was limited to lecturers’ perceptions within a single institution. Eam et al. (2020) and Ros et al. (2020) also examined Cambodian academics’ accountability, identity, role, and culture in a few HEIs in Cambodia; however, these studies were limited the findings to qualitative methods. The above literature has pointed to a research gap in terms of method and scope in academic careers in the Cambodian HE context. Thus, Cambodia needs more studies that apply mixed methods research (MMR) to expand the scope and methodological implications through multiple data collection stages in order to capture a fuller picture of academic career management and the underlying issues therein the system from cross-institutional perspectives.

In brief, the above literature shows scant research on academic career management in Cambodian HE. It is thus necessary to conduct this study to fill the gap by investigating how public HEIs manage academic staff in the current reform context. It is also important that this study assesses the degree of alignment practices in academic career management and explores key challenges. Partly, this study is responding to a call from Wan et al. (2018), along with Eam et al. (2020) and Ros et al. (2020), for further research on resolving the issues of Cambodian HE governance and management system to provide broader perspectives on the management of Cambodian academic professions.
1.2 Research motivation

This study focuses on the practices and challenges for academic career management in Cambodian public HEIs for three main reasons. First, this research study analyses the current situation of Cambodian policy reform on improving academic quality and strengthening the management accountability and autonomy. Another essential reason to undertake this study is to support Cambodian public HEIs in establishing and implementing a comprehensive academic career framework to develop Cambodian academics in teaching and research so that they can disseminate knowledge and skills to students for employment market. Finally, this study informs the national and international policymakers and the development partners to pay cautious attention to improve academic professions in teaching, research, and innovation that contribute to achieving the national goals on transforming Cambodia to be a middle-income country by 2030 and an upper-income society by 2050. This study is thus guided by three main questions.

1.3 Research questions

1. How do Cambodian public higher education institutions manage academic careers in the changing governance context?

2. To what extent are the management practices aligned to enhance academic careers in the selected higher education institutions?

3. What are the challenges for academic career management under the studied institutions?

The present study employs the exploratory sequential design of MMR since it is considered a potential approach to capture a fuller picture of the phenomena through multiple data collection phases (Creswell, 2014). The first phase is a qualitative study using semi-structured interviews with 18 academic leaders, including vice-rectors, faculty deans/vice-deans, and
heads/officers in charge of academic human resource management. In this first study phase, 25 academic teachers were invited for FGDs. Data collected from the interviews and focus-group discussions address the practices of academic career management, examine the alignment features, and explore challenges. The second study phase administers an online survey to 200 academic teachers, including 100 civil servants and 100 contract staff. The survey data are analysed to verify the practices of academic career management, the alignment features, and challenges in statistical aspects. Finally, data from the two research phases are collated and discussed to address the research questions.

1.4 Significance of the study

The study aims to get insights into the alignment practices and key challenges for academic career management to enhance teaching and research competencies in Cambodian public HEIs. This study thus suggests a practical solution for improving the academic career system to ensure effective recruitment, professional development, and motivation of competent teachers in Cambodian higher education. The study aims to inform all stakeholders, such as national and international policymakers, institutional leaders, and researchers, of the underlying issues related to academic career management, which is a timely response to policy reform on developing academic professional competencies in Cambodia.

This study also bridges the research gap in the academic career system, which most studies, for example, Eam et al. (2020), Ros and Oleksiyenko (2018), and Ros et al., 2020) have superficially addressed and are more related to the higher education governance sector, the quality assurance, and the academic freedom. This study thus primarily focuses on the academic career system, which is central to the Cambodian government’s agenda to promote human capital and the economy. Therefore, the study’s findings are expected to strongly
support the government initiatives on improving education quality outlined in the Education Strategic Plan (ESP) and the Policy on Higher Education Vision 2030.

This study also expands theoretical and conceptual knowledge of academic career management and research practices, mainly conducted in the Global North, for example, in the United States (Finkelstein, 2006) and the European Union (Musselin, 2005, 2013). The study develops a cross-fertilized model that combines academic human resource management (HRM) (e.g., Kekäle, 2015; 2018; Pausits et al., 2022), and academic labour theories (Baldwin & Blackburn, 1981; B. Clark, 1997; M. Clark, 1986; Musselin, 2005, 2013). The combination of theoretical foundations for this study follows the suggestions from Kekäle, 2015, Sarrico et al. (2022), and Pausits et al. (2022) that applying a cross-pollinated model can enrich a deeper understanding of academic career management to foster academic excellence. This study frames the research approach around theories of academic labour and theoretical framework for human resource management to examine the management of academic careers in Cambodian public higher education.

Finally, the study contributes to a methodological gap in academic career management research in Cambodian HE since existing studies (e.g., Eam et al., 2020; Ros et al., 2020) were conducted in a single method using a qualitative inquiry. The study also expands the methodological gap to a wider context, as Bainbridge and Lee (2014) suggested that mixed methods research (MMR) has gained little attention from academia in the least developed countries due to limited resources and data access. Therefore, applying MMR in this study is not only crucial to capture a complete picture of academic career management under reform process, but also enhance research culture and capacity beyond a standalone method in Cambodia.
1.5 The originality of the study

Academic career management in the higher education sector is underdeveloped and an untouched research area in Cambodia. Therefore, this study, including its method design, method, conceptual framework, and content, is unique. First, this study embeds a sequential research design, differentiating itself from management studies that apply a single research inquiry, such as a qualitative case study. This study also utilizes multiple data sources to investigate the research foci to combine qualitative and quantitative strands. As such, the present study uses a sequential MMR to synthesize the data strands derived from semi-structured interviews, focus group discussions and survey questions. This research design distinguishes this study from its predecessors, such as Eam et al. (2020) and Ros et al. (2020), that applied only qualitative methods.

This study also distinguishes its focus from other works in the Cambodian higher education context. Unlike the previous studies that focused on university governance and administration (Sok et al., 2019), management accountability (Eam et al., 2020), the academics’ identities and roles (Ros et al., 2020), the policy misalignment (Ros & Oleksiyenko, 2018), and the university governance (Mak et al., 2019), the present study capsulizes the macro and micro-level systems of academic career management to examine the current practices in recruitment, professional development, performance evaluation and the compensation system. More importantly, the study investigates the alignment practices and key challenges to inform the policy debate on the academic career system in Cambodian HE.

The final feature of this study, which differs from others, is the synthesis of theoretical framework combined sociological theory and academic human resource management theory. Adapting different theoretical underpinnings is expected to dig deeper into the issues of
academic career management and explain the relationships among multiple factors underlying the practices in the evolving landscape of such Cambodian HEIs.

1.6 Research ethics

The study has followed the ethical guidelines of the *Education University of Hong Kong (EdUHK)* and has fulfilled the research procedures required by the targeted HEIs in Cambodia.

First, the *Ethical Review* was applied to obtain an ethical approval from the *Human Research Ethics Committee* (HREC) of EDUHK (see Appendix K). Along with the request for the ethical approval, the researcher also applied for supporting documents from the Graduate School of the EdUHK. The supporting documents were used to have an approval from the *Directorate of the General Higher Education Department* (DGHE) to collect data at four public HEIs in Cambodia (see Appendix L and M). After obtaining an official approval from DGHEIs, the researcher submitted a request letter, attaching all supporting documents such as the ethical approval, research support letter, and information sheet the participating HEI in Cambodia. All the attaching documents provided a clear overview of the research purposes and data collection procedures and to reassure that the present study was not involved with any political and legal organisations. The present study mainly was to fulfil the requirement of a doctoral study at *The Education University of Hong Kong*.

After having an approval from each HEI, schedules for interviews and focus group discussions (FGDs) were arranged. Before starting interviews and FGDs, the researcher briefly introduced the research purpose, procedures, benefits, and risks to the participants so that they understood the research purpose and that they could either participate or withdraw from the study at any time without any consequences. At the same time, the Participant Consent was presented to each participant to have individual agreement and signature. The
use of consent form was to protect the researcher and participant from any risks relating to legal and ethical issues. In this case, a copy of the signed consent was given to every participant for record-keeping purposes. In online survey, the participants were also asked to give their consent before they could proceed to answer questions in the Google Form. Otherwise, they could withdraw from the participation of the study.

Finally, this study was also conducted in principles of privacy and confidentiality by anonymising the identities of institutions and participants. That means the thesis report did not show detailed information about the institutions and participants. In other words, the selected institutions were coded Institution A, Institution B, Institution C, and Institution D, while the participating academic leaders were labelled PA1-P A6, PB7-PB11, PC12-PC16 and PD17-PD19. The twenty-five teachers were coded as TA1-TA8, TB9-TB15, TC16-TC20, and TD21-TD25.

In summary, the study was conducted following the ethical guideline and research rigors in respect of privacy and confidentiality to protect the participants from any risks and to enhance research standard procedures.

1.7 Definition of the key terms

*Academics* refer to people who teach and conduct research and other academic activities in higher education institutions and research organisations (Teichler, 2015; 2017). This study defines *‘academics’* as people who work as faculty members in Cambodian public universities and institutions, regardless of civil servants or contracted staff. The term *‘academics’* in this study is sometimes replaced by *‘educational personnel’*, a gloss used in Cambodia’s Law on Education 2007 to refer to “teaching and non-teaching staff, within or outside the civil servant cadre or personnel serving in the education sector at all levels, except
for political appointees who are leading the education sector of public institutions” (RGC, 2007).

Career refers to the sequence of work-related roles and experiences developed over a person’s lifetime (Arthur, 1999; Arthur et al., 2005).

Academic career(s) is/are defined as the sequence of positions—starting from entry job and ending with retirement (Fumasoli, 2018). In the literature, the term ‘academic careers’ sometimes means ‘academic profession’, which refers to a community of scholars (see Altbach, 2000; Enders, 2007). European researchers also describe the term ‘academic workforce’ as ‘academics’ (see Musselin, 2005, 2013; Whitchurch, 2018). This study adopts a definition of ‘academic careers’ defined by Fumasoli (2018) to mean the sequence of work-related experiences and roles. This study includes teachers, teacher-administrators, and teacher-researchers in Cambodian higher education settings.

Academic career management may comprise multiple activities and processes. Management refers to activities and processes to achieve results and goals by organizing tasks and resources (Kekäle, 2015). Musselin (2013) explained that the management of academic careers is linked with formal and rational processes such as job announcements, hiring and promotion procedures, career development and coaching, performance appraisal, and income policy, which is under the authority of the human resources department. In some cases, ‘academic human resource management’ (Fumasoli, 2015) or ‘academic personnel management’ (Wang & Jones, 2021) were used as synonyms. This study defines ‘academic career management’ as activities and processes related to the recruitment, development, evaluation, and compensation of academics, including teachers, teacher-administrators, and teacher-researchers who hold civil servant status and contract positions. The study focuses on the four management functions since they are commonly conceptualized for research on
faculty management or human resource management in higher education (Pausits et al., 2022). The four management functions are the core activities in the manual for human resource management and development in the higher education subsector (MoEYS, 2021a; 2021b).

Alignment refers to a degree of ‘congruence’ (Delery & Doty, 1996), ‘fit’ (Wright & Snell, 1998), and ‘mutability’ (Boxall, 2012). Audenaert et al. (2014) defined strategic alignment as the congruence between organisational strategy and the execution of management functions to enhance employee ability, skills, and attitude. Internal alignment is the consistent coordination of management dimensions to select, develop and motivate employee performance. This study examines the micro features of the management system, including distinctiveness, consistency, and consensus. The concepts of these features are framed around Bowen’s and Ostroff’s (2004) process approach.

Higher education institution (HEI) is defined differently, based on governance system, policy, funding, and authority control. According to B. Clark (1983), higher education institutions are divided into (1) a single public system with a single public sector, (2) a single public system with multiple sectors, (3) multiple public systems with multiple sectors, and (4) public-private system with multiple sectors (also see Teichler, 2017). In this study, a higher education institution is defined by the Law on Education 2007 (RGC, 2007). The law states that higher education institution, including university and institute under state control and private ones, aims to develop learners’ personality and characteristics to promote scientific, technical, cultural, and social research to achieve capacity, knowledge, skill, morality, inventive and
creative ideas, and enterprise spirit to the development of the country\textsuperscript{2}. This study includes universities and institutes under state policy and funding regulation.

*Governance* refers to the relationship between organisational structure and authoritative power in formulating coherent policies, plans and decision to ensure integrity, accountability, and responsiveness in academic institutions (Sporn, 2007; Middlehurst, 2013).

Corporate governance defines entrepreneurial characteristics of academic institutions granting power to academic boards to play a role as a ‘buffer’ between institution and state to formulate policies and strategies (Sporn, 2007). The implementation of corporate governance is to improve accountability and efficiency of higher education management (Ramirez & Tejada, 2018).

*Competency* refers to ‘the extent of effectiveness and efficiency results from knowledge and ability to usher the desired outcome (Carr, 1993). The European higher education has defined various competencies for academic teachers, for instance, personality, content knowledge, pedagogy, classroom management, lifelong learning (Tigelaar et al., 2004), professionalism, education, scientificity, communication, and digitality (Dervenis et al., 2022). This study does not adopt all these competence domains. It focuses on only four domains such as specific subject knowledge, pedagogy, personality, and professionalism since these competencies are associated with the competence framework recently developed for the Cambodian higher education sector (see MoEYS, 2021b).

\textsuperscript{2} See Article 18 in Cambodia’s Education Law 2007 for a detailed explanation of the higher education sector. The Sub-Decree on Criteria for the Establishment of University also outlines the characteristics of universities and institutes in Cambodia (see Articles 4, 5 and 6, Royal Government of Cambodia, 2002).
1.8 Thesis structure

This thesis focuses on academic career management and its alignment features of the system in four Cambodian public HEIs. The thesis consists of eight chapters.

**Chapter 1** describes the theoretical background, identifies the problem, and proposes research objectives and questions. This chapter also lays down the significance and originality of the present study and explains key terms.

**Chapter 2** presents the Cambodian context and discusses its education systems. This chapter also highlights the legal and institutional frameworks for the academic career system in public HEIs.

**Chapter 3** discusses theoretical and conceptual frameworks for the present study. The chapter also highlights the research gap and proposes research concepts and variables.

**Chapter 4** focuses on research methodology, describing the research sites, the sample and sampling method, instruments, the measures and data collection and analysis.

**Chapter 5** presents the qualitative data analysis and reports the findings to address research questions (RQs). The chapter begins with a report of demographic information, followed by the findings of research questions 1, 2, and 3.

**Chapter 6** presents the quantitative data analysis and reports the statistical results to address research questions (RQs). The chapter begins with a report of demographic information, followed by the presentation of results to address research questions 1, 2, and 3.

**Chapter 7** concludes the study findings based on qualitative and quantitative key findings.

**Chapter 8** provides implications for policy practices, institutional management, and future research agendas.
CHAPTER 2: THE RESEARCH CONTEXT

This chapter presents the Cambodian context, focusing on social, economic, and educational development. The chapter also highlights the legal and institutional framework for academic career management and discusses some feasible issues under study.

2.1 The Cambodian context

Cambodia is officially and internationally known as “the Kingdom of Cambodia”. It has an area of 181,035 km\(^2\) and a population of 16.5 million (Ministry of Planning, 2019). Over the past decades, this country has experienced social and political turbulences, for example, the Indochina Cold War and the coup d’état by Lon Nol in the 1960s, the genocidal Khmer Rouge in the 1970s, and the occupations by the socialist Soviet Union (SU) and communist Vietnam (VN) in the 1980s. After receiving the Paris Peace Accords in 1991, the country could establish a coalition government and avow in its Constitution to implement the democratic-political system and the free-market economy (see articles 51 & 56 of the Constitution of the Kingdom of Cambodia 1993, RGC, 1993). In 1999, it became a member of the ASEAN economic community and entered the World Trade Organization (WTO) in 2003. Following the two remarkable events, Cambodia has enshrined in its Law on Education 2007 to establish comprehensive education systems to ensure equal access to quality education for developing human capital, economic growth, and social progressions (see Law on Education 2007, RGC, 2007).

The Law on Education is an essential legal framework for establishing and administrating Cambodian education systems. The Law outlines three education levels: The primary grades are from 1 to 6; the secondary level is divided into the lower grades from 7 to 9; and the upper grades from 10 to 12, and the tertiary level refers to higher education, including university
and institute (see Article 8 in the Law on Education 2007). The first two education levels teach Cambodian students the fundamental knowledge of morality and good character by enhancing their personal, intellectual, and physical capacities to pursue higher education or enter the employment market. Higher education equips the learners with personality and characteristics and promotes their technical knowledge and skills in science, technology, culture, and society. This education level also advances the learners’ capacities, innovative and creative ideas, and entrepreneurial spirit to compete in the local and international labour market and contribute to economic development towards the upper-middle income by 2030 and the higher-income society by 2050 (MoEYS, 2019).

In what follows, the chapter presents the development of Cambodian higher education, including the academic governance and personnel management framework from different milestones.

2.2 Cambodian higher education (HE) development

Cambodia’s education systems have been evolving from a ground zero to an international standard. Before arriving at such significant progress, the Cambodian higher education system has been shifted according to historical, social, and political orbits in four milestones.

The first development predated the ancient Angkor Empire from 802 to 1431 when cosmological-religious concepts influenced Cambodian society and educational philosophies. During that time, Cambodian education was generally community-based to enhance the basic reading and writing and the egalitarian skills of the learners, while higher education was offered in a narrow approach to elites in the kingdom (Ayres, 2000). It was also noted that the teaching staff were recruited from religious members, especially Buddhist monks, and the educational institutions were supervised by authorities to serve the supreme power of kingship (Chandler, 2008).
The second development of Cambodia's education system began with the French colonisation from 1863 to 1954. The French attempted to transform Cambodia's Indigenous education into a more secular pedagogy. Under the colonisation, the French tightly controlled curriculums, programs, and staff to use them for the colonial administration (Clayton, 2006). This situation triggered resistance among the Cambodian grassroots for the fear of deteriorating the Khmer language and cultural identities. Therefore, the French combined the French-based education and Khmer traditional school, expecting to improve educational access throughout the country. The blended education system was implemented through King Norodom Sihanouk (1954-1970), albeit affected by underfinance, political turmoil, and chronic wars.

Unfortunately, the Khmer Rouge in 1975 destroyed nearly all past education systems, aiming to change Cambodia to an egalitarian society. At the same time, the Khmer Rouge killed over 70% of Cambodian scholars, including professors, teachers, doctors, and others.

The third development started after the collapse of the Khmer Rouge in 1979. Cambodia slowly restored its education systems, receiving financial and technical support from the socialist Soviet Union (SU) and communist Vietnam (VN). However, the education operation was not fully functioning to provide the universal education goal, as the two communist countries manipulated education systems to instate political ideologies. Under such control, Cambodia's higher education system lacked the autonomy to provide equal access to Cambodian learners (Ayres, 2000). In addition, higher education faced key challenges since there was little state investment in the sector (Un & Sok, 2018).

The final development of Cambodia's higher education occurred in the 1990s after Cambodia received the Paris Peace Accords to cease the political fractions and conflicts and to establish the government through the general election assisted by the United Nations Transitional Authority in Cambodia (UNTAC). After forming the government, Cambodia could
restructure its social, political, and economic systems and establish a holistic education system that adopted the Western model (Sok et al., 2019). To increase educational access and prepare Cambodians for economic society, Cambodia introduced a privatisation policy on higher education in 1997, followed by the endorsement of the Royal Decree on the Legal Status of the Public Administrative Institutions (PAIs) (Sok et al., 2019; Sok & Bunry, 2021). Along with the Decree, other legal frameworks have been stipulated to improve the efficiency and accountability of the Cambodian higher education governance and management system.

The Education Congress 2020-2021³ reported that Cambodia had 130 (42 public, 82 private), which increased from 121 in 2017. This figure reveals a quantitative expansion of Cambodian HE; however, poor education quality and a lack of institutional autonomy and accountability remain potential issues.

### 2.3 Cambodian higher education governance

Different national frameworks influence the Cambodian higher education governance. The Constitution of the Kingdom of Cambodia 1993 (amended in March 1999) ordinates the citizens' rights to access universal education for individual and social development (RGC, 1993), and the Education Law 2007 (RGC, 2007) stipulate the structures of educational administration and management to four levels. The Supreme National Council of Education (SNCE) is at the national level, chaired by the Prime Minister. The SNCE formulates long-term educational policies and strategies, assesses educational progress and achievement, and seeks resources. The Technical Working Group on Higher Education (TWG-HE) is at the subnational level, formed among line ministries, government agencies, public and private bodies, civil societies, and development partners. The TWG-HE assists the SNCE in

implementing educational policies and strategies. The district and institutional levels directly manage educational programmes and academic personnel to ensure the accomplishment of strategic missions and plans. The institutional level is crucial in strengthening organisational governance to promote autonomy and accountability. In reverse, the education institutions are supervised and evaluated by the MoEYS team, composed of the Directorate General and Departments of Higher Education, the Education Quality Assurance Unit, and the Administration and Personnel Management Department (RGC, 2009).

Other frameworks, for instance, the Royal decree on legal status of the public administrative institution (RGC, 1997), Sub-decree on Criteria for the Establishment of Universities (RGC, 2002); Royal Decree on Accreditation of Higher Education (RGC, 2003); Education Law 2007 (RGC, 2007), Policy on Higher Education Vision 2030 (MoEYS, 2019b) and the 10-Year Strategy for Higher Education 2021-2030 (MoEYS, 2021a) were developed as a means for improving the effectiveness and efficiency of Cambodian higher education governance. These regulatory frameworks prescribe the general conditions for higher

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4 This Sub-decree provides an overall management structure of MoEYS by highlighting the responsibilities of separate departments, e.g., the Personnel Department in charge of recruitment, nomination, promotion, appointment, retirement, punishment, and elimination of educational staff (p. 6).

5 This Sub-degree implicitly states that Cambodian university teachers must be qualified to transfer knowledge and research skills to students by following a modern methodology (p.3).

6 This Royal Decree explicitly describes the qualifications and experiences of teachers, developing, giving enumeration and salary scale, contracting, nominating, and promoting them (p. 4).

7 The 2007 Education Law defines educational personnel as those teaching and non-teaching staff, within or outside the civil servant cadre or personnel serving the private education sector (pp. 22-23).

8 This policy provides a roadmap for promoting the quality of higher education and strengthening a good government system to provide quality of learning, teaching, and research (p. 3).
education establishments, stipulated accreditation quality standards, laid down the strategic missions and goals, and introduced a ten-year strategy on Cambodian higher education to support the Education Strategic Plan (ESP) and the National Strategic Development Plan (NSDP) (MoEYS, 2019).

Besides the above legal frameworks, Cambodian higher education governance is controlled by line ministries and government agencies. As highlighted in Table 1, 16-line ministries and agencies have managed 130 HEIs: 48 public and 82 private establishments. For example, the Ministry of Education, Youth and Sport (MoEYS) supervises 82 (13 public: 69 private); the Ministry of Labour and Vocational Training (MoLVT) manages 25 (12 public: 13 private) HEIs; the Ministry of Defence oversees five institutions; while other state agencies control their institutions (MoEYS, 2022).

Table 1 Number of Cambodian HEIs under line ministries and relevant state agencies

<table>
<thead>
<tr>
<th>No.</th>
<th>Names of Ministries-Institutions</th>
<th>Public</th>
<th>Private</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ministry of Education, Youth and Sport</td>
<td>13</td>
<td>69</td>
<td>82</td>
</tr>
<tr>
<td>2</td>
<td>Ministry of Labour and Vocational Training</td>
<td>12</td>
<td>13</td>
<td>25</td>
</tr>
<tr>
<td>3</td>
<td>Ministry of Defence</td>
<td>5</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>Ministry of Cults and Religions</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>Ministry of Agriculture, Forestry and Fisheries</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>Ministry of Health</td>
<td>2</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>Ministry of Culture and Fine Arts</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>Ministry of Interior</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>Office of the Council of Minister</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>Ministry of Public Affairs and Transport</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>National Bank of Cambodia</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>Ministry of Social Affairs, Veterans and Youth Rehabilitation</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>13</td>
<td>Ministry of Mines and Energy</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>14</td>
<td>Ministry of Posts and Telecommunication</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>
In brief, different regulatory frameworks and the influence of state agencies have caused tensions and controversies in HE governance and management in Cambodia. The tensions have given rise between the use of public administrative system and the introduction of public autonomy in the management of public HEIs. For example, while the government has introduced a series of regulations to promote public autonomy, the state laws and agentic roles and powers remain being enforced and thus restricted the institutional leeway from formulating policies, strategies, and guidelines that fit their local contexts (Sok & Bunry, 2021). The dominance of ministerial and agentic roles without a clear coordination mechanism have also led to inconsistent resource management and allocation. This issue has resulted in a lack of transparent and accountable financial and personnel management at the institutional level.

Second, the controversies have risen from the contesting aspects between quantity expansion and quality improvement in Cambodian HEIs. While increasing number of HEIs from 8 in 1997 to 130 in 2022 has marked a significant expansion, the inadequate funding, poor infrastructure, outdated curricula, and weak institutional capacity are restraining the improvement of quality standards in Cambodian public HEIs (MoEYS, 2022). In addition, the sharp increase of student enrolments, expecting to doubly increase by 2030, has also provoked another tension to quality improvement, as there is a lack of proper mechanisms to enhance teaching and learning outcomes. This issue has limited the capacity of Cambodian HEIs to well-rounded graduates for local and international employment market. Third, the
tensions have emerged from malignment between national strategy and institutional planning, for example, on promoting research productivity since many Cambodian universities function primarily as teaching institutions, and about 65% of lecturers do not have research experience (Heng, 2023).

The final tension concerns the promotion of higher education internationalization, while most Cambodian HEIs face financial and human resource shortages (Sok & Bunry, 2021). This issue has undermined the paths for Cambodia to achieve its long-term vision to promote higher education quality and academic governance system.

2.4 Academic career system in Cambodia

Table 2 presents the distribution of academic careers in terms of gender and qualifications. As illustrated, Cambodia had 16,438 academic staff; 3,518 (equivalent to 21%) were females. The majority of the academic staff, about 11,053 (76.24%), were master’s degree holders, with 9,265: 1,788 male-female ratios. It was also reported that 3,948 (about 24.01%) Cambodian teachers in higher education hold bachelor’s degrees. The gender ratios in this category were 2,374 males and 1,574 females. In other words, 60% were male staff and 40% were females—the academic staff who hold Doctorate degrees were1,437, equal 8.74 per cent. The gender ratios in this category were dispersed mainly at 1,281 (89%) males and 156 (11%) females. Compared to the Academic Year 2019-2020, the number of teachers holding a master’s degree increased by 210 persons, equal to 1.89 per cent, and teachers holding a doctoral degree increased by 46 persons, equal to 3.30 per cent (MoEYS, 2022). However, there is no specific report on a comparison between academic career systems in public and private HEIs; however, the Cambodia’s Law on Education 2007 highlights some differences in academic personnel management. This law states that the management of academic personnel in both public and private institutions must follow the regulations and procedures
introduced by the Ministry of Education, Youth and Sport. In practice, the management of academic civil servants is governed by the state laws and regulations, while the management of educational employees in private institutions is subject to individual regulations.

Table 2 Distribution of academic staff by gender and education levels in Cambodian HE

<table>
<thead>
<tr>
<th>No.</th>
<th>Qualification levels</th>
<th>Gender distribution</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>1</td>
<td>Bachelor’s degree</td>
<td>2,374</td>
<td>1,574</td>
</tr>
<tr>
<td>2</td>
<td>Master’s degree</td>
<td>9,265</td>
<td>1,788</td>
</tr>
<tr>
<td>3</td>
<td>Doctorate degree</td>
<td>1,281</td>
<td>156</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>12,920</td>
<td>3,518</td>
</tr>
</tbody>
</table>

Sources: The Educational Congress 2020-2021 (MoEYS, 2022)

The Law on Education 2007 divides Cambodian academic careers into civil servant status and contracted employees. The management of academic civil servants follows the employment conditions and procedures stated by the Constitution 1993, the Law on Education 2007, and the Law on the Common Statute of Civil Servants of Cambodia 1994. The Handbook for Civil Servants 2010 also describes the procedures and conditions of recruitment, training,

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9 The Constitution of the Kingdom of Cambodia 1993 states that Khmer citizens of either sex shall enjoy the right to choose any employment according to their abilities and the needs of the society. They shall receive equal pay, [...] values, [...] social security and benefits, [...] and [...] join trade unions (see Article 36).

10 The Law on Education 2007 states that educational personnel have the rights and obligations to achieve career values and high social respect, develop career paths, participate in educational personnel associations, [...] obtain equitable educational services, and [...] adhere to professional codes of ethics. Private educational personnel shall have other rights and obligations stipulated by the existing Labor Law (see Article 37).

11 The Law on the Common Statute of Civil Servants of the Kingdom of Cambodia shall apply to civil servants belonging to the step corps established by Kret and having a job with rights to a retirement pension (see Article 2). [...] The nomination, promotion, change of assignment, secondment, or placement outside of the organisational framework of bodies shall be decided by Kret, Anukret or Prakas. Dismissal, automatic placement into retirement and removal of civil servants shall be carried out by Kret, Anukret or Prakas, according to the particular statutes that apply (see Article 5).
performance appraisal, compensation system, and other employment conditions for civil servants. Following these national policies and laws, the management of academic staff must adhere to the following procedures.

The recruitment of academic teachers is divided into public civil servants and university contracts. The hiring process of academic civil servants must conform to the conditions and procedures stated by Law on Common Statute of Civil Servants 1994 (RGC, 1994) and the Handbook for Civil Servants 2010 (RGC, 2010). The two legal documents require all candidates who wish to apply to become civil servants. These laws state: the candidates must be Cambodian, aged between 25 to 30 years; must derive from a political alliance/party; must be clean from any crimes and moral misconducts; must satisfy physical and aptitude conditions; can belong to any ethnic or privilege groups from remote areas or woman, and must meet the requirements of the host institutions. The candidates must also pass the examination arranged by MoEYS. On the other hand, the recruitment of contract teaching staff is based on the internal regulations developed for individual institutions.

Regarding training and development, academic civil servants must oblige to the twelve-month probation. During this period, the educational personnel are still considered trainees to complete the duties and responsibilities regulated by the national law. Promoting civil servant teachers must respect the laws in force, following the seniority-based evaluation for grades and ranks. The evaluation rubrics are designed based on the conditions in the Law on Common Statute of Public Civil Servants (see RGC, 1994, for further review).

The Legal statute on Public Civil Servants mandates the principles of rewarding, disciplinary sanctions, or punishments on any educational personnel (see Article 40 of the Legal Statute for Public Civil Servants). This article states two-degree sanctions. The first one is less severe than the other one that an internal committee can manage. The resolution of the first sanctions
can be a reprimand, censured records, or job transfer. In contrast, severe sanctions can delay promotion, suspension of salary, or removal from job titles. For the contract staff, all types of sanctions must be managed by the internal committee with a decretive decision of university leaders and faculty managers.

The government encourages all institutions to establish innovative, effective, and efficient working systems and performance evaluations to ensure a good working environment. The performance evaluation must include job descriptions, transparent recruitment procedures, practical training, on-the-job coaching, and equal career development opportunities.

The government teachers who committed crimes or engaged in illegal acts must undergo judicial litigation within 72 hours of bringing the charges. This legal procedure is prescribed in the law on managing civil servants (see Article 53). The consequences of the litigation may lead to a decision of termination or other severe sanctions.

2.5 Key issues of academic career system in Cambodia

The development of Cambodian higher education, including its academic personnel system, has been influenced by prolonged social and political complexities. Long-decade wars plagued the system and were destroyed by the Khmer Rouge in the mid-1970s. Over three years, Cambodia lost more than 70% of educators, including teachers and professors (Ayres, 2000). The education system was restored yet tightly controlled by the socialist Soviet Union and communist Vietnam during the 1980s. The 1990s marked the positive development of Cambodia’s education system to promote universal access, equity, and quality for developing human capital and economic progression. Therefore, strengthening the education system, especially at the tertiary level, becomes a core national strategy. However, the historical and
political complexities shape the management of academic careers and thus remain a frontline issue worth researching.

Some studies noted that low remuneration, a lack of transparency and integrity, and a rewarding system influenced academic careers in Cambodia. For example, Ros et al. (2020) found that the piecemeal salary hardly met Cambodian academics’ basic needs. This issue had adverse effects on academic, emotional, and financial well-being. Cambodian academics also face job security and career autonomy due to a high-context culture and an unpleasant environment. The researchers further argued that a lack of teamwork, trust, and accountability caused uncertain career prospects for Cambodian academe (Eam et al., 2020).

Another issue concerning the management of academic personnel in Cambodia is due to the effects of the traditional administrative system (Sen, 2022), tacit management guidelines (Sok et al., 2019), and limited leadership capacity (Sok & Bunry, 2021). The problems of the academic career system in Cambodia also concern the complex roles of line ministries and state agencies (see Cambodia’s Education 2030 Roadmap, MoEYS, 2019a) in staffing procedures (Mak et al., 2019). These complexities have limited staffing autonomy at universities that recruit, develop, and promote the capacities of Cambodian academics.

The final problem underlying the management of academic careers in Cambodian public higher education concerns the division of Cambodian academics into civil servants and contract employees as per the Law on Education (RGC, 2007). The division affects the promotions, salaries, and other aspects of well-beings of academia in Cambodia. For example, civil servants gain more benefits, such as job security, pension plans, and a clear path to promotion; however, contract staff have more flexible careers but are less secure careers.
Summary

The Cambodia has substantially developed its education system over the last few years. Meanwhile, structural challenges and institutional complexities have influenced the institutional development, the governance system, and the management of academic staff. For example, the contesting space evolving from a transformation of state-governed bodies to public institutional autonomy has triggered tensions and uncertainty to academic career management. The tensions also arise from the expansions of higher education institutions without clear mechanism to ensure quality standards. In addition, the controversial aspect concerns the state intention to promote management autonomy and the lack of institutional capacities to adapt to the changing legal and political environment. Therefore, it is paramount to examine the management process of academic careers further and discuss them in this study to compare the management practices and key challenges from cross-institutional and national perspectives.

To capture a full picture of academic career management system under the changing environment, this study proposes a cross-pollinated framework around the sociological theories of academic careers (Dobbins et al., 2011; Musselin, 2005; 2013; B. Clark, 1997; M. Clark, 1986; Whitchurch et al., 2019), the theoretical model of academic human resource management (Kekäle, 2015; 2018; Pausits et al., 2022) and the human resource management theory (Delery & Doty, 1996; Bowen & Ostroff, 2004) to get deeper insights into the complex issues in academic career management setting in the reform process in four public HEIs in Cambodia.

The following chapter thus offer a review and discussion on the theoretical and conceptual frameworks to guide the research methodology presented in Chapter 4.
CHAPTER 3: LITERATURE REVIEW

This chapter reviews and discusses theoretical and conceptual frameworks for this study. The chapter highlights theories for academic careers and research approaches for examining the relationship between academic governance and academic career management in higher education. The chapter also identifies key issues underlying the academic career system by critically appraising the existing studies in order to identify the research gaps. Finally, the chapter proposes the conceptual framework to map the research concepts and to guide the methodological procedures discussed in Chapter 4.

3.1 Theories of academic careers

The review of the literature has followed a standard method which is called a ‘systematic review’ (see Newman and Gough, 2020). The systematic review started with a setting of the selection criteria to include most relevant and up-to-date literature in the field. To ensure the relevance, the researcher identified and selected only the journals and book series that focus on theory of academic careers in higher education. In so doing, first, the researcher set keywords and phrases: “theory of academics”, “theory of academic labour”, “management of academics”, “academic recruitment”, “academic professional development”, “academic performance evaluation, academic compensation etc.” These key words and phrases were keyed in the university online library database via [https://www.lib.edu.hk/] to search for the literature. These keywords were also directly entered to the journal websites, for instance, Studies in Higher Education, Higher Education Policy, and Tertiary Education and Management, Journal of Management, Human Resource Management, Academy of Management, and Public Administration.
Second, the researcher identified a good number of book series, for example, “Higher Education: Handbook of Theory and Research”; “The Changing Academy – The Changing Academic Profession in International Comparative Perspective”; “Professorial Pathways: Academic Careers in a Global Perspective”; “The Palgrave International Handbook of Higher Education Policy and Governance”, and the “Encyclopedia of International Higher Education Systems and Institutions”. These book series were collected from the university library and downloaded from Google Scholar via: [https://scholar.google.com/]. The review of these books aims to understand the broad concepts and approaches to academic career research and practice cutting across the globe.

Finally, the literature review aims to define specific concept of academic careers and academic career management. In so doing, a number of seminal works and current studies, for instance, Angermuller (2017); Baruch and Hall (2004); Dowd and Kaplan (2006); Finkelstein (2006); Fumasoli (2018); Musselin (2005; 2007; 2013); Pausits et al., 2022; Teichler (2017; 2021); Whitchurch (2018); Whitchurch et al. (2021) and Whitchurch et al (2023) were reviewed to define the concept of academic careers:

Baruch and Hall (2004) illustrate that academic careers are ‘networking across organizational borders and individual attribution to professional reference serving for defining roles and position’.

Dowd and Kaplan (2005) define academies as boundaried and boundaryless professions. The boundaried careers are defined by institutional and structural frameworks, while boundaryless careers are self-defined through career pathways.

Angermuller (2017) defines academic careers as social processes involving many members of large populations over long periods.

Fumasoli (2018) states that academic careers are the sequence of positions over the working life of an academic, usually but not necessarily starting with a doctoral degree.
The entry position of academic careers generally starts from assistant and continuously develop to full professor.

The above definitions indicate that academic careers are confined differently depending on institutional framework and individual aspiration. The institutional framework generally defines academic career as a “boundaried model”, tightly regulated by norms and rule-based structures. This career type is generally applied to the case of civil servant status such as in France and Spain. The individual career aspiration is called a “boundaryless career model” driven by individual strengths, interests, and commitments. Drawing on the above definitions, this study defines academic careers as the employment structures related to teaching, research and administrative roles in academic institutions that are shaped by social and institutional framework. The academic careers generally start with an entry position as a lecturer or an assistant professor to a top position as a (full) professor. However, the conceptualisation of academic career structures can vary to social and institutional contexts which are generally reciprocal with theoretical epistemologies, for example, economics, sociology, psychology contracts, and managerialism.

The subsections present these theoretical underpinnings of academic careers in chronological in order to show the relationship between the theories and practices across the globe.

3.1.1 Economic theory of academic careers

The economic theory of academic careers emerged from the 1950s to 1970s under the influence of Max Weber’s *Economic Organisational Theory* and Frederic W. Talor’s *Scientific Principle of Management*. The economic theory defines academic careers as boundaried structures under institutional processes and regulations (Dowd & Kaplan, 2005). This career model entails norms and rule-based management (Teixeira, 2022) to encourage academics to perform pastoral-custodian and pedagogical teaching tasks in colleges and universities (Finkelstein,
Baruch and Hall (2004) noted that the management of academic careers from an economic perspective followed a *vacancy-and-replacement model*, which means academic staff were recruited and promoted by comparative assessment (concourse) and preference (tournament process). The economic theory posits in the use of pecuniary and non-pecuniary rewards to enhance academic motivation and career progression (Teixeira, 2022). The pecuniary rewards include salary and incentives, while the non-pecuniary rewards refer to recognition and promotion (Whitchurch et al., 2021).

In principle, the economic theory can provide insights into academic career research by analysing the incentives, costs, and benefits of academic work. This theory helps researchers understand how academics respond to the market forces, such as supply and demand, competition, and innovation, that shape the higher education sector. More importantly, economic theory can help evaluate the efficiency and effectiveness of academic work, examine productivity and quality, and measure the impact of academic research, teaching, and services on social and economic development (Marini et al., 2019).

However, it was criticised that the application of economic theory limits career boundary to a life-span employment such as civil servant status (Dowd & Kaplan, 2005). This career model does not contain attractive features to talented people to enter academic life, as career development is conditioned by institutional policies and regulations (Marini et al., 2019). The economic model also gives academics little freedom to academia to define their career goal and success (Teixeira, 2022). Such limitation generally restrains the fulfilment and satisfaction of academics, and consequently, lead to high turnover rates. Therefore, a sociological career model was developed to manage academic staff through providing tenure-track system.
3.1.2 Sociological theory

Robert K. Merton (1910-2003) is one among other sociologists who opposed a boundaried career model to deviate from norms and rule-based management (boundaries career) (see Hermanowicz, 2012, for a complete understanding of the sociology of academic professions). The sociological career framework promotes academic professionalisation, identification and status to diversify the academic workforce in the changing specialisation (Whitchurch, 2018). The sociological perspective defines greater freedom for the community of scholars in managing, recruiting, and nominating academic staff (Marini et al., 2019). The sociological model also focuses on (a) the prestige of an institution, (b) the notoriety of the field, and (c) the accumulative advantages of enhancing academic careers (Finkelstein, 2006).

The first aspect posits that the prestige of the institution where the candidate obtained a terminal degree and the sponsor's (scholarship) reputation are key determinants to enter academic careers. Musselin (2013) described this notion using the term ‘labour division’ to mean the selection and promotion of academics based on institutional preference. The second aspect of the sociology of academics concerns an advanced discipline and recognition of the field (Finkelstein, 2006), giving rise to the rebirth of professionalisation (Enders, 2007). Whitchurch (2018) noted that the growth of professionalisation encourages individual endeavours to pursue excellence (Whitchurch, 2018). The final aspect of sociological theory emphasises the accumulative advantage of an academic career, such as professorial ranking and salary increment. Finkelstein (2006) noted that career promotion and salary increase are the two indicators of achievement and productivity. They are potential stimulants for academics to work beyond institutional boundaries.

Sociological theory can provide insights into the study of academic careers by examining the social and cultural factors that influence academic work. This theory help understand how
academics interact with their peers, students, and stakeholders and how they cope with the norms, expectations, and pressures of their work environment. Social theory can also explore the diversity and inequality of academic work and the implications of academic work for social and cultural change. More specifically, this theory can be used to investigate the identity, role, and status of academics and the power relations, politics, and ethics in academia (Baruch & Hall, 2004; Musselin, 2013).

However, applying the sociological perspective on academic careers is criticised as less ideal for promoting academic professions, as constitutional procedures tightly regulate it for a lengthy period. This issue causes dissatisfaction among academics to pursue career life. Therefore, psychological contract theory was developed for flexible management of academic careers (Baruch & Hall, 2004; Dowd & Kaplan, 2005).

3.1.3 Psychological (contract) theory

Psychological contract theory of academic careers was developed in the 1980s to create a more flexible academic career system, promote working conditions, ensure academic career progression, and accumulate advantages for faculty staff (Baruch & Hall, 2004). The psychological career model embraces a market-orientated system that applies open recruitment and performance-based pay as criteria to maintain academic identity, interest, and value (Finkelstein, 2006; Marini et al., 2019). The psychological model posits that academic staff are active agents who can contribute beyond institutional development (Henkel, 2000). Therefore, the psychological career model posits mutual obligations between employees and employers in a fair and transparent treatment in the workplace.

The psychological theory can provide insights into the research on academic careers by exploring the cognitive and affective processes that underpin academic work. This theoretical
perspective focuses on how academics think, learn, and create knowledge and how they experience and express emotions, motivation, and satisfaction in their work. The locus of the theory helps enhance the skills and competencies of academic work and the well-being and resilience of academics. For example, researcher can use this theory to assess the abilities, interests, and personalities of academics and the strategic interventions for better outcomes of academic work (Baruch & Hall, 2004).

The model of psychological careers ensures the effectiveness and efficiency of personnel management in response to financial cuts and deregulation of state agencies. The impetus of psychological career contracts brought along with performance-based management to transform government-affiliated institutions into entrepreneurial entities (Deem, 1998; Tight, 2015). From here, the management of academic careers is streamlined with human resource management, especially emerging in the United Kingdom, Norway, Finland and other European nations.

3.1.4 Management theory

Management theory is an emerging field for academic career research in higher education to prepare knowledge society (Teichler, 2021). The management theory was actually evolved from human resources management in business organisations to public management in the presence of New Public Management (NPM) during the 1980s and 1990s in order to improve effectiveness and efficiency of public higher education (Pausits et al., 2022). Some studies noted that human resource management theory, such as human capital, has been applied to educational management research since the 1980s (Bell, 2020; Gillies, 2015; Marginson, 2019; Quiggin, 1999). These scholars claimed that the human capital model had a critical lens to analyse the role of academic managers in selecting, developing, and motivating academic staff.
Behavioural management was another theory applied to the research on academic staff management, coexisting with Foucault's concept (Lakes & Carter, 2011). The implication of behavioural management in research is to improve the efficiency and accountability of academic governance (Rowlands, 2016). From here, the concept of 'managerialism' has emerged as an ideology for higher education management, especially in the case of the United Kingdom (Deem & Brehony, 2005). In the new management paradigm, the crucial role of the academic manager is necessary to ensure efficiency and accountability of academic governance and to enhance academic excellence (Smeenk et al., 2009). The managerial model also reduces state control and decision-making power in managing higher education human resources (Pausits et al., 2022). To enhance the effectiveness of human resource management in HEIs, some projects have been developed and implemented in Europe.

In Europe, the project entitled: ‘Modernisation of Higher Education Institutions through enhancement of Human Resources Management function (HRMinHEI)’ was developed and implemented based on ten management functions: (a) human resource strategy and planning; (b) job demands; (c) recruitment and selection; (d) performance evaluation; (e) training and development; (f) career progression, (g) pay and benefits; (h) HR analyses and reporting; and (i) information systems and personnel administration (see Pausits et al., 2022 for further details). Drawing the project framework, Sušanj et al. (2020) conducted a study investigating whether implementing human resource management impacted Croatian academics’ effectiveness and professional development compared with Austrian and Finnish higher

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12 The European Commission's Erasmus + programme funded the HRMinHEI project from 2016 to 2019. The project was led by the Agency for Science and Higher Education (ASHE) to enhance academic staff management in four European higher education institutions: Danube University Krems, Austria; University of Tampere, Finland; Faculty of Humanities and Social Sciences at the University of Rijeka and University College Algebra from Croatia (http://hrminhei.eu/project/).
education contexts. The study found variant effects of Europe’s HRMinHEI framework on academic staff management in the three countries—the reasons for the differences concerned institutional and national higher education systems and governance policy in each country.

Another model of human resource management was developed by Kekäle (2015) for academic personnel management at Finnish universities. This model is composed of six interrelated components: (a) personnel planning and recruitment, (b) agreement, (c) support, (d) monitoring, (e) rewarding and acknowledging, and (f) correction. Kekäle argued that the six components are intertwined to support academic staff management in higher education institutions (also see Kekäle, 2018). On a separate note, however, the Organisation of Economics Cooperation Development (OECD) implemented The Higher Education Resources Project. It provided a comprehensive report on how higher education institutions allocate financial and human resources (OECD, 2020). In the report, the OECD found different models for managing academic staff.

In general, the management theory provides critical lenses into investigating the organizational and strategic processes on academic work. The theory can help researchers understand how academics organize, plan, and manage their work and how they collaborate, communicate, and lead in their work. The management perspective also helps improve the governance and leadership of academic work and the innovative change of academic work. For example, researchers can apply the management theory to study the structure, culture, and performance of academic organizations and the policies, practices, and systems of academic work (Marini et al., 2019; Pausits et al., 2022; Teichler, 2021).

Pausits et al. (2022) argued that, although management theory is emerging for higher education research, the framework for research and practice remains problematic. Pausits et al. (2022) noted that research on academic career management using human resource
management theory focused on four functions: recruitment, professional development, performance evaluation and compensation. Other components may not fit due mainly to different higher education governance systems. (See further discussions on higher education governance in 3.2).

Summary

The above literature showed that the four theoretical perspectives have shaped the management of academic careers differently. The economics of academic careers focuses on functional and institutional career management, using norms and rules to incentivise academic staff in order that they can perform pastoral-custodial and pedagogical tasks. The sociology of academic careers argues that the cumulative advantage is the driver to enhance academic prestige, identity, and value. The sociological perspective promotes the sentiment of academic freedom in a collegial environment. The psychological theory emphasizes the transactional and rational relationship between academic staff and institutions to ensure mutual benefits. As rooted in the business organisation, the management theory give rise to a corporate culture in academic institutions in order to establish the shared values, beliefs, and behaviours that influence employee interactions and performance to handle educational provisions to achieve the institutional vision. The implication of management theory in higher education aims to reduce state bureaucratic administration on academic staff management in order to promote the management accountability and autonomy.

In brief, the literature review has presented three aspects of academic career management in Cambodian HEIs. First, the literature has informed the changing national policy on academic careers by reforming its from state control towards institutional autonomy. Second, the literature review has illuminated the tensions given rise between the emerging national policies and institutional practices. Third, the literature has highlighted the contextual changes
to implement the new policies on academic careers in different conditions, resources, and environments. Overall, the literature review informs the dynamic relationship between the academic governance and academic career management in higher education. Therefore, this study conceptualises the relationship between academic governance and academic career management as follows.

### 3.2 Higher education governance and academic careers

As presented in Figure 1, the management of academic careers is generally shaped by the ideal types of institutional governance (Altbach et al., 2009; Dobbins et al., 2011; Musselin, 2005; Finkelstein & Jones, 2019; Sporn, 2007; Teichler, 2021). Governance is generally defined as the structure of decision-making processes made at institutions of higher education (Sporn, 2007) to determine the value, mission, and goals (Marginson & Considine, 2000) that bring about coherent policy and plan given rise to strong integrity, effectiveness, and efficiency (Middlehurst, 2013). Sporn (2007) argued that the concept and practice governance vary, for instance, the shared governance places important on role and power negotiation among relevant stakeholders; the corporate governance embraces entrepreneurial concepts to give authority to academic leaders e.g., rectors, deans and department heads to decisions, while state is purely supervisory; the flexible governance is an adaptive process for change and market competition. In general, the ideal forms of higher education governance fall into three typologies: state, academia (professoriate) and market (B. Clark, 1983; Neave, 2003; Oslen, 2007; Sporn, 2007; Dobbins et al., 2011; van Vught & de Boer, 2015; Shin, 2018). These ideal types of academic governance grant different degree of autonomy to HEIs in recruitment, appointment, promotion, and termination of academic staff.
Figure 1 summarizes different characteristics of the ideal types of governance in relation to
the management of academic careers. The discussions of these differences are presented in the
following sections.
Figure 1 Ideal-type governance and academic career management (adapted from Dobbins et al., 2011)

State-centered model

Management of academic careers

Market-oriented model

Self-governance model

State and academia determine who are eligible and how to manage them through a certain level of autonomy.
3.2.1 State-centered model and academic careers

The state-centred model has its Napoleonic origin, primarily implemented in France, Spain, Portugal, the Soviet Union, and its colonial territories. B. Clark (1983) defines this type of institution governance as being controlled by a single public system within a single public sector. At the strategic level, the state regulates institutional vision, missions, program standards, graduation criteria, and staffing procedures (Neave, 2003). This constitutive governance enables higher education institutions to achieve a national development goal (Oslen, 2007). State agencies oversee resource allocations at the operational level using government legitimacy and regulation to determine employment conditions, appointments, and pay differentials (Dobbins et al., 2011). Significantly, the state-centred model embraces a strong political authority for recruiting, nominating, and rewarding academic staff, as an example in the Chinese higher education system (Shin, 2018) and other higher education systems in Southeast Asian nations (Jarvis & Mok, 2019).

Although the model of state control is regarded as an ideal type of governance for academic staff based on rational planning with limitless state capacities, it is criticised that the model is weak and highly centralised, giving little freedom to institutional leaders and the academic community in actual management practice. This gave way to higher education institutions adopting an academic self-governance approach to staff management (van Vught & de Boer, 2015).

3.2.2 Academic self-governance/Humboldtian model and academic careers

The model of academic self-governance developed in Europe is generally acknowledged as the European governance model. The academic self-governance was from the Humboldtian project to minimize state control and resolve a state expense cut on public educational organisations. The educational institution under self-regulated governance is a single public
system with multiple sectors under multilevel coordination, for example, state bodies, academic boards, and institution leaders (B. Clark, 1983; Dobbin et al., 2011; Rowlands, 2017). In this context, the model of self-rulled governance embraced a cybernetic perspective (van Vught & de Boer, 2015) to implement internal and external policies to manage academic personnel, especially in Germany, Austria, and other central European nations (Dobbins et al., 2011). The key feature of the self-governed model is to promote management autonomy through a decentralised approach to recruiting, nominating, and promoting academic employees. This model is also implemented in higher education of Asia Pacific region, for example, in Hong Kong, where HEIs are granted greater autonomy in financial and personnel management (Lo, 2018; Postiglione & Jung, 2017). The self-regulated system is also adapted by the Singaporean government to promote academic quality and management autonomy in the higher education system (Eng Thye Tan, 2018).

However, academic self-governance lacks a comprehensive framework for measuring academic performance outcomes and neglects competitive selection and merit-based pay (Oslen, 2007). Implementing this governance model also causes unequal power among stakeholders, especially when the academic board overrules the community of scholars (Rowlands, 2017). Therefore, the management of higher education institutions seeks to gain more significant participation from external stakeholders.

### 3.2.3 Market-oriented system/managerialism and academic careers

The market-oriented model is the Anglo-American ideal type of higher education governance to promote greater external involvement in the personnel management process. An institution that follows a market-oriented model can be classified under multiple public systems with multiple sectors with less state intervention (B. Clark, 1983). Sporn (2007) defined this type of institutional governance in concert with an entrepreneurial university that focuses on the
marketisation of its services and products (Rowlands, 2017) to attract students for financial resources (Dobbins et al., 2011). In addition, Oselen (2007) claims that the market-oriented model entails greater participation from external stakeholders through academic recruitment and performance appraisal to ensure merit-based promotion and reward (Dobbins et al., 2011; Whitchurch et al., 2019).

Implementing a market-oriented model gives academic managers greater authority to dismiss unproductive staff without state inference (Dobbins et al., 2011). Therefore, the market-oriented model entails managerial practices to promote efficiency and accountability of academic staff management in educational settings.

**Summary**

The above literature shows different academic governance models that have shaped the management of academic careers. In general, the state control model gives a dominant role to state agencies in recruiting, evaluating, and rewarding academic staff, especially in the case of civil servant status. The academic self-governed system empowers the community of scholars to be involved with staffing processes, including selection, evaluation, and promotion. This model gives the rectorate or academic board more power to allocate resources. The market-oriented system seeks greater stakeholder participation (e.g., funders) for rigorous recruitment and selection. The market-oriented approach posits performance-based remuneration. Therefore, the academic manager can dismiss academics if they are unproductive. The ideal type of higher education governance shapes the practice of academic career management. As can be understood through the literature, the management of academic professions under state control is bureaucratic and hierarchical in recruiting, compensating, and sanctioning the academic staff. The state-control governance of academic careers aligns with the Napoleonic model in France, Spain, Russia, and their colonial region. The academic self-governance or
the Humboldtian model is collegial, giving greater autonomy to the community of scholars (professoriate) in identifying and selecting academic staff. The market-oriented model defines the managerial role of academic managers with more significant participation of external stakeholders in the employment process. This model defines the management of academic staff in higher education as a business-like enterprise which needs bundle practices. Research on the relationship between business-like higher education governance and academic career management in Cambodia remains scarce. Therefore, this study is conducted to understand the relationship between the former and the latter foci. In what follows, the study reviews and discusses the concepts of academic career management.

3.3 Management of academic careers

Management is defined as goal-orientated activities through organizing tasks and systems (Kekäle, 2015; 2018). In higher education, Kekäle (2018) contended that the management of human resources, for example, are employee-related and organized functions to provide knowledge, tools, training, administrative services, coaching, and legal and management advice needed for successful operations. Therefore, Musselin (2013) described the ‘management of academic careers’ as activities related to job announcement, hiring and promotion procedures, performance appraisal and incentive policy. It can be noted from these studies that the composition of academic career management contains various functions and activities undertaken through recruitment, professional development, performance evaluation, promotion, retention, etc. The different functions and activities vary in national and institutional contexts.

As evident, a cross-national study by Bennion and Locke (2010) found different models of academic careers and employment conditions in 17 countries. The study showed that Finland, Norway, China, and Malaysia required people with at least master’s degrees to enter academic
professions. The United States and Canada set higher qualifications with at least PhD degrees to start a career in academia. Baruch and Hall (2004) compared academic career frameworks between the United Kingdom, Australia, and the United States. The study showed that the entry position in the UK universities began with a ‘lecturer A’; the Australian universities entitled a new entrant as an ‘assistant/associate lecturer’, while this position was called an ‘instructor’ at American higher education institutions. The next level of academic position was called ‘lecturer B’ in UK universities, which referred to a ‘senior lecturer’ in Australia or an ‘assistant professor’ in the United States. The top career position for academics in the respective countries was a (full) professor. These findings showed that the management of academic careers varies from country to country, depending on national laws and institutional governance systems.

In the Asian higher education context, the academic career management system differs from one nation to another. For example, Hong Kong has followed British-American system, dividing academic careers into (chair) professor, associate, and assistant professor (Lo (2018), while Japan has used four-level structure diving academic professions into professor, associate, assistant, and instructor (Arimoto et al., 2015; Huang, 2020). In contrast, Malaysia uses a six-level career structures, for instance, professor, associate professor, senior lecturer, lecturer, and tutor (Lee, 2018). In Cambodia, however, the management of academic careers remains vaguely defined due to historical turbulence and the current legal reform framework. In the 2013 Decree on Professorial Ranking, Cambodia classifies its academic careers into professor, associate, assistant professor, and teacher/lecturer (RGC, 2013).

However, Cambodia has implemented a unique system of academic career management. On the one hand, Cambodia tightly controls academic career management through recruitment, selection, performance evaluation and compensation. On the other hand, the government
encourages autonomy and accountability through an institutional self-regulated system. Such contesting space has caused tension and uncertainty in defining academic careers and undergoing recruitment, professional development, performance evaluation, and compensation practices in this country.

Therefore, the study discusses and confines the concepts of recruitment, professional development, performance evaluation, and compensation to develop the conceptual research framework.

3.3.1 Academic recruitment

Recruitment involves multiple stages and activities to identify and select the right people for the right jobs (Armstrong, 2014). In higher education, recruitment is a central approach to ensure a sufficient workforce through identifying the job need, calling for applications, assessing candidates' qualifications, and negotiating for agreement (Fumasoli & Kehm, 2017). However, the recruitment of academics is more than a complex process shaped by theoretical and institutional logic (Henningsson & Geschwind, 2022).

In a state model, academic recruitment followed norms and regulations under state legitimacy and agency. This type of recruitment model remains implemented by universities in France, Russia, and other socialist countries to select civil servants (Dobbins et al., 2011; Pietilä & Pinheiro, 2020). This type of recruitment generally lacks proactive features to attract and retain talented people in academia (Kekäle, 2015). The modern managerial theory, in contrast, decentralises authority to university and faculty leaders (literally called a community of scholars/professors) to conduct academic recruitment (Teichler, 2021). The market-orientated model encourages a competitive selection process and uses pay for performance as a trade-off (Pietilä & Pinheiro, 2020). This type of recruitment seeks an external stakeholder, such as
funders, to engage in the process to ensure transparency and accountability (Dobbins et al., 2011).

In sum, academic recruitment contains multiple stages and activities to screen, test, and negotiate candidates for contract (Dobbins et al., 2011; Musselin, 2005). The primary purpose of recruitment is to obtain an adequate academic workforce and optimise academic excellence at the tertiary level (Kekälä, 2015; Pausits et al., 2022).

However, it is noted that academic recruitment remains a contesting area not only in European higher education (Musselin, 2013; Teichler, 2017) but also in many Asian-Pacific universities (Shin, 2018) because of the impact of globalisation, massification, diversification and governance system (Altbach, 2000; Altbach et al., 2009). Hong Kong and Japan have used competitive recruitment and selection (Huang, 2020), while China remains using state policy to select the academic staff as civil servants (Wang & Jones, 2021). In the Southeast Asian nations like Singapore and Malaysia, the academic recruitment is made by the institutional and department leaders (Teichler et al., 2013). In this case, these two countries grant greater autonomy to HEIs in managing the academic staff.

In contrast, the recruitment of academic staff remains problematic in Cambodia due to a contest between state policies and institutional autonomy. In such contesting space, it is not clear how much the government agencies give autonomy to HEIs and how much HEIs are accountable for the recruitment practices. For this reason, recruitment of academics is one of the key areas to be investigated by this study.

3.3.2 Academic professional development

Professional development is vital to management practices to develop employee competencies for organisational effectiveness. Winterton (2007) noted that professional training and development helped individuals develop knowledge, skills, and attitudes to bolster
performance outcomes. In the education sector, professional development is a continuing process to develop individual knowledge, skills, and attitudes for accelerating academic performance (Kennedy, 2005; 2014). In the education context, professional development must cover (1) an institutional-wide system and (2) individual-focused intervention (Runhaar, 2017) to cover all key stakeholders’ needs (Allui & Sahni, 2016). In this case, different models have been developed for professional development.

According to Kennedy (2005), professional development can be categorised into transmission, transitional, and transformative models. The first category includes training, award-bearing, deficit, and cascade models. The second category covers standard-based coaching/mentoring and community of practice. The final category focuses on action research and transformative activities to enhance individual competencies. In general, the main goal of academic professional development is to scaffold academic competencies and maintain the workforce quality in higher education. However, Linguist (2019) noted that academic professional development is fragmented due to a lack of a specific framework.

However, the practices of academic professional development and promotion vary in East and Southeast Asian higher education. Hong Kong has provided a continuing support to upgrade the capacities of academia, while promotion is made based on research assessment and academic contribution to communities (Arimoto et al., 2015). In Cambodia, academic professional development remains controversial following resource dependency model. In the current situation, Cambodian HEIs rely on the government investment funds and financial supports from development partners to develop academic careers. Due to institutional negligence and tacit guidelines for professional development, the implementation of academic professional development has faced several challenges and misalignments due partly to a lack of strategic mechanism (Ros & Oleksiyenko, 2018) and an influence of the traditional
management approach (Sen, 2022). Therefore, academic professional development remains problematic to explore in this study.

3.3.3 Academic performance evaluation

Performance evaluation is a crucial component of management practices to motivate and retain employees in their careers (Armstrong, 2014). In the same vein, academic performance evaluation plays a vital role not only in measuring academic achievement (e.g., teaching and research) but also in developing academic professions and institutional effectiveness (Hamann & Beljean, 2017) through excelling an ultimate teaching and research performance (Kekäle, 2015). According to Gómez and Valdés (2019), the performance evaluation for higher education teachers can be classified into goal-oriented, decision-oriented, and naturalistic models.

The goal-oriented model evaluates academic performance based on pre-determined criteria and objectives (Gómez & Valdés, 2019). This evaluation form is aligned with a functionalist perspective on academic evaluation, quantifying academic outcomes against the goals set in the work agreement (Hamann & Beljean, 2017). In other words, goal-oriented evaluation focuses on overall goals rather than behavioural processes and outcomes (Kaplan & Maehr, 2007). A longitudinal study with 430 Australian teachers found that a goal-oriented approach effectively appraises teacher job performance, identifies their needs, and resolves emotional and psychological well-being (Parker et al., 2012).

A second model is a decision-oriented evaluation that embeds a continuous and systematic procedure to assess individual performance to inform critical decision-making bodies (Gómez & Valdés, 2019). This evaluation aims to bolster academic performativity within a given timeframe to develop academic staff's knowledge, skills, and attitude (Hamann & Beljean, 2017).
The final evaluation model is naturalistic, transactional, and phenomenal to promote comprehensive understanding between academic staff and evaluators (Gómez & Valdés, 2019). This evaluation may link with the social-constructivist perspective that focuses on stakeholder interactions in the evaluation process (Hamann & Beljean, 2017). The evaluation model combines formative and summative objectives to assess the process and output in a concrete and interactional way.

In Hong Kong, the University Grant Committee (UGC) set evaluation criteria which in general include research and publication outputs, project managements, and community engagements (Postiglione & Jung (2017). In promoting world-class academic professions and academic institutions, Hong Kong has introduced ‘publish’ or ‘perish’ culture as part of assessment system (Lo, 2018). In Cambodia's higher education context, academic performance evaluation remains at odds since it has mainly focused on teaching and curricula outcomes. This assessment has been driven by a state agenda to fulfil the quality assurance standards (Sok et al., 2019). This performance evaluation plays functional roles (Hamann & Beljean, 2017), failing to promote academic satisfaction and commitment throughout career life (Allui & Sahni, 2016). In addition, the performance evaluation of Cambodian academics also disconnects with career promotion and compensation practices (Ros et al., 2020) which is far distant from the managerial concepts of performance-pay system in order to motivate and promote academic staff based on performance indicators (OECD, 2020).

In brief, academic performance evaluation remains a key concern in Cambodian public higher education which needs to re-assess its procedures and tools. Therefore, it is a worthwhile area to examine by this study.
3.3.4 Academic compensation

The compensation system is a potential source of income to secure emotional, psychological, and financial well-being and encourage academics to strive for excellent performance (Altbach et al., 2012). In an edited book entitled *Paying the Professoriate: A Global Comparison of Compensation and Contracts*, Altbach et al. (2012) contended that compensation was only defined as salary but also financial and non-financial benefits, bonuses, and recognition. Another edited chapter by Altbach (2013) highlighted that generous compensation was powerful in attracting and retaining the best academia to pursue longer careers without financial concern and avoid moonlighting for additional income generation. Altbach et al. (2012) and Altbach (2013) concluded that the compensation systems for academics varied across global contexts due to national contexts and policy frameworks. The academic compensation policies in English-speaking countries such as the United States, Canada, and Australia tended to be more generous than those in other European nations (Altbach, 2013). In Europe, France and Portugal continued implementing a government pay grid.

By and large, Galaz-Fontes and Gil-Antón (2013) argued that the merit pay system positively impacted academic careers in Mexico. Likewise, the merit pay system positively enhances teacher motivation and retention in South Korea (Kim & Mikiewicz, 2021). In contrast, the Chinese universities provided rigid, and complex pay due to a centralisation of the iron-rice bowl policy (Xia et al., 2023). The Chinese compensation system, by far, differs from the payment system in Hong Kong, where academics are offered internationally competitive salary packages, about US$ 78,649, which was ranked the second among eight developed countries (Lo, 2018).
Another study revealed that performance-based pay was another instrumental system to incentivise academics in Finnish higher education (Pietilä, 2019). Performance-based pay focuses on result-based management using a tenure track system since it is adequate to change academic mindset to entrepreneurial thinking (Pietilä & Pinheira, 2020). The performance-based pay enables academics to bear accountability for individual performance and promotion (Pietilä, 2019).

However, Cambodia’s academic compensation system is underdeveloped, with limited resources. Although some studies argued that the government pay scale had been increased to promote incomes for academic civil servants, the salary packages were hardly enough to support academic life. This issue has negatively affected the identity and status of academics in Cambodia (Ros et al., 2020). Therefore, academic compensation remains a crucial concern that may cause a high rate of turnover in the context of higher education in Cambodia. It is a worthy area to investigate for improving academic career management in Cambodia.

**Summary**

The literature shows that the management practices in academic careers regarding recruitment, professional development, performance evaluation and compensation remain problematic due to the changing global, national, and institutional landscapes. At the global level, the management of academic careers has shifted over time and space, departed from economics to sociology, to psychology and managerial paradigm. The theoretical and conceptual phenomena of academic staff management have traversed around global spheres from the Anglophone to Anglo-American and European perspectives. The changing academic careers concerning national and institutional governance systems have also diversified.
In the case of Cambodia, where higher education management has been affected by social and political turbulence, it is now on the go for governance reform. Although some studies (Eam et al., 2020; Ros et al., 2020) have explored the issues of academic professions, these research implications were not strong enough to improve the management system of academic careers. In other words, these studies were conducted before implementing the Higher Education Improvement Project (HEIP), which aims to transform the higher education governance sector to be relative institutional autonomy. Thus, managing academic careers remains worthwhile researching to address the question: (RQ1) How do Cambodian public higher education institutions manage academic careers in the changing governance context?

Following this research question, the study examines the alignment practices of academic career structure, which are discussed in the following sections.

3.4 Alignment features of academic career management

The concept of ‘alignment’ is rooted in strategic human resource management to means a degree of ‘congruence’ (Delery & Doty, 1996), a degree of ‘fit’ (Wright & Snell, 1998), and a degree of ‘mutability’ (Boxall, 2012). In a systematic review of competency-based management, Audenaert et al. (2014) classified alignment into vertical/strategic alignment, horizontal/internal alignment, alignment of line managers and alignment of employees.

Vertical alignment refers to the congruence between organisational strategy and the execution of human resource management to achieve organisational goals (Delery & Doty, 1996; Wright & Snell, 1998). Internal alignment generally refers to consistent coordination of management functions to recruit, develop, and perform for ultimate results (Audenaert et al., 2014). The alignment of line managers is conceived as the value added to empower line managers to put into daily operational management. The alignment of employees refers to the actual impact of management practices on enhancing employee motivation and interest.
Internal alignment is defined as when the management practices are perceived as high in distinctiveness, consistency, and consensus (Bowen & Ostroff, 2004). The concepts of the alignment features are discussed below.

3.4.1 Distinctiveness

Distinctiveness refers to a degree to which management practices are visible, understandable, legitimate, and relevant to cross-level people, including senior managers, mid-level managers, and employees (Bowen & Ostroff, 2004). The visible and understandable management features are observed through the use of public job advertisements, the use of fair performance evaluations, and a transparent pay system. The two features are crucial to attracting talented people by signifying generous numeration and benefits. The legitimate and relevant management features are essential in shaping employee behaviour, enforcing sanctions and motivating them to achieve an ultimate goal. The two features also establish alignment of line managers and employees through building meaningful communication and sharing the goals and interests in job performance (Audenaert et al., 2014).

In education settings like the Netherlands, Runhaar (2016) argued that distinctive management features played an important role in teacher management since they presented clear information regarding recruitment, professional development, performance evaluation and pay system. In the United States, Heneman and Milanowski (2004; 2011) assessed the impact of human resource management alignment on teachers in district schools. They found that distinctive human resource management practices features could enhance teacher professions and improve teaching quality. In Finnish universities, Kekäle (2015) proposed a model for academic personnel management and argued that a transparent and fair management policy could foster commitment and motivation. Pausits et al. (2022) consistently argued that a straightforward personnel management system can enhance academic careers in higher education.
In Cambodia, however, the management system of academic careers in public HEIs has been underdeveloped. The government has recently introduced the *Manual for Human Resource Management* (MoEYS, 2021b) and *Manual for Human Resource Development* (MoEYS, 2021c) to public HEIs. However, the implementation of these manuals is at a trial stage lacking clarity on the ground. Therefore, the practices have not been clearly defined to promote academic professions. Therefore, this study examines this issue by investigating distinctive features of academic career management through pondering the perceptions of academic leaders and faculty members.

### 3.4.2 Consistency

Consistency refers to the coherent coordination of all management functions to an event that affects employee behaviours and performance to achieve the organisational goals (Bowen & Ostroff, 2004). The consistent feature of management practices is influential in developing employee competencies and motivation towards performing for an outcome.

In educational organisations, the consistency of academic staff management can reflect a strong interaction between staff planning and recruitment, performance evaluation, and compensation systems (Heneman & Milanowski, 2011). More importantly, in higher education institutions, Kekäle (2015; 2018), the management of academic staff needed to be well aligned to ensure that recruitment, agreement, monitoring, correction, and reward played an instrumental role in promoting academic careers and fostering academic excellence.

In Cambodia, the consistency of academic career management remains problematic due mainly to a lack of a clear management framework. Although the manuals for human resource management and development were formulated and introduced to HEIs, there may not have fully functioned yet. This study, therefore, aims to assess the consistent feature of the current
practice of academic career management in Cambodian public HEIs. The consistency is observed through the practices of recruitment, professional development, performance evaluation and compensation.

3.4.3 Consensus

Consensus refers to a degree of agreement among cross-level people to management practices and their procedural and interactional effect on employee performance (Bowen & Ostroff, 2004). The consensus feature of management practices can be observed in a fair performance evaluation practice and a transparent pay system. In higher education, Pausits et al. (2022) posited that the management system of academic professions should be operated fairly and transparently to bring justice to all academic staff so that they feel secure in their career life and financial well-being. In addition, the management practices must provide a holistic view and rule-based procedure to equally support academic staff in performing the tasks and to assist them in continuously developing professions (Kekäle, 2018).

In brief, the consensus feature of management practices shapes employee behaviour and response, similarly leading to achieving event-effect relationships in academic career management. However, the management of academic careers in Cambodian HEIs is affected by structural and institutional complexities which result in a lack of consensus feature. It means that the management of academic careers remains problematic due to a lack of fair and transparent practices such as in promotion and compensation. Therefore, consensus feature is conceptualised as the key parameter to assess the management system of academic careers in this study.
Summary

The process perspective on management practices provides analytical lenses for this study to examine the alignment features such distinctiveness, consistency, and consensus of academic career management in Cambodian public HEIs. As discussed in the literature, the distinctive feature can measure the degree of visibility and understandability of management practices. In this case, the study applies the concept of distinctiveness to investigate whether the management practices are clearly aligned for academic recruitment and professional development. The consistent feature can reflect the coherent practices of management functions in congruence with the institutional strategies. In this study, the concept of consistency is applied to observe the consistent and coherent practices of academic management to see the relationship between performance evaluation and compensation system. The consensus can indicate agreement and transparent management practices to promote employee motivation and commitment. This study uses the concept of consensus to examine the views of the participants on the degree of fairness and transparency of academic career management. Overall, the concepts of distinctiveness, consistency and consensus are used to assess the alignment of recruitment, performance evaluation and pay system in Cambodian HEIs. Assessing the alignment of academic career management helps this study to address research question (RQ2): To what extent are the management practices aligned to enhance academic careers in the selected higher education institutions?

3.5 Challenges to academic career management

The literature review (see them in chronological order e.g., Altbach, 2000; Welch, 2005; Kaplan, 2006; Kogan & Teichler, 2007; Musselin, 2007; Altbach et al., 2009; Dobbins et al., 2011; Fumasoli et al., 2015; Machado-Taylor et al., 2017; Finkelstein & Jones, 2019; Johnes & Weinrib, 2022; Çalıkkoğlu et al., 2023) have presented several challenges to the management of
academic careers. In general, the scholars found that impact of globalisation, the influence of national and institutional governance, and the contextual constraints potentially challenged the management of academic professions. These challenges are discussed in more detail in the following sections.

3.5.1 The influence of globalisation on academic careers

Phillip G. Altbach is probably one of the leading scholars who has discussed the impact of globalisation on academic careers (see Altbach, 2000; Altbach et al., 2009). In a book chapter entitled The Deterioration of the Academic Estate: International Patterns of Academic Work, Altbach (2000) deliberately portrayed the changing realities of academic careers given rise to internationalisation, massification and diversification of higher education. Altbach (2000) and Altbach et al. (2009) argued that globalisation caused the massification of higher education and restructured academic careers by shifting from the management practices state control model to managerialism. The new management of academic professions has changed how to appoint and compensate academics globally, especially in the United States and Europe (Musselin, 2013).

In addition, Welch (2005) noted that the rise of globalisation and massification of higher education shifted the management of academic careers from a lifetime appointment to a tenure track system to promote teaching and research excellence (also see Musselin 2005; 2007). In the changing context, Musselin (2007) emphasised that the globalisation of higher education has demanded both diversification and specialisation to respond to the rising student enrolment in the United States, the United Kingdom, and the Netherlands. The high demand for an academic workforce also has to meet the third mission of the higher education sector in order to develop a knowledge-based society.
Key challenges to academic career management and academic professional development have also been observed in the Asian contexts. Huang (2020) conducted a cross-national survey on challenges to academic careers in Cambodia, China, Indonesia, Japan, Malaysia, Singapore, Taiwan, and Vietnam. This study found various factors that shaped the management of academic professions. Some of the factors included geographic conditions, different working culture and conditions, and different governance and management in the participating countries.

In addition, the literature reveals that the increase of globalisation has transformed the management model of academic careers, shifting from centralised habitations to a managerial model, decentralising decision-making on recruitment and assessment to faculties and departments, for example, the case in Spain (Sanz-Menéndez & Cruz-Castro, 2019). In this case, other researchers (Kaplan, 2006; Dobbins et al., 2011; Marini et al., 2019) argued that rising globalisation had reshaped academic governance and influenced the system of academic career management.

3.5.2 The influence of institutional factors on academic careers

The changes in institutional governance have been attributed to academic career management in several ways. Two decades ago, Altbach (2000) traced the academic revolution and found that the changing globalised economy had restructured national and institutional frameworks to improve management efficiency and accountability of academic personnel management. The rising demand for efficiency and accountability of institutional management is considerably attributed to strategic changes to establish new norms and procedures to develop academic professions (Enders & Naidoo, 2019; 2022). Enders and Naidoo (2019) furthered that the new norms, rules, and resource dependencies became legitimacy and power to mobilise organisational resources, cope with environmental changes and reinforce intra-organisational control. The researchers explained:
In everyday practice, external coercive and normative pressure and changing resource dependencies provide rationales for new organisational responses. The new professionals derive their legitimacy and positional status partly from these external pressures that legitimise their work and provide an essential source of their empowerment. (Enders and Naidoo, 2019, p. 1294)

It can be learned from the above statement that legitimacy and power can legitimise the role and responsibilities of new academics to bear beyond teaching and research boundaries. The legitimacy and power can also empower academic leaders to exercise their expert judgement and expertise to achieve academic goals, values and norms through quality leadership and management.

Jones and Weinrib (2019), together with Welch (2005), also highlighted that the deregulation of state law and control to promote managerialism and neoliberalism have pressurized the institutional strategy and the cult of academic professions. Due to fast-paced policy reform in response to political agenda and market orientation, the swift legal framework and regulation change sometimes misaligned institutional missions, regulations, and resources to promote academic professions (Kogan & Teichler, 2007). Giving more examples, Jones and Weinrib (2019) confirmed that the changing institutional governance policies on higher education had vertical and horizontal effects on academic careers. The vertical effect could be driven by building a knowledge society through academic professions. In this case, the institutional mission tends to pay greater attention to social and economic progression than to faster academic professions, motivation, and career interest. Jones and Weinrib (2019) argued that the vertical effect could cause fragmentation of academic careers, provoking tensions and controversial conditions, dispersed salary scales and unequal career development opportunities. Such stratifications of academic careers have partly mediated by contextual factors related to
administrative practices, resource allocation and agency dependencies (Kehm & Teichler, 2013).

3.5.3 The influence of contextual factors on academic careers

The contextual factors have exerted numerous effects on academic careers. As discussed in the previous section, the contextual changes could create a new quality assurance system, staff development, curricula programme reform, career service efficiency and a new management approach to maintain excellent teaching and research activities (Enders & Naidoo, 2019). A shift in contextual features also established a new approach to resource allocation and created tension and contest among agencies to reinforce new norms and rules for enhancing efficiency and accountability. In such a context, Welch (2005) found that contextual factors could cause financial constraints, administrative resistance, and an unpleasant working environment in academic work. Consequently, the contextual challenges declined the motivation and interest of academics in teaching and research and shifted their careers into complex ventures.

In Europe, for example, Musselin (2005) noted that the changes in the working environment affected incentive systems and changed the mindset of academic leaders to be entrepreneurial thinkers. Such transformation enabled academic leaders and staff to self-regulate their tasks and goals (Musselin, 2013). Along the same line, Jones and Weinrib (2022) confirmed that the contextual changes reshaped the role of academic managers and realigned the management practices to set clear employment terms and conditions to ensure that academics could accomplish long-term goals. The contextual changes in academic careers also called for balancing academic governance systems to enhance accountability and autonomy (Dobbins et al., 2011).
Summary

The management of academic careers is facing structural challenges such as the impact of globalisation, the change in national policies and regulations and the transformation of academic institution to be business-like organisation or entrepreneurial body. The changing globalisation is the most potential challenge to academic careers since it has brought massive parameters on policy reform in higher education management and created tensions in academic labour. Globalisation has diversified and specialised academic workforce for multidisciplinary teaching and research programs and comparative advantages. In addition, the management of academic careers is generally regulated by national legitimacy and agentic power interplay in the management processes. State agentic powers can centralise the processes of academic recruitment, appointment, and promotion at institutional and departmental levels. In other words, strong state interference in institutional governance can impose new norms and rules on academic careers which sometimes cause uncertainty. In Cambodia, it is observed that the management of academic careers reaches tensions between state legitimacy and power and institutional governance reforms. Therefore, there is a need for realignment between state policy, institutional strategy, and contextual features to ensure management accountability and autonomy. Thriving for management autonomy, the Cambodian government has decentralised the management processes from national agencies to institutional and departmental levels. However, weak institutional capacities and resource constraints have conquered the reform processes to promote managerial practices in academic careers. Therefore, this study explores these rising challenges by addressing the question (RQ3): What are the rising challenges for academic career management under the studied institutions?

The following sections discuss the research gaps and frame the concepts to guide the research method, design, and procedure for data collection in Chapter 4.
3.6 Discussions on the research gaps

The literature review shows the dominance of theoretical and conceptual frameworks of academic careers and the management system which is evolving from the Global North. Therefore, the Western models have been considered the common approach applying for researching examine academic careers, globally, such as in the United States, the United Kingdom, and the European Union (see Baruch & Hall, 2004; Musselin, 2005; 2007; 2013; Whitchurch, 2018; Whitchurch et al., 2021; 2023). This indication suggests theoretical and conceptual gap between the Global North and the Global South in academic career research. Therefore, there is a need for defining a clear concept for the research area in the Global South, especially in the Southeast countries, where literature on the under-research topic shows no Asian-typed academic career system (Höhle & Teichler, 2011; Huang, 2020). In this case, research on the academic career management remains thin yet shaken by the parameters of global regional reform on academic governance and management systems. This points to the necessity of this study, especially in developing Cambodia, where policies on academic personnel management is being reformed from state centralisation to institutional autonomy.

The literature also reveals that most studies on academic careers were driven by sociological theory (e.g., Hermanowicz, 2012; Musselin, 2005, 2013) and psychological contract theory (e.g., Hall & Moss, 1998; Sewpersad et al., 2019). Management theory applied for academic staff management remains limited and lacks consistency (Pausits, 2022). Moreover, Boselie et al. (2021) systematically reviewed public management research. They found a scant literature on using management theory in educational management settings, including in the United States, Europe, and Asia-Pacific region. This highlights a scarce literature on applying management theory for academic career research in higher education across the globe. Therefore, there is vital to apply the management theory in this study to examine the
organisational process of academic career management in order to enhance academic professions in teaching and research in Cambodia.

The literature further indicates a methodological gap in academic career research since most studies were limited to qualitative or quantitative enquiries. For example, Rafiei and Davari (2015) conducted an experimental study to investigate the role of management practices in developing competencies among the Iranian faculties. The study found that the management of faculty staff plays an essential role in enhancing academic performance, enforcing new regulations and rules on shaping behaviour, enhancing teaching methods, and evaluating teaching and learning outcomes. However, this study is limited to a small sample of participating workshops during the experiment. This points to a need for applying mixed method research to capture a full picture of the practices and challenges of academic career management in the dynamic context in Cambodia.

The literature review also identifies a gap in research participants in which most studies focused on a single-level group, such as senior leaders or mid-level administrators. For example, Aboramadan et al. (2020) surveyed 237 administrative staff in Palestine's universities about the impact of management practices on academic commitment and whether their work engagement mediated the effect on management practices and faculty commitment. The study found that management practices impacted Palestinian academics. This research gap suggests future studies using multilevel participants and cross-institutional perspectives to get deeper insights into the management of academic careers and issues therein. Hence, this study uses participants from multilevel positions and background including senior leaders (vice rector), mid-level leaders (deans/vice deans/heads), and academic staff.

Considering all the research gaps, the management of academics remains a virgin territory to explore, especially in a developing country such as Cambodia, where existing studies have paid
little attention to the under-research area from multilevel and cross-institutional perspectives. Although the often-cited works (e.g., Ayres, 2000; Clayton, 2006; Sloper, 1999) highlighted the issues of academic careers in context, these studies focused on macro perspectives related to political complexities, foreign occupations, and international interventions that occurred decades ago before the government introduced policy reform on the improvement of higher education quality and governance sector. Therefore, this study must examine the management of academic careers from cross-level perspectives.

Another reason to conduct this study is to extend the methods and measures of academic career research in Cambodian higher education. Some contemporary studies giving a few references, Ahrens and McNamara (2014), Sam and Dahles (2015), Sen (2019) and McNamara and Hayden (2022) discussed Cambodia's higher management system and relatively highlighted the issues of quality assurance and personnel management practices. These studies, however, provided superficial evidence on the development of academic careers and underlying issues from qualitative perspectives. In other words, these studies did not examine specific practices and processes of academic career structures. This suggests further studies on academic career management in Cambodia, where the management of civil servant status has been transforming into a human resource management system, posing several challenges to educational institutions. This issue suggests a need to research the management of academic careers using cross-fertilized approaches such as sociology, psychology, and management to understand the research focus and inform the key stakeholders.

One more reason to research the management of academic careers in Cambodian higher education is to promote accountability and autonomy in higher education management. Although previous studies, for example, (Hum & Choi, 2020; Ros & Oleksiienko, 2018; Sok & Bunry, 2021) discussed higher education management with regard to policy reform, these
studies provided superficial evidence of why management accountability and autonomy remain a potential issue in teaching and research careers. For example, Hum and Choi (2020) pointed to the issues of power competition among actors, especially in designing language curriculums. Ros and Oleksivenko (2018) looked into policy misalignment as a constraint to promote academic performance. Further, Sok and Bunry (2021) highlighted issues underlying policy enactments and investment programs as barriers to promoting university performance. These studies, however, provided little indication of how academic careers are managed and the key challenges therein.

The final reason to conduct this study is to extend the literature on the research area. Although current studies by Eam et al. (2020) and Ros et al. (2020) examined Cambodian academics concerning accountability, identity, role, and status, these studies relied on qualitative data from interviews. The present study will use more sophisticated procedures and multiple tools to get the depth and breadth of understanding of the research problems. Using a meta-feature model helps magnify a clear picture of academic career management, alignment features and key challenges.

In sum, this study is conducted to assess the current situation of Cambodian policy reform to promote academic professions in teaching and research that contribute to social and economic development. This study specifically examines the management of academic careers, assess the alignment features of the management system, and explore key challenges in four public HEIs in Cambodia. To guide the methodological procedures, the study proposes the following conceptual framework.
3.7 Research conceptual framework

The research conceptual framework is proposed based on research questions and research gaps identified in the previous sections. As illustrated in Figure 2 below, the framework is framed around three components to display the interrelated research concepts for analysing the practices and challenges of academic career management in Cambodian public HEIs. The proposed framework is also to guide the methodological procedures for data collection and analyses in order to address the research questions:

1. How do Cambodian public higher education institutions manage academic careers in the changing governance context?

2. To what extent are the management practices aligned to enhance academic careers in the selected higher education institutions?

3. What are the challenges for academic career management under the studied institutions?

To address the above questions, the research framework operationalizes the concepts and variables to examine academic career management, investigate the alignment features, and explore key challenges.

Based on the figure below, first, the study posits that the development of academic careers depends on a strong relationship between ideal type of institutional governance and academic career management in Cambodian public HEIs. To address this proposition, the framework is conceptualised around the sociology theory that focuses on higher education governance and academic personnel management (see B. Clark, 1983; Dobbins et al., 2011; Musselin, 2013; Sporn, 2007; van Vught & de Boer, 2015).
Second, this study argues that the development of academic careers also depends on the alignment management of academic career system; otherwise, there are several challenges. To discuss this argument, the study utilizes the managerial theory to investigate the features of academic career management in terms of recruitment, professional development, performance evaluation, and compensation practices. This research component is framed around the managerial theory for higher education management (see Deem & Brehony, 2005; Kekäle, 2015; Pausits et al., 2022; Shepherd, 2018; Teichler, 2021) and the process approach to human resource management practices (Bowen & Ostroff, 2004). The investigation of alignment features emphasizes on three features: distinctiveness, consistency, and consensus of academic career management.

Third, this study explores key challenges for academic career management in Cambodian public HEIs. The concepts for this research component integrate the sociological and managerial theory to explore the national, institutional, and contextual factors. This research component is framed around the literature such as Enders and Naidoo (2019; 2022), Kehm and Teichler (2013), Musselin (2005), and Whitchurch et al. (2023). These scholars have argued that the national, institutional, and contextual factors have significant effect on the management and development of academic careers. The comprehensive discussions of the framework are presented in the following sections.

![Conceptual framework](Image)

Figure 2 Conceptual framework (synthesised from the literature e.g., Bowen and Ostroff, 2004; Dobbins et al, 2011; Musselin, 2013, Kekäle, 2015)
3.7.1 Relationship between institutional governance and academic career management

As discussed in the above section, this study applies sociology to analyse the relationship between institutional governance and the management of academic careers, while the managerial theory is framed to observe the alignment processes to enhance academic careers. This study posits that the ideal-type academic governance, namely, state-centred, self-regulated, and market-oriented models have strong influence on the management of academic career. Research scholars have argued that these governance models have different implications on academic career management (Dobbins et al, 2011; Sporn, 2007; Jones & Weinrib, 2019). Therefore, there is needs for further research attention to harness the governance processes on academic career management in the changing context (Whitchurch et al., 2023). In so doing, this study conceptualises the sociology theory, adapted from the literature (e.g., Dobbins et al., 2011; Hermanowicz, 2012; Musselin, 2013; Sporn, 2007; van Vught & de Boer, 2015) to examinate the relationship between governance model and academic career management in Cambodian HEIs which is under a reform process.

The operationalized concepts of the ideal-type governance and their implications on academic career management, expressing through academic recruitment, professional development, performance evaluation, and compensation systems are highlighted in Table 3, followed by detailed discussions in the following sections.
Table 3 Analytical concepts: institutional governance and academic career management

<table>
<thead>
<tr>
<th>Management of academic careers</th>
<th>Ideal-type institutional governance</th>
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<tbody>
<tr>
<td></td>
<td>State-centred</td>
</tr>
<tr>
<td>Recruitment</td>
<td>• The state determines employment conditions and selection procedures.</td>
</tr>
<tr>
<td></td>
<td>• The state decides who is qualified for academic positions.</td>
</tr>
<tr>
<td></td>
<td>• State agencies hire academics as civil servants.</td>
</tr>
<tr>
<td>Professional development</td>
<td>• The state sets career structures/pathways for professional development.</td>
</tr>
<tr>
<td></td>
<td>• The state sets uniform criteria for performance evaluation (e.g., national quality assurance standards)</td>
</tr>
<tr>
<td>Performance evaluation</td>
<td>• The state sets salary scales and reward systems</td>
</tr>
<tr>
<td>Compensation and rewards</td>
<td>• The institution determines salary scale and reward based on contract/agreement.</td>
</tr>
</tbody>
</table>

Sources: Author (synthesis of Dobbins et al., 2011; Musselin, 2013 and Teichler, 2021)
Based on the above table, this study argues that ideal types of academic governance: state-centered, self-regulated and market-oriented system determines the management practices of academic careers in different ways. For example, the state-centered model generally influences academic career management through the enforcement of state regulatory frameworks, procedures, agentic roles, and power interplay in the system. Therefore, HEI that applies this type of governance strictly regulates the recruitment processes, selection conditions of academic professions (Dobbins et al, 2011). In the state centric perspective, the state agencies have dominant power to decide who is eligible to be employed as academic civil servants. In contrast, the academic self-governed or collegial system empowers a community of scholars (e.g., rectors, deans, heads, professors) to decide on the employment conditions and selection procedures for elicit the suitable candidates for academic positions. This governance model gives a greater degree of institutional leeway to hire academic staff with little state intervention (Musselin, 2013). Unlike state and self-regulated governance, the market-oriented system follows the concept of ‘market commodities’—bidding for the most qualified candidates for the positions. This type of institution allows strong connection with external stakeholders to be involved with the procedures of academic staff management to ensure transparency and accountability (van Vught & de Boer, 2015).

Second, ideal types of academic governance can determine the approaches and resources to academic professional development. For example, the state-centered governance institution can allocate national resources for developing academic professions (Musselin, 2013). In this case, the state-governed institutions can have long-term resources, but with limited capacity to allocate them because they have to follow the procedures and regulations of the state. Therefore, the HEIs tends to have limited autonomy to development and promotion of
academic careers. In contrast, the HEIs that have applied the academic self-governance may have greater autonomy to diversify resources and establish career pathways for academic professional development. This academic governance model is tied well to the boundaryless career system to give autonomy to academics to pursue career passion and goal through continuous professional development and career mobility (Whitchurch et al., 2021). The market-oriented model is perceived as the modern academic career system that creates a boundaryless career structure for academics. This governance system encourages individuals to develop their careers based on their strengths, commitments, and interests (Hermanowicz, 2012).

Third, the academic governance can also determine academic performance evaluation and promotion system. For example, state-governed institutions evaluate academic performance based on uniform criteria and formalised standards predetermined by state agencies (e.g., the quality assurance unit). However, self-regulated institutions established internal procedures, rules, and standards for performance evaluations. This type of academic governance gives faculty deans and department heads authority to assess and determine the performance results. By and large, a market-oriented governance allows external agencies (e.g., funders, development partners) to be peer assessors. External agencies can continue or stop an employment contract if academic performance is below par (Dobbins et al., 2011).

Finally, this study argues that the ideal type of academic governance can also affect academic compensation and reward systems. For example, a state-funding institutions always provide fixed salaries and little incentives regulated by the government pay scales. Self-regulated institutions provide generous pay and rewards based on internal rules and regulations as agreed in a contract. The market-oriented model offers competitive salary packages and
rewards based on employment standards, job performance and outcomes (Altbach, 2012; Dobbins et al., 2011).

In sum, the proposed framework provides multidimensional concepts to analyse the relationship between ideal-type governance and academic career management in Cambodian HEIs, especially in the changing governance context. First, the framework allows this study to assess the current policy reform on academic governance and the development of academic career management system towards relative institutional autonomy, while there is a concern about transparency and accountability of academic recruitment, promotion, and compensation practices. The proposed framework also enhances the understanding of the management conditions of academic professions in Cambodian HEIs from cross-institutional perspectives in order to foster their teaching and research competencies desirable to social and economic growth in Cambodia. In brief, the conceptual framework allows this study to capture a comprehensive view of the academic careers management amidst of the policy reform on improving academic quality and management accountability in Cambodian HEIs.

3.7.2 Alignment of academic career management

The second component of the framework is conceptualised to investigate the microelements of academic career management in order to specifically assess the alignment features: distinctiveness, consistency, and consensus, which are built around the concepts of process approach to human resource management (Bowen & Ostroff, 2004). The process approach posits that strong management practices must present high degree of distinctiveness, consistency, and consensus through the implementations of recruitment, professional development, performance evaluation and payment. The implementations of these
management functions must be aligned with the organisation strategy and employee needs on
developing their capacities to work for achieving the organisation goals. Following process
approach perspective, this study argues that the effective management of academic careers
must embrace clarity, consistency and consensus features, being aligned with the institutional
strategy and academics’ needs to enhance their teaching and research competencies desired by
Cambodian HEIs. (See the summary of analytical concepts in Table 4 to illustrate the
alignment features of academic career management).

Table 4 Analytical concepts of alignment management features

<table>
<thead>
<tr>
<th>Features</th>
<th>Analytical concepts</th>
</tr>
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</table>
| Distinctiveness| • The management practices of academic careers (e.g., recruitment, professional development, and evaluation criteria) are visible and understandable to cross-level people.  
• Academic leaders (e.g., deans/heads) play key roles in recruitment, training, evaluation, and promotion.  
• The management practices of academic careers (e.g., recruitment, professional development, and evaluation criteria) are instruments and valid to achieve institutional and individual performance. |
| Consistency    | • The management practices are well aligned to motivate and retain academic interests and commitments.  
• The management practices of academic careers (e.g., recruitment, professional development, and evaluation criteria) communicate with institutional and individual goals.  
• The management practices are fair and transparent to cross-level people. |
| Consensus      |                                                                                      |

Sources: Author (Synthesis of Bowen & Ostroff, 2004)
First, as highlighted in the table below, this study argues that the development of academic careers in Cambodian HEIs relies on strong alignment features of the management system. According to Bowen and Ostroff (2004), the strong features of management practices that contain a high degree of clear content and understandable processes of, for instance, recruitment, professional development, and performance evaluation can attract and motivate competent employees to act in line with the organisational missions for competitive advantages. Likewise, the distinctive management system of academic careers that displays a strong link between employment conditions, performance indicators and benefits and rewards can foster academic motivation and commitment in Cambodian HEIs. In this case, the contents and processes of academic career management must be visible and understandable to cross-level employees to clearly signify relationship between performance criteria, performance outcomes and benefits. This argument is consistent to the report from OCED that comprehensive academic career system can attract, develop, motivate, and retain academic staff for long-term careers in universities (OCED, 2020). In addition, the distinctive management practices can maintain a healthy employment condition and teacher collaboration to minimize complexities (Runhaar, 2017). The clear management procedures also help establish strong central leadership to develop teacher professional development (Tang et al, 2023).

Therefore, this study adopts a concept of distinctive process to management practices to investigate whether Cambodian HEIs have laid out clear and understandable procedures for academic recruitment, selection, and promotion. This study argues that without distinctive
mechanism for academic career management, the participating HEIs cannot manage, develop, and motivate academic staff to excel teaching and research excellence in Cambodia.

Second, this study adapts the concept of consistent management process to investigate academic career management in Cambodian HEIs. Bowen and Ostroff (2004) posited that management consistency could establish long-term effects on employee performance. To have consistent practices, the management system must be stringent at the internal management functions and at the institutional strategic level to meet the needs of academic staff. In the same line of thinking, the management of academic careers shall be consistently formulated and implemented in line with institutional goals and individual needs (Kekäle, 2015). For example, the academic recruitment should be constitutive to elicit the most suitable candidates for the academic positions. In addition, the performance evaluation should also be evaluative to assess the strengths and weaknesses of the academic staff and provide constructive feedback to improve their improvement of performance (Kekäle, 2018). In this study, the concept of consistency is conceptualised to investigate the link between the practices of academic career management and the institutional strategy and individual needs. Applying the concept of consistency helps this study to understand whether the management practices are instrumental and procedural to manage, develop, and motivate academic staff cutting across faculties and institutions. The implication of consistent management practices also illuminates the internal fit of management functions such as the connection between performance evaluation and payment and rewards in Cambodian public HEIs.

Finally, this study applies the concept of consensus process to examine the interaction and communication channel among academic leaders and employees regarding the academic career management in Cambodian HEIs. Bowen and Ostroff (2004) argued that the consensus
feature of management practices presents a high degree of agreement, fairness, and transparency among actors (Bowen & Ostroff, 2004). Without consensus feature, the employees may lose their motivation and commitment to pursue their careers with the organisations. In this study, the concept of consensus features is proposed to examine whether the practices of academic career management, for example, the selection of academic staff and the opportunity for professional development are fair and transparent to academic staff. The concept of consensus feature is also applied to observe transparent process in performance evaluation and compensation practice in the participating institutions in Cambodia.

In brief, the second component of the research framework helps this study to analyze microelements of academic career management in order to examine whether or not the practices are clear, consistent and census, strongly aligned with the institutional strategy and individual needs for the development of academic professions in teaching and research that contribute to social and economic development in Cambodia.

### 3.7.3 Key challenges for academic career management

The research framework also includes concepts to explore key challenges for academic career management in Cambodian HEIs (see a summary in Table 5). The conceptualisation of this research component aims to examine the underlying issues related to national, institutional, and contextual factors that influence the management and development of Cambodian academics in public HEIs. The development of research component has consulted with the literature, for example, Kogan and Teichler (2007), Welch (2005), Finkelstein and Jones, 2019, and Whitchurch et al. (2023).
### Table 5 Analytical concepts of key challenges for academic career management

<table>
<thead>
<tr>
<th>Level of challenges</th>
<th>Analytical concepts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>State legitimacy and power</strong></td>
<td>• The state sets laws and regulations for lifetime employment.</td>
</tr>
<tr>
<td></td>
<td>• Bureaucratic/traditional administration limits institutional leeway in the management of academics.</td>
</tr>
<tr>
<td></td>
<td>• Path dependency/ institutional inertia pressures the management of academic careers.</td>
</tr>
<tr>
<td><strong>Institutional leadership and structure</strong></td>
<td>• Weak leadership leads to institutional negligence in promoting academic professions.</td>
</tr>
<tr>
<td></td>
<td>• Complex institutional structure and tacit framework for academic career management causes conflicts.</td>
</tr>
<tr>
<td><strong>Contextual constraints and resource shortage</strong></td>
<td>• Lacking human and financial resources to support the management of academic careers.</td>
</tr>
<tr>
<td></td>
<td>• Lacking collaborative/conducive working environment to motivate and retain competent academics.</td>
</tr>
</tbody>
</table>

*Sources: Author (synthesis of Kogan and Teichler, 2007; Whitchurch, 2023)*

First, this study posits that state legitimacy and power interplay are the potential challenge for managing academic careers in Cambodian HEIs. Although the government has introduced reform initiatives to promote autonomy, the enforcement of national laws and regulations remains strong on the management of academic careers in Cambodian public HEIs. In this case, for example, the management of academic staff who are civil servants remains following a lifetime employment conditions, and thus they may not be productive to perform for achieving teaching and research excellence. As previous study argued, the bureaucratic and traditional administrative system may be another constraint to promoting the autonomy of academic career management (Kogan & Teichler, 2007). In addition, the influence of state
agencies may also give rise to tensions and controversies and pose more complexities to benchmark the academic career system in Cambodian HEIs. In this case, the influence of agentic role and power can limit the boundaries of academic professions (Whitchurch et al., 2023). Therefore, this study thus argues that state legitimacy and agentic roles and powers strongly affect the management of academic careers through recruitment, training and development, promotion, and compensation processes in Cambodian public HEIs.

As seen from the above Table, this study argues that institutional leadership and departmental management structure may be another key challenge for the management of academic careers in Cambodian public HEIs. Previous studies (e.g., Welch, 2005) found that institutional leadership style and internal management structures can cause uncertainty to the management of academic careers and provoke tensions and controversies at the institutional level. In addition, the negligence of the institutional leaders to establish comprehensive management system also affect the management accountability and fail to establish a transparent system for academic motivation and rewards (Finkelstein & Jones, 2019). In this case, this study argues that the institutional factors, including leadership style and internal management structure, directly influence the management of academic careers. Otherwise, the institutional factors are integral to negotiating state agencies for better management practice of academic careers.

Finally, this study posits that the contextual factors that include local resources and working conditions are also affecting the management of academic careers in Cambodian HEIs. It has been generally noted that insufficient local resources in terms of human and finance are the most intrusive factor to deteriorate academic professions across the globe (Altbach, 2000). The issue of human and financial deficiency may also be key constraint to academic career
development in Cambodia HEIs since these issues have tremendous effect on academic motivation and commitment. A complex working environment and a lack of collaborative culture can also drive away academic commitment and interest from pursuing their careers with academic institutions. In addition, resource deficiencies have native impact on the performance of academic professions and their intention to stay long in academia. The resource shortage has also caused high turnover rate among young and talented academic employees (Whitchurch et al., 2023). This study posits that the contextual factors such as a resource shortages and a lack of conducive working environment are the key challenges for academic career management and career development in Cambodian public HEIs.

**Summary**

The proposed research framework comprises cross-pollinated concepts to examine the practices and challenges for academic career management in Cambodian public HEIs. The research framework has synthesized sociological and managerial theories to create analytical metrics to examine the macro-level relationship between the management of academic careers and the institutional governance policies, strategies, and structures in the changing governance context in Cambodian HE. The application of sociological theory helps trace the movement of the academic governance reforms and the development of academic career system in the Cambodian HE. The application of managerial theory through a process approach allows this study to diagnose the microelements of academic career management system whether it has been implemented in distinctive, consistent, and consensus way to recruit, develop and motivate Cambodian academics that they can perform to achieve teaching and research excellence. The final component of the framework allows this study to assess the contextual factors such as local resources and surrounding environment that shape the internal
management of academic careers. In sum, the proposed research framework provides a complete typology to this study to analyse the practices and challenges for academic career management and academic career development in a dynamic space of Cambodian public higher education.

The research framework also maps the research concepts and methodological procedures for data collection and analyses which are discussed in Chapter 4.
CHAPTER 4: RESEARCH METHODOLOGY

This chapter discusses the research method, design, and research institutions. The chapter also describes the details of interview protocols and procedures and the administration of survey questionnaires. The final part of the chapter discusses the procedures and tools for data analyses and thesis report writing.

4.1 Research method

This study adopts mixed-methods research (MMR) since it has been considered a pragmatic approach to seeking solutions for a dynamic phenomenon (see Creswell, 2014; Creswell & Plano Clark, 2018; Johnson & Onwuegbuzie, 2004; Tashakkori & Creswell, 2007; Teddlie & Tashakkori, 2015; Teddlie & Yu, 2007). Gorard and Taylor (2004) argued that MMR provides a fuller picture of the phenomena through data justifications beyond the triangulation standpoint to enhance reliability and validity of multiple data sources. Given the pragmatic nature, Creswell and Plano Clark (2018) defined MMR as a pluralistic and oriented method toward ‘what works’ in real-world practices. In this case, Creswell (2014) emphasised:

MMR is a multiple-method approach to collect and analyse qualitative and quantitative data to address research questions and to test hypotheses. MMR combines different methodological strands to strengthen the designs and procedures that provide the logic for conducting the study framed around a specific theory and philosophy.

Consistently, Johnson and Onwuegbuzie (2004) contended that:

MMR is a class of research methods where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts, or language into a single study.
Being a pragmatism, MMR has become a middle ground to seeking a workable solution for an issue in question (Johnson & Onwuegbuzie, 2004) by using eclecticism, pluralism, iterative, and cyclical paradigms (Teddlie & Tashakkori, 2015) that has been used to multiple issues relevant to social phenomena, health systems, and educational management (Creswell, 2014). Considering such essence, MMR was adapted for this study.

First, MMR is an eclectic method that allows the researcher to combine qualitative and quantitative data (Teddlie & Tashakkori, 2015). Merging two data strands enables the researcher to build rigour to thresh out factual issues of a complex condition (Johnson & Onwuegbuzie, 2007). This characteristic is considered powerful in research management practices, especially in the evolving landscape of evaluating hypotheses in a theory-driven study (Bainbridge & Lee, 2014). Thus, MMR is the most suitable method for researching the management of academic careers in Cambodian public higher education institutions, where personnel management policy is on the go for improvement of accountability and autonomy.

Second, MMR is regarded as a “paradigm pluralism or a big tent” approach (Teddlie & Tashakkori, 2015), used to investigate underlying issues from various philosophical stances and theoretical assumptions (Johnson & Onwuegbuzie, 2004; Schoonenboom & Johnson, 2017). This feature is powerful to mime data from open-ended responses and closed-ended constructs, enabling the researcher to interpret data patterns for critical discussions (Creswell, 2014). This potential feature fits the present study since it has been designed to collect and analyse data from multiple sources, such as interviews, focus-group discussions, and online surveys.
Third, MMR is an iterative and cyclical process that allows researchers to re-investigate a dynamic phenomenon (Teddlie & Tashakkori, 2015) through a concurrent or a sequential design (Creswell, 2014; Johnson & Onwuegbuzie, 2004). This research technique is also crucial to developing contextual understanding in the study from an initial stage and validating tools for statistical measures in the latter stage (Teddlie & Yu, 2007). This approach is appropriate to this study since it examines academic career management, the alignment features, and the challenges through two-phase processes.

The final feature of MMR considered suitable for the present study is its procedure for data collection and analytical tools for data analysis. Clark and Badiee (2015) suggest that the application of MMR allows the researcher to explore, explain, compare, and synthesise data from different sources. This analytical procedure strengthened data interpretations and discussions to achieve research questions (Creswell, 2014). Bearing this essence, the present study utilises MMR to collect and analyse data from different resources to address research questions regarding the issue of academic career management in Cambodian public higher education institutions.

Although MMR has been potentially regarded as a ‘pluralism or big tenet’ approach, Teddlie and Tashakkori (2015) contended that researchers who apply MMR must pay cautious attention to specific issues. First, MMR remains an evolving method lacking an agreement on language, pedagogy, and philosophy. Thus, it is challenging for a novice researcher to select an appropriate design to address research questions. In dealing with such methodological shortcomings, the researcher has engaged with on and off university research programmes and communities, for example, attending several online learning modules and physically participating in workshops and seminars on MMR. Meanwhile, consultative meetings with
thesis supervisory teams have been regularly scheduled to have their guidance on conducting MMR. Another issue of MMR may concern conflicting analyses and interpretations of qualitative and quantitative strands. As Johnson and Onwuegbuzie (2004) argued, “It is unclear how researchers handle different theoretical foundations for interpreting multiple meanings of data beyond the already-existing knowledge. In managing such a challenge, the researcher has reviewed and classified different theoretical stands related to the research area to elicit the most updated knowledge and establish analytical metrics. To build consistent interpretations and discussions on the research findings, the researcher has shared preliminary research findings with local and international experts through conference talks, such as at the 3rd National Research Forum in Cambodia and the 9th Higher Education Research Association (HERA) Conference in Japan. Additionally, the researcher has incorporated considerable comments and suggestions from journal reviewers to improve the interpretation and discussions of the study findings.

The above-discussed techniques help the researcher address this study's methodological issues.

4.2 Research design

The mixed-method research (MMR) has six major designs: the convergent parallel, explanatory sequential, exploratory sequential, embedded, transformative, and multiple-phase types (Creswell & Clark, 2018; Schoonenboom & Johnson, 2017). The different designs are driven by research foci and theoretical frameworks (Johnson & Onwuegbuzie, 2007). The convergent parallel occurs when quantitative and qualitative methods are used concurrently to understand a complete phenomenon; the explanatory sequential design is applied when
quantitative data is prioritised to explain the relationship among variables, followed by the second phase of the qualitative study. In contrast, the exploratory sequential design is used when the measures or instruments are unavailable, the variables are unknown, or the guiding theoretical framework does not exist (Creswell & Clark, 2018, p. 86). The embedded design occurs when the qualitative data is added to quantitative data vis-à-vis while conducting an experiment and case research study; the transformative design is utilised for testing a theoretical framework in a dynamic context, for example, focusing on feminism or cultural ethnography. The multiphase design combines sequential and concurrent strands when the study focuses on developing and evaluating the program (see Creswell, 2014; Schoonenboom & Johnson, 2017; Teddlie & Tashakkori, 2015).

Based on the above descriptions, the exploratory sequential design is the most suitable model for this study. This design allows this study to examine the underlying issues of academic career management, alignment features and challenges in the context where the measures, the variables, or the theoretical frameworks are yet to be well established in Cambodian public higher education institutions. The exploratory sequential design also helps this study to investigate the depth and breadth of academic career management beyond statistical inference, especially to understand the management practices and processes in public institutions under complex national policies and regulations (Bainbridge & Lee, 2014; Sanders et al., 2017). The sequential design fits this study since its primary objective is to understand a complete picture of academic career management in public learning institutions under state legitimacy and power in Cambodia. Following the exploratory sequential design, this study is conducted in two phases (see Figure 3).
Phase 1: Qualitative study

The qualitative research phase aims to understand the real worldview from a constructivist principle. Tashakkori and Creswell (2007) explained that the constructivist principle works to build realities from multiple data sources. Following this principle, the researcher reviewed and compared the research ontologies by secondary data sources to dissect different theoretical and conceptual underpinnings (e.g., sociology, psychology, and managerialism). The research realities were compared cross-national to identify the under-research area's nature and gap. Also, the researchers physically visited the research sites to build closeness and nurture positive relationships with the participants before undergoing data collection. The constructivist principle also permits the researcher to understand the realities and patterns of the problem from multiple participant perspectives (Creswell & Clark, 2018). The researcher invited 46 participants with multilevel backgrounds, such as senior leaders, mid-level leaders and academic staff. The twenty senior and mid-level leaders, including vice-rectors, faculty deans/and vice-deans, and departmental heads, were invited to share their views on the strategic aspects and the practices of academic career management. The FGDs were undergone with twenty-six academic staff (e.g., academic civil servants and contracted...
employees) to examine the realities of academic career management, alignment features, and challenges in the studied institutions.

In sum, the qualitative research phase helps the researcher construct realities of the research foci and build on the procedures and the measures for quantitative study in the second phase, generally referred to as the postpositivist stage (Creswell, 2014; Creswell & Clark (2018).

**Phase 2: Quantitative study**

The quantitative study embraces the postpositivist principle since it aims to examine the research problem and confirm the findings based on statistical tests (Creswell, 2014) to measure the relationship among the variables (Creswell & Clark, 2018).

In this phase, the researcher applied an online survey to collect data from 200 academic staff, including 100 academic civil servants and 100 contracted employees. The quantitative data were analysed to verify the qualitative findings by comparing the statistical differences in the practices, alignment features, and key challenges for academic career management. The statistical comparisons were made concerning gender, career type, and institutional characteristics. The data derived from this study is generable to address research questions and verify the assumptions of academic career management in Cambodia's four higher education institutions.

**4.3 The research sites**

This section describes the research contexts, including the locations and institutions. The descriptions also highlight the rationale for studying academic career management in Cambodia, specifically focusing on institutions located in different geographical conditions.
4.3.1 The locations

Cambodia is a potential case for studying the practices and challenges for academic career management in higher education institutions (HEIs) for a few reasons. First, Cambodia has a complex educational policies and systems influenced by social and political turbulences over the past decades. For example, Cambodian education system was developed from traditional and bureaucratic to the French-based model, and it was destructed by wars, political conflicts, and resource shortages especially from the 1960s to 1970s. Unfortunately, all education levels were destroyed by the brutal Khmer Rouge in the mid-1970s, and over 70% of educators, including professors and teachers, were killed during that regime. Following the destruction, the socialist Soviet Union and communist Vietnam controlled Cambodia and steered its education systems. They introduced a socialist education model to Cambodian curricula to deliver teaching and learning activities per the political agenda. This historical and political backdrop has made academic career management problematic in Cambodian higher education. Hence, there is a need for more research for improvement.

Another potential reason to examine the under-researched topic in Cambodian public HE is to analyse the government policy reform on promoting higher education quality and strengthening the accountability and transparency of the governance sector in order to transform the academic governance from state centralisation into public autonomy. Indeed, the transformation initiatives began in the 1990s and continued through the 2000s, receiving myriad assistance from foreign development agencies. However, a lack of research-based policy has restrained the engagement from all parties to implement these initiatives (Mak et al., 2019) to promote efficiency and accountability of higher education management (Un &
Sok, 2018). This issue suggests further research-informed policies to improve efficiency and accountability in academic personnel management in Cambodia.

The final reason for conducting this study on the academic career management in Cambodian public HEIs is to support the government agencies and higher education institutions (HEIs) in promoting academic professions in teaching and research and developing their career pathways. In 2018, the government endorsed a 90-million USD project to improve teaching and research quality and enhance academic careers by strengthening the accountability and autonomy of human and financial resource management (Un & Sok, 2022). The Higher Education Improvement Project (HEIP) has been implemented in five leading public higher education institutions and will likely be extended to private learning institutions. The goals of HEIP are to enhance teaching and research in STEM and Agriculture and to link HEIs with industries to accelerate economic and social progress toward a middle-income country by 2030 and an upper-income country by 2050 (see the National Strategic Plan, RGC, 2019). To achieve this goal, the Cambodian government, through key agencies, has introduced manuals for human resource management (HRM) and development in the higher education sector. However, it is noted that the implementation of HEIP is less systematic, and institutional leaders neglect using a human resource management manual for academic career management. For this reason, this study contributes to improving the implementation of HEIP and informing the academic representatives of the importance of academic career management to achieve government policies on promoting teaching and research excellence in Cambodian higher education.
4.3.2 The institutions

The participating higher education institutions (HEIs) (coded A, B, C, and D) were selected based on key criteria such as historical background, geographic diversities, and academic management structures. The inclusion of these criteria was expected to obtain a comprehensive understanding of the practices and challenges for academic career management and the underlying issues therein in Cambodian public HEIs.

First, the historical background of the participating HEIs allows this study to understand the social and historical processes shaping the practices of academic career management among the participating HEIs. In this case, the study selected two young institutions A and B, which were established in 2006 and 2007. Other institutions, C and D, were well-established since the 1960s to provide comprehensive education in science, technology, and agriculture to students in Phnom Penh. Both well-established institutions have undergone different milestones, such as the French protectorate, King Norodom Sihanouk regime (the 1960s-1970s), the socialist Soviet Union, and communist Vietnam (1970s-1980s). Therefore, the findings from these different HEIs provide insightful story that represents the academic governance and academic career management system in Cambodia.

The reasons to include the participating HEIs with different geographic conditions was to compare the different practices of academic career management. The comparison provides deeper insights into academic career management on cross-institutional perspectives, for example, through comparison between the new HEIs and the old HEIs, and between the provincial HEIs and the capital HEIs. In this case, the study selected Institution A which was based in the northwest provincial Cambodia, on the border with Thailand. This potential province is compacted by development, commercial, and tourist activities. The study also
included Institution B, located in the southeast part of Cambodia, close to the international border with Vietnam. This province is highly concentrated on economic and industrial activities. Finally, Institutions C and D which are based in Phnom Penh, the hub for economic, commercial, and educational activities were identified and included in the study. Therefore, research findings from the four institutions will portray a complete picture of academic career management from different geographic conditions in Cambodia.

The inclusion of HEIs with difference in sizes and resources was to understand the characteristics of academic career management based on different contextual factors. The selection of young, small, and under-resourced HEIs was expected to understand how academic careers were managed and developed in line with the national and international policy reform shifts. In this study, the young and small HEIs have five faculties and other supporting offices. They have less than 200 academic staff, including teaching and administrative personnel. Other participating HEIs, institutions C and D have larger sizes and richer resources. They have over 300 personnel and over five faculties. Findings from HEIs with different characteristics provide a deeper understanding of the management system of academic careers and compare the different practices within and between studied institutions.

Finally, the four participating HEIs were selected among key implementers of the government project, entitled the “Higher Education Improvement Project (HEIP)” that aims at improving education quality and research productivity to develop the economy and society in Cambodia. Especially, the four participating HEIs are under the direct supervision of the Ministry of Education, Youth and Sport (MoEYS) and other governance agencies. Two of them were providing multidisciplinary programs ranging from language education, business management, agriculture, technology and science, sociology, and education. Other two were
comprehensive science, technology, and agriculture curriculum. Findings from HEIs with under the project intervention to improve academic quality and governance system can provide nation-wide aspect of academic career management in the dynamic space. In addition, findings from HEIs different educational programs can provide good understanding of the academic workforce diversification, specialisation, and innovation of management approaches in Cambodia.

Overall, the findings gained from the participating HEIs with different historical backgrounds, institutional characteristics, and geographic conditions provide insightful story of the practices and challenges for academic career management and the underlying issue on cross-institutional perspectives in Cambodia. Especially, the findings can inform all key stakeholders to resolve the immediate issues and improve policy reform on improving educational quality and academic career management system in Cambodian public HE.

4.4 Sample and sampling methods
Teddle and Yu (2007) suggested that MMR extracted data from multiple sources using different techniques to enrich the depth and breadth of the findings. Considering this suggestion, the researcher selected 246 participants from three groups: 4 senior leaders, 16 mid-level leaders, and 226 academic staff. In the qualitative study phase, forty-six participants were purposively selected for interviews and group discussions. The quantitative study used cluster sampling to select 200 participants from two subgroups: civil servants and contracted employees. (See a summary of sample size and sampling methods in Table 6).
Table 6 Sample sizes and sampling methods

<table>
<thead>
<tr>
<th>Sample</th>
<th>Number</th>
<th>Sampling methods</th>
<th>Data collection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vice-rectors in charge of personnel</td>
<td>4</td>
<td>Purposive sampling</td>
<td>Semi-structured interviews (face-to-face &amp; online)</td>
</tr>
<tr>
<td>Deans/vice-deans in charge of personnel</td>
<td>12</td>
<td>Purposive sampling</td>
<td>Focus-group discussion (face-to-face &amp; online)</td>
</tr>
<tr>
<td>Heads/officers in personnel offices</td>
<td>4</td>
<td></td>
<td>Online survey due to Covid-19</td>
</tr>
<tr>
<td>Academic staff (civil servants/contracted positions)</td>
<td>26</td>
<td>Purposive sampling</td>
<td></td>
</tr>
<tr>
<td></td>
<td>200</td>
<td>Cluster sampling</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>246</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.4.1 Purposive sampling

The purposive sampling method selects participants with pre-determined criteria such as expertise, experience, and positions to enhance research reliability and validity (Onwuebue & Collins, 2007). Following this suggestion, the researcher selected forty-six participants from different backgrounds. Four senior leaders (e.g., vice-rectors) were in charge of formulating policies on human resources, finance, and quality assurance; the sixteen mid-level leaders (deans/vice-deans/heads) were responsible for the daily management of academic staff, and the twenty-six academics including lecturers, lecturer-administers, lecturer-researchers, experienced in recruitment, training, performance valuation and compensation practices. In other words, the senior and mid-level leaders are invited to share their views on the management policies, the alignment features, and the challenges for academic career management in the studied institutions. The mid-level leaders, e.g., deans/vice-deans/heads,
were also invited to share their hands-on experience in management practices, specifically focusing on alignment practices and challenges for recruitment, training and development, performance management, and compensation. The academic staff were invited to join focus-group discussions (FGDs) to share their perceived experiences regarding the under-researched topic. Obtaining data from diverse backgrounds participants enhances a deeper understanding of the research foci.

4.4.2 Cluster sampling

The cluster sampling technique is utilised to select academic staff to respond to the online survey questionnaire. Cohen et al. (2018) argued that cluster sampling was powerful enough to determine the samples from subgroups when the population was too widely dispersed and difficult to access through simple random sampling. This study uses cluster sampling to stratify 50 academic staff from each higher education institution. That means the total number of academic staff obtained through cluster sampling was 200, divided into 100 civil servants and 100 contract positions. Including civil servants and contract positions in the study helps capture reliable and valid data regarding the management systems of academic careers in Cambodian public higher education.

In brief, the composition of research participants was 246: 46 were selected from purposive sampling to join semi-structured interviews and group discussions in the qualitative study, and 200 others were selected by cluster sampling to share their responses to the online surveys at the quantitative study.
4.5 Data collection procedures and instruments

The procedures for data collection consist of two main phases. In the first phase, qualitative data were collected through semi-structured interviews and focus-group discussions. In the second phase, quantitative data were extracted from online surveys.

4.5.1 Interviews

Kvale (1996; 2007) and Brinkmann and Kvale (2018) defined “an interview as an *inter-view*, an interchange of views between two persons conversing about a theme of common interest”. To conduct quality interviews, Kvale (2007) suggested seven planning stages: thematising, designing, interviewing, transcribing, analysing, verifying, and reporting (also see Brinkmann & Kvale, 2018).

*Thematising an interview*: Brinkmann and Kvale (2018) contended that the thematising stage mapped vital concepts and questions for research interviews. This stage also refines a clear purpose, constructs basic knowledge of the subject matter, and justifies the data collection and analysis procedures. Thus, the researcher confined this study's research objectives, questions, and theoretical framework before proposing a research design, data collection, and analytical tools. At the thematising stage, consultations with thesis supervisors were made to ensure a clear research direction and to build a solid knowledge of the research area for designing interview questions.

*Designing interview questions*: Kvale (2007) suggested that designing an interview followed vital processes to determine the number of questions, the question formats, the number of interview subjects (how many?), and the interview method (how to interview?). In the same line of suggestion, Kvale and Brinkmann (2009) said that the number of interview subjects
must fit the research purpose and scope. For example, if the study aims to understand a specific person’s life experience, it was then one person enough for data saturation. In principle, however, the common subjects for social science research can be around 15±10, depending on the time and resources available to the researcher. Following this suggestion, this study designed two interview protocols with open-ended questions. The study invited 20 participants, 4 senior leaders, and 16 mid-level leaders, to join the semi-structured interviews.

Kvale (2007) also suggested that the semi-structured interview using open-ended questions is an interactional conversion to share knowledge and experience on a particular topic. To be interactional, an interview should be semi-structured and open-ended to allow interviewees to express their thoughts freely. The semi-structured interview is crucial to understanding the dynamic problem from different groups. Thus, this study uses the semi-structured interview to extract data from senior and mid-level leaders. Two sets of questions were prepared for the study. (See sample questions in Table 7 and 8).

<table>
<thead>
<tr>
<th>Table 7 Sample of interview questions for senior leaders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions</td>
</tr>
<tr>
<td>Introductory questions</td>
</tr>
<tr>
<td>Relationship between academic career management and institutional governance</td>
</tr>
</tbody>
</table>
What is the process of career promotion, compensation, and reward? Does it link with the performance outcomes?

What do you say about the selection criteria and procedure?

Do you think the training is helpful to enhance your competencies? Do you think the performance evaluation is fair?

What do you think about the compensation practices (e.g., salary scales)? Does it cover what you have achieved?

I want to talk about key challenges to managing academic careers. Could you share some of them? Could you share some difficulties in developing academic careers? Do you think the performance evaluations help promote your career? Why? What is your thought about the payment? Is it enough?

Before ending the interview, do you have any questions? Thanks for joining the interview. Would you like to make any suggestions regarding the management of academic careers?

As showed in Table 7, interview questions were developed for senior leaders. The formation of the questions followed the research questions and conceptual framework. The interview at this stage aimed to understand the relationship between the management of academic career management and ideal-type governance, the alignment features, and challenges. The interview began with introductory questions to address the research problem. The interview was followed by probing questions to give hints to the participants. While interviewing, some structuring questions were used to redirect the participants’ responses to themes. The interview ended with closing questions. Brinkmann and Kvale (2018) commented that the variety of interview questions captures extensive and comprehensive data. Considering this suggestion, various questions were formulated to capture multidimensional aspects of the research foci.
As seen in Table 8, the questions were developed for interviewing mid-level leaders in charge of academic career management. These questions focus on recruitment, training, performance evaluation, and compensation practices. The interview questions also concentrate on the alignment features and key challenges that the mid-level leaders have experienced in daily management.

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Example of the questions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Academic recruitment</strong></td>
<td>Could you tell me the selection process? How do you design a job and advertise the vacant position?</td>
</tr>
<tr>
<td></td>
<td>What is the screening process? Who are the committee members? Who decides?</td>
</tr>
<tr>
<td></td>
<td>What selection tools do you use, e.g., test, interview?</td>
</tr>
<tr>
<td></td>
<td>Who makes a final hiring decision?</td>
</tr>
<tr>
<td><strong>Academic professional development</strong></td>
<td>What are the training and development plans? How often (bi-annually or annually)? Who organises them? What is/are the training topics and priorities? Who decides them? Do you think the training outcomes meet individual needs?</td>
</tr>
<tr>
<td><strong>Academic performance evaluation</strong></td>
<td>How often do you evaluate academic performance? What is the procedure? What are the criteria? Who set them? Who are the committee members? Do you receive feedback? Are they useful?</td>
</tr>
<tr>
<td><strong>Academic Compensation and reward</strong></td>
<td>How do you offer/set salary/incentives to academic staff? Do you give rewards to outstanding teaching/research? Do you give them other benefits like health insurance and medication services?</td>
</tr>
<tr>
<td><strong>Alignment features</strong></td>
<td>Do you think the management practices are easy to implement? Do the recruitment practices follow clear guidelines? Do you think training meets institutional and individual goals? Do you think performance evaluation is</td>
</tr>
</tbody>
</table>
valid to enhance individual performance? What do you say about the compensation and reward system?
What difficulties do you have when recruiting academic staff?
Can you describe some challenges in developing academic professions?
What are the issues of performance evaluation?

Interview procedures: Kvale and Brinkmann (2009) suggested that conducting interviews must follow rigorous procedures to maintain the participant's privacy and confidentiality and enhance the study's reliability and validity. Therefore, the interviews were conducted according to the following procedures.

First, the researcher applied for ethical review approval (Appendix K) and research support letter (Appendix L) from the university research committee. Then, applications for fieldwork proceeded for approval from the Ministry of Education, Youth, and Sport (MoEYS) to collect data in the four institutions (Appendix M). At the same time, the consent forms were prepared for institutions and participants (Appendix H & I). After obtaining approval from the targeted institutions, the researcher visited the campus and met with relevant people, such as the head of administrative offices and the head of the human resource office, to understand the institutions and request a list of interviewees.

After that, the researcher sets up a schedule to communicate with informants for the interviews. At the same time, various communication means (e.g., E-mails, Telegram, Messenger, and Phone calls) are used throughout the study process, e.g., before, during, and after, to explain and clarify the study purposes. The constant communication also builds trust and confidence between the informants and researcher to have smooth interview processes.
and honest responses (Kvale, 2007). Before starting an interview, the researcher presented the consent form to the informant on the interview site for signature. The consent form aims to maintain research ethics and ensure confidentiality between the researcher and informants (Kvale, 1996; Kvale & Brinkmann, 2009).

After completing all procedures, the interviews began, mostly on campus, e.g., in the office or classroom, based on the arranged schedules. The interview period was divided into a 05-minute introduction, 45 minutes for crucial questions, and a 10-minute wrap-up and closing for a smooth procedure. The time allocations for various stages allow the informants to prepare and express their thoughts without intentions (Kvale, 2007; Kvale & Brinkmann, 2009). The whole interview period will take 20 hours, 1 hour for each interview session. The interview data were audio-recorded with the interviewee’s consent for transcription and analysis.

4.5.2 Focus-group discussions (FGDs)

Nyumba et al. (2019) maintained that using FGDs yields significant findings for the study. It is an interactional platform and a sharing moment for the participants where they can express experience and emotion to the realities. It has been advised that conducting FGDs must be mindful of the number of participants in the group, the research environment, the research role of participants, and the analytical procedure. Thus, the researcher conducts eight FGDs through precautionous steps.

**Preparation for FGDs:** Krueger (1994; 2009) said that the research must have a list of questions before conducting FGDs. Therefore, the questions were formulated based on the conceptual framework used for the semi-structured interview. The questions cover the
research areas on the management practices, alignment features, and key challenges. In addition, the development of questions was guided by initial findings obtained from semi-structured interviews. (See Table 9)

Table 9 Sample questions for FGDs

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Example of the questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic recruitment</td>
<td>Could you briefly share with me your experience in applying for the position at this institution? How many processes did you go through? How many tests/interviews did you take?</td>
</tr>
<tr>
<td>Academic professional development</td>
<td>Did you require pre-service training? What was the training about? How long was it? How often do you participate in in-service training? Who are the trainers?</td>
</tr>
<tr>
<td>Academic performance evaluation</td>
<td>How often do you evaluate academic performance? What is the procedure? What are the criteria? Who set them? Who are the committee members? Do you receive feedback? Are they useful?</td>
</tr>
<tr>
<td>Academic Compensation and reward</td>
<td>How do you offer/set salary/incentives to academic staff? Do you give rewards to outstanding teaching/research? Do you give them other benefits like health insurance and medication services?</td>
</tr>
<tr>
<td>Alignment features</td>
<td>Do you think the management practices are easy to implement? Do the recruitment practices follow clear guidelines? Do you think training meets institutional and individual goals? Do you think performance evaluation is valid to enhance individual performance? What do you say about the compensation and reward system?</td>
</tr>
<tr>
<td>Challenges</td>
<td>What difficulties do you have when recruiting academic staff? Can you describe some challenges in developing academic professions? What are the issues of performance evaluation?</td>
</tr>
</tbody>
</table>
Procedures for FGDs: Krueger and Casey (2014) suggested that FGDs must be conducted rigorously to enhance research reliability and trustworthiness.

First, the criteria were set for the selection of the participants. For example, the researcher invited only academic staff with experience in recruitment, training, performance evaluation, and compensation practices. To ensure the inclusiveness of gender and employment types, the researcher chose the participants based on the ratios between male and female academics and employment status between civil servants and contracted employees.

Second, Creswell (2014) and Krueger and Casey (2014) noted that the researcher should be cautious about FGD size. It should not be too large or too small. The scholars suggested that the most appropriate size should contain between 5 and 8 people in each group. Therefore, the researcher invited between 3 and 5 academic staff to join the discussions.

Second, Krueger (2009) also suggests that the FGD be conducted in a sound environment, free from pressures and distractions. Therefore, FGD was conducted on campus in the offices or meeting rooms based on each institution's arrangement and the participants' requests. The participants were arranged with U-shaped or circle seating to give equal opportunity for discussions, and the discussion was made concurrently in the group. In so doing, the researcher facilitated and maintained the discussion flow by rotating the role of the speakers (Krueger, 1994). At the same time, the researcher acted as a moderator by asking probing questions in an open-ended form. While the participants shared their thoughts, the researcher carefully listened, took notes, and prepared follow-up questions. At this stage, the discussions were audio-recorded with the consent of the participants.
Finally, Creswell (2014) and Krueger and Casey (2014) agreed that data analysis and reporting obtained from FGD were crucial yet challenging to the researcher since FGD generated a range of data from various participants. Therefore, the researcher has to manage such issues by analysing data from every discussion. In this case, the researcher designed a separate data frame to encode and analyse data obtained from FGD to reduce data analysis complexities and enrich the results' situatedness. The results were finally reported in narrative texts to findings captured from interviews to address research questions.

### 4.4.4 Online surveys

Sue and Ritter (2012) suggested that online surveys could extract large amounts of data from a wide range of participants at a lower cost and less time-consuming. Under challenging circumstances, such as during the COVID-19 pandemic, online surveys are crucial in collecting data across national and institutional contexts (Singh & Sagar, 2021). It can be designed on different platforms: Qualtrics, SurveyMonkey, Snap-Survey, SoGoSurvey and Google Forms (Fricker, 2017). Of these platforms, Google Forms is a free application with multiple functions and options. It is unlimited usage to collect data from an unlimited number of participants. Therefore, the survey questions were designed on Google Forms.

**Designing online surveys:** The online survey design strictly followed research principles to avoid bias and enhance reliability and validity (Fricker, 2017; Toe-poel, 2017). For example, the researcher set an access control to prevent repeating responses. The researcher set a ‘limit to 1 response’ and selected a ‘required’ option to ensure no missing response. To direct the participants to the next section, the researcher set a ‘Go to next section based on the answer’.
The researcher set verified in the form to follow up on whether the participants responded to the survey. Otherwise, a reminder was sent to the targeted participants.

The layout is another important feature when designing online surveys (Fricker, 2017). It has been suggested that the survey layout should contain a straightforward paging design, simple language and content, questions and options, and a routing interface (Sue & Ritter, 2012; Toepoel, 2017). Following this suggestion, the survey was designed with precise descriptions of main sections followed by subsections. For example, the survey consists of four sections: demographic information, the management of academic careers, alignment features and key challenges. Under the section on academic career management, for example, subsections such as recruitment, professional development, performance evaluation and compensation were developed to provide logical orders to the questions and responses. In addition, the survey format followed a paging design to allow the participants to complete one question before they could select another. Toepoel (2017) commented that the paging design is flexible yet effective in saving data immediately after completing one question.

Another important interface of the online survey is clear language content. The language should be short, simple, and understandable. In this case, the survey content contained the Khmer language version (possibly switching to English via online translation). The use of native language is to ensure the participants correctly understand and respond to the statement items. To enhance face validity (clear language and content), eight survey forms were piloted with the participants selected from the four higher education institutions. After piloting the survey, language errors and content paucity were improved for clarity. After all, the survey forms were finalised and administered to 200 academic staff.
Measure development: The measure development was guided by the conceptual framework validated by the qualitative findings in the first study phase. The measures were constructed rigorously to enhance research reliability and validity. In doing so, the researcher has to construct the variables and scales carefully, considering several suggestions. For example, Boselie et al. (2005) suggested that the accurate measurement of management practices must cover three aspects: *the content, the coverage (function), and the intensity (activities)*. The content items can be measured by a nominal or dichotomous scale (Yes/No), while continuous and ordinal scales measure the process (coverage and intensity). Following this suggestion, the researcher uses various scales to measure the management practices, alignment features, and key challenges for academic careers in the studied context.

The measures of demographic information: The multiple scales were used to measure demographic information related to gender, educational level, experience, employment type etc. The nominal/dichotomous scales denote gender (e.g., male/female) and employment types (e.g., civil servant/contract staff). Interval scales measure ages and years of experience (e.g., 18, 20, 25, 27, 30). Cohen et al. (2018) suggested using multiple measures for accurate results. As seen in Table 10, the demographic information contained seven items:

<table>
<thead>
<tr>
<th>Variables</th>
<th>Descriptions</th>
<th>Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>0 = male</td>
<td>Nominal/dichotomous</td>
</tr>
<tr>
<td></td>
<td>1 = female</td>
<td></td>
</tr>
<tr>
<td>Ages</td>
<td>18, 20, 22, 25, 27, 30</td>
<td>Interval</td>
</tr>
<tr>
<td></td>
<td>1 = Bachelor’s degree</td>
<td></td>
</tr>
<tr>
<td>Educational levels</td>
<td>2 = Master’s degree</td>
<td>Scale</td>
</tr>
<tr>
<td></td>
<td>3 = Doctorate degree</td>
<td></td>
</tr>
<tr>
<td>Subjects taught</td>
<td>English</td>
<td>Nominal</td>
</tr>
</tbody>
</table>
The measures of academic career management: The four management dimensions: recruitment, professional development, performance evaluation and compensation were operationalised to measure the management of academic careers under study. Twenty-four statement items were developed using a 5-point Likert scale to measure academics' perceptions of management practices. Creswell (2014) suggested that the 5-point Likert scale effectively measured the perceptions of the subject matter. Therefore, the 5-point Likert scale was used in this study.

The first six-item statements were constructed to examine the practice of academic recruitment. The six statements were developed from concepts of recruitment discussed in the framework (see Fumasoli, 2018; Fumasoli & Kehm, 2017; Henningsson & Geschwind, 2022). The statement items were modified based on qualitative results to fit the research purpose and context. For example, the original statement, ‘The organisation I work for widely disseminates information about both external and internal recruitment process, was changed
to: ‘The university/institute I work for widely disseminates information about both external and internal recruitment process’. The six statement items were measured by a Likert scale (1 strongly disagree; 2 disagree, 3 = neutral, 4 agree, and 5 strongly agree). The scale reliability analysis was conducted to measure the internal consistency of the items.

The second six-item items were developed to measure practices of professional development. The statements were developed from the framework adapted from Kennedy (2005) and Winterton (2007). Some statements in the original framework were modified. For example, the organisation I work for helps me develop the skills I need for the successful accomplishment of my duties (e.g., training, conferences, etc.), which is modified to ‘The university provides relevant training to develop teaching competencies I need for the successful teaching and learning outcomes. The six statements for academic professional development were measured by scale (1 strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; 5 = strongly agree).

Other six-item statements were developed to measure the practice of performance evaluation. The six statements were formulated based on the framework adapted from Hamann and Beljean (2017) and Gómez and Valdés (2019). Some statements, for instance, ‘The organisation I work for discusses competency-based performance criteria and results with its employees,’ were modified to ‘The university I work for discusses competency-based performance appraisal criteria and results with teachers’. The five-point Likert scale was used to measure these statements (1 strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; 5 = strongly agree).
The final six-item statements were developed for the measure of the compensation system. The development of these statements followed the conceptual framework, mainly adapted concepts from Altbach (2012). Statements such as ‘The compensation (e.g., salaries, financial incentives) of the university/institute has influenced my teaching and research activities. The five-point scale, ranging from (1 strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; 5 = strongly agree) measured academics’ perceptions of these statements.

**The measures of alignment features:** The measures of alignment features were developed to examine the distinctiveness, consistency, and consensus. The statements regarding the alignment features were adapted from the framework and validated by the qualitative findings. Some original concepts suggested by Bowen and Ostroff (2004) were reduced to fit the research objective to investigate the holistic aspect of the alignment features. Therefore, only six-item statements were designed in the 5-Likert scale to measure the perceptions of academic staff on *clarity, attractiveness, rigour, effectiveness, and transparency* of the management of academic careers. For example, ‘To what extent do you think the recruitment at the university/institute provides clear information to you?’ (1 = very unclear; 2 = unclear; 3 = neutral; 4 = clear; 5 very clear).

**The measures of the challenges:** Eight statements developed for the measure of key challenges were synthesised from the literature (see Kogan & Teichler, 2007; Musselin, 2007; Dobbins et al., 2011; Fumasoli et al., 2015; Machado-Taylor et al., 2017). These statements were developed to measure the academics’ perceptions of national, institutional, and contextual challenges. The five-point Likert scale (1= strongly disagree; 2 = disagree; 3 = neutral; 4= agree; and 5= strongly agree) measured the perceptions of academic staff on the challenging items. To suggest improvement of the challenges, eight statements were
developed to improve the effectiveness of academic career challenges. These statements were also measured by a five-point Likert scale (1= strongly disagree; 2= disagree; 3 = neutral; 4= agree; and 5= strongly agree).

### 4.6 Reliability and validity

First, the reliability and validity of the study are enhanced by a solid theoretical and conceptual framework cross-pollinated from sociological, institutional governance, and management theories, which have been widely used to research academic professions in the United States, the United Kingdom, and the European Unions (Fumasoli & Kehm, 2017; Kekäle, 2015; Musselin, 2013; Pausits, 2022; Whitchurch et al., 2023).

Second, the reliability and validity of the study are improved by multiple stages of research to collect and analyse data. As highlighted in the previous section, the study collected data from two main phases; in each phase, data were extracted from multilevel participants and sources, allowing the researcher to validate the data quality and credibility. Creswell and Clark (2018) suggested multiple data collection procedures enhance data quality and credibility, especially when the study adopted MMR. More importantly, the survey data enhanced the reliability and validity since all statement items were developed based on the framework, validated by the initial findings in the qualitative study. Each statement was tested by scale reliability to confirm ‘internal consistency’ based on the value of Cronbach Alpha ranging from 0 to 1.

The validity and trustworthiness of the study were also improved through interviews, focus group discussions (FGD), and surveys. Pilot studies were conducted before formal interviews and group discussions to check the interview content and language accuracy. The pilot survey study was also conducted to check the survey tools and to improve its content. More
importantly, the Khmer language, the native language of the researcher and participants, was used during data collection to enhance positive communication and accurate understanding of data through interviews, discussions, and survey responses.

Finally, the reliability and validity of the study were improved by data triangulation to gain richness and the depth of data. In so doing, a cross-tabulation was created to compare and synthesize the qualitative and qualitative findings (see Table 40 in Chapter 7). The cross-tabulation also provides the convergent and divergent patterns of the findings derived from semi-structured interviews, the FGDs, and the survey questionnaires. This process helps the researcher enhance the reliability and generalisability of the findings to a broader aspect of academic management in Cambodian HEIs. The cross-tabulation of the findings also can classify the data patterns to answer the research questions and establish a trade-off between qualitative and quantitative rigors in order to provide comprehensive discussion and conclusion.

4.7 Data analyses

The data analyses are conducted in two separate stages. The first stage analysed qualitative data derived from semi-structured interviews and focus-group discussions. The second stage focused on quantitative data obtained from the online survey.

4.7.1 Qualitative data analyses

Qualitative data derived from semi-structured interviews and focus-group discussions were analysed concurrently following six steps of thematic analysis (TA) (Braun & Clarke, 2006; Nowell et al., 2017). Braun and Clarke (2006) suggest that TA is a flexible method for identifying, analyzing, and interpreting patterns of meaning ‘themes’ within the data set. TA is a valuable technique for summarising data from multiple sources extracted from large numbers
of participants (Nowell et al., 2017). TA can be used to analyze data deductively (a data-driven analysis) and inductively (a theory-driven analysis) (Clarke & Braun, 2017). Following TA, this study analyses data in the following steps.

**Familiarising with data:** In this early stage, the researcher explored the entire data set by listening to audio records and reading the transcripts from interviews and FGs. Extensive listening and reading were to understand if the data contents are relevant to research questions, such as how academic careers are managed, to what extent the management practices are aligned, and what challenges are for academic career development in the four HEIs. While so doing, the researcher manually made notes on transcriptions and collated them with field notes to guide the analysis processes. The notes at this stage helped the researcher observe the data relationship within and between the data set obtained from different participants: senior leaders, mid-level leaders, and academic staff.

**Generating initial codes:** In this stage, the researcher manually coded data derived from interviews and FGDs. The coding was made on paper using different colour stripes for labelling data features. For example, the RED identified ‘Recruitment’, the BLUE labelled ‘Professional development; and the GREEN highlighted ‘Performance evaluation’ (See examples in Table 11).

| Table 11 Examples of Manual Codes (Excerpted from an interview with PA2, University A) |
|---------------------------------|---------------------------------|
| **Transcripts** | **Codes** |
| [PA2] There are two types of teachers: government and contract teachers. The recruitment of government teachers must go through the Ministry of Education and the Ministry of Public Civil servants. So, the mapping of human resources for the university must be: | `1`Type of employment  
`2`Government recruitment process |
approved by the line ministries. So far, we [the university] have proposed the number of teachers with specific area\(^3\), but in real recruitment, we [the university] cannot get the teachers we proposed because the Ministry of Education decides based on its human resource planning\(^4\).

**PROFESSIONAL DEVELOPMENT**

[PA2] We provide training mainly to the university and faculty management\(^1\), not the teachers. Generally, the training concerns administrative tasks, not much relating to teaching methodology and the subject area\(^2\). Err…yes, we observe that teachers do not have sufficient content knowledge. So, we need time to upgrade their competence, but time constraint is the key challenge to develop teachers. They need time to develop research skills, advance their content knowledge and design more materials relevant to courses\(^3\).

**PERFORMANCE EVALUATION**

[PA2] Ok, let’s talk about the evaluation of government teachers. We have IQA system\(^1\). We have three forms of assessments: the faculty assessment, the teacher-self assessment, and the student assessment\(^2\). Generally, the faculty assessment is good, but the teacher-self assessment is questionable. The question is how we teachers assess ourselves as weak or poor. What is this effect? This is a problem. Another issue is that teachers always evaluate themselves as having good or fairly good performance\(^3\). Also, the faculty management is busy and cannot assess every aspect of the teachers. So, the assessment cannot cover everything and accurately reflect real teaching practice\(^4\).

After doing manual codes, the analytical metrics were established using NVivo software. Saldaña (2013) recommended that NVivo was a power program to code extensive data using...
different techniques. With the support of NVivo 12, the researcher conducted initial coding following suggestions made by Miles et al. (2020) and Saldaña (2013; 2020). First, the researcher used ‘Attribute Coding’ to generate demographic variables (e.g., gender, position, discipline area, and work experience) and to identify institutional characteristics such as year of establishment, institutional type, status and size, number of faculties, and strategic planning and goals. (See examples in Table 12)

Table 12 Examples of Attribute Coding (Excerpted from interviews with PB9 & PB8, University B)

<table>
<thead>
<tr>
<th>Transcript</th>
<th>Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Demographic information</strong></td>
<td></td>
</tr>
<tr>
<td>[PB9] My name is […], a vice dean¹ of the faculty of agriculture². I</td>
<td>¹position</td>
</tr>
<tr>
<td>started my job here in 2007 and have worked for 15 years. I worked as</td>
<td>²workplace</td>
</tr>
<tr>
<td>the vice dean in 2009³. So, I have been working as vice dean for 13 years.</td>
<td>³work experience</td>
</tr>
<tr>
<td>The faculty has three areas: animal science, agricultural science, and</td>
<td>⁴expertise/discipline</td>
</tr>
<tr>
<td>rural development⁴. […] Presently, we have a HEIP project to support</td>
<td></td>
</tr>
<tr>
<td>teacher training and development. We sent a teacher for a PhD study and</td>
<td></td>
</tr>
<tr>
<td>10 Master studies. They are studying vet and agriculture.</td>
<td></td>
</tr>
</tbody>
</table>

| University B                                                               |                |
| [PB7] Hello [researcher]. I am [name], a vice-rector in charge of quality  | ¹position/responsibility |
| assurance¹. [university name] was established 2005² as a public university | ²year of establishment|
| but was transformed into PAIs³. We have five faculties: agriculture,      | ³institutional status|
| technology, language, business, and sociology⁴. We have 90 government    | ⁴size/number of    |
| teachers/officers. Every semester, the university needs around 130 full-   | ⁵number of staff    |
| time teachers⁵. We have only one foreign staff.                           |                |
In this stage, the researcher also applied Descriptive Coding’ to identify words and phrases related to each management dimension, such as recruitment, professional development, performance evaluation, etc. (See examples in Table 13)

Table 13 Examples of Descriptive Coding (excerpted from an interview with PB8, University B)

<table>
<thead>
<tr>
<th>Transcripts</th>
<th>Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Compensation system</strong></td>
<td></td>
</tr>
<tr>
<td>[PB8] Concerning compensation, yes, relating to the education staff, we prioritize it. In addition to basic salary¹, the teachers can gain monthly incentives² if they are involved with administrative work in the faculties. We also provide them with the teaching rates if they teach ³. These are the compensations which are not prescribed by the government policy. Yes, after we proposed this compensation policy to the university boards and got approval⁴, we provided teacher compensation….</td>
<td>¹ basic salary ² additional ³ teaching wage ⁴ compensation policy</td>
</tr>
</tbody>
</table>

At the same time, ‘In Vivo Coding’ was conducted to extract verbatim quotes (exact words and phrases) from the participants as supporting evidence. (See examples in Table 14).

Table 14 Examples of In Vivo Coding (excerpted from T20, FGD8, University D)

<table>
<thead>
<tr>
<th>Transcripts</th>
<th>Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>T20: I think, yes. I think there is too much training, but not much relevant to our needs ¹. Yes, we do not have strategic planning ². What we are doing is based on the department's needs ³. Nevertheless, now, we are working on the strategic planning for 10 years. So, we have to plan for the next 10 years. For example, plan the number of students and teachers. yes, we are working on the plan now.</td>
<td>¹ not relevant training ² no strategic plan for professional development ³ based on the department’s need</td>
</tr>
</tbody>
</table>
Searching for the themes: Braun and Clarke (2006) suggested that after initial coding, the researcher needs to sort and collate the codes relevant to the research themes. At this step, some codes were collated to match the data patterns within the data sets to align with management functions: recruitment, academic professional development, etc. At the same time, some codes were eliminated, and others were combined into identified themes. In this stage, ‘Pattern Coding’ was conducted to classify thematic features of distinctiveness, consistency, and consensus. (See examples in Table 15).

Table 15 Examples of Patterns Coding (excerpted from an interview with PA2, University A)

<table>
<thead>
<tr>
<th>Transcripts</th>
<th>Initial codes</th>
<th>Pattern codes (themes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RECRUITMENT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[PA2] There are two types of teachers: government and contract teachers. The recruitment of government teachers must go through the Ministry of Education and the Ministry of Public Civil servants. So, the mapping of human resources for the university must be approved by the line ministries. So far, we [the university] have proposed the number of teachers with specific area, but in real recruitment, we [the university] cannot get the teachers we proposed because the Ministry of Education decides based on its human resource planning.</td>
<td>1Type of employment</td>
<td>1, 2 hybrid management model</td>
</tr>
<tr>
<td></td>
<td>2Government recruitment process</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3The university recruitment quota</td>
<td>3, 4 state control</td>
</tr>
<tr>
<td></td>
<td>4State hiring decision</td>
<td></td>
</tr>
</tbody>
</table>

Reviewing the themes: Braun and Clarke (2006) recommended that the reviewing phase helped the researcher redefine the themes to improve data consistency and accuracy of meaning. The researcher reviewed the themes and checked if the coded extracts were consistent with the entire
data set. After all, the identified themes were established in storylines to tell the meanings of the data set.

**Defining and naming the themes:** At the refining step, the researcher determines the most salient features of data and explains the reasons therein (Braun & Clarke, 2006). At the same time, the researcher needs to modify what are themes and what are not themes (Nowell et al., 2017) to make precise meanings of the data and prepare for reporting.

In the two coding stages, ‘Axial Coding’ was performed to redefine patterns/themes of academic career management. The refinement of codes was based on the initial codes by naming them into themes to address the research questions. (See examples in Table 16)

<table>
<thead>
<tr>
<th>Alignment features of recruitment</th>
<th>Transcript</th>
<th>Initial codes</th>
<th>Axial codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>[T3] I became a teacher in this study because I passed the examinations. The recruitment process did not involve interviews. The university did not provide pre-service training to develop teaching competencies. That is because the university may think we teachers are competent to teach the subjects. Talking about teaching evaluation, I also think teachers should not evaluate themselves. So, I think the evaluation is ineffective because teachers cannot use the same evaluation questions for different assessors. An effective assessment should provide feedback by different actors, not only one or a group. The evaluation in the university is like an empty space (void), nothing. To ensure the effectiveness of teacher evaluation,</td>
<td>1 A single selection process</td>
<td>2 No connection between training and recruitment</td>
<td>1, 2 lacking clear and attractive features</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3 Less reliable evaluation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4 No connection in the evaluation</td>
<td>4, 5 lacking relevant and</td>
</tr>
</tbody>
</table>
we need experts to work on it. We need resources to work on the evaluation, but the university has limited resources. So, it is hard to say. I think some activities are just acting; they are just the forms/recipes without ingredients. So, it is not tasty, losing its attractiveness.\(^5\)

**Producing the report:** This is the final step of thematic analysis (Braun & Clarke, 2006). In writing the qualitative report, the researcher must establish concise, coherent, and logical storylines to produce narrative texts supported by crucial quotes from the interviews and group discussions. The data presentations were also consulted with the literature to interpret the management of academic careers, alignment features and key challenges.

4.7.2 Quantitative data analysis

The Statistical Package for Social Science (SPSS) 28 version assisted the quantitative data analysis. First, the online survey data was downloaded and re-coded in the MS Excel spreadsheet since it is convenient to check the data errors and accuracy. After completing the coding, the datasheet was imported into SPSS for labelling the scales and categories.

**Scale reliability analysis:** The researcher performed a scale reliability test to measure items’ reliability/internal consistency, represented by the value of Cronbach’s alpha, ranging from 0 to 1. Cohen et al. (2003) suggested that a higher value of Cronbach’s alpha indicates higher internal consistency. For example, when Cronbach’s alpha is at 0.9, it means excellent reliability; 0.8 is good; 0.7 is acceptable; 0.6 is questionable; 0.5 is poor; and 0.5 is unacceptable. The analytical procedures are summarized by Figure 4 below.
Figure 4 analytical procedures for quantitative data

**Descriptive analysis:** The second procedure was descriptive analysis conducted to report the geographic information of the participants. The descriptive data were reported to show the distributions of the responses (Percentage), the proportions of civil servants and contract staff (Percentage), the central tendency of the Mean (M), and the dispersion of Standard Deviation (SD). These descriptive data are helpful for the interpretations of statistical inference in the later stage.

**Compare Means: Independent-sample t-tests and ANOVA tests:** The Independent Sample t-test was performed to compare the Mean difference in the perceptions of academic career management between gender and employment type. Levene’s Test for Equality of Variance outputs was reported on ‘Equal variance not assumed’ due to unequal sample sizes in this study. The report of the t-test results followed the American Psychology Association (APA) format, \( t (df) = \text{the t statistic}, p = p\text{-value} \). The difference in academics’ perceptions of academic career management was decided based on the two-tailed value of \( \text{Sig. (p-value)} \). Cohen et al. (2003) suggested that when \( p < p\text{-value} \), there is a statistically significant difference between the two groups.

The **One-way ANOVA test** was also performed to compare academics’ perceptions of academic career management among four institutions (groups). Cohen et al. (2003) suggested that the
One-way ANOVA determines the statistically significant differences between the means of more than two independent samples. Due to unequal sample sizes, the Welch and Game-Howell tests were applied to generate data outputs. The report of ANNOVA’s results followed by the American Psychology Association (7th ed.) was, \( f (df, f) = f\text{-value}, p = p\text{-value} \). The F distribution was reported based on the two-detailed Sig. (p. value at .05).

In addition, the effect sizes were also calculated and reported to compare the statistical significance between groups. The value of Cohen’s was reported from the Independent-Sample t-test, while the eta squared (\( \eta^2 \)) was used to calculate the effect size of the statistical significance found from One-way ANOVA.

Based on Cohen et al. (2003), the effect size from Cohen’s d was small at 0.2, medium at 0.5 and large at 0.8. The value of eta squared (\( \eta^2 \)) was small at 0.01, medium at 0.059 (0.06) and large at 0.138 (0.14).

### 4.8 Data interpretations and discussions

Creswell and Clark (2018) suggested that the interpretations and discussions of data from the exploratory sequential studies must be done didactically. The qualitative data must be summarised and interpreted before analysing quantitative data. Both qualitative and quantitative data are collated and discussed to address the research questions and claim the objectives. In this study, qualitative and quantitative findings were presented in two separate Chapters 5 & 6, followed by a cross-tabulation for discussion in Chapter 7. The cross-tabulations of qualitative and quantitative findings created a trade-off between the two data strands to see the patterns and themes for the research questions. The discussions of the findings are made to compare with the theoretical and conceptual frameworks in Chapter 3.
CHAPTER 5: QUALITATIVE DATA ANALYSIS

This chapter presents qualitative findings derived from semi-structured interviews with 18 academic leaders and focus group discussions with 25 academic staff in the first research phase. Thematic Approach was used to analyse the data (see Braun & Clarke, 2006) while varieties of coding techniques were performed using NVivo 12 to identify, classify, and organize the data patterns into themes (see Miles et al., 2020; Saldaña, 2021). The supporting documents, such as the national policy on higher education vision, the national employment laws and regulations, the human resource management and development manuals, and the educational strategic plans, were also reviewed and incorporate to supplement the qualitative findings in the following sections.

Section (4.1) presents demographic information of the participants and the selected institutions. Attribute Coding (Saldaña, 2013) was performed to generate demographic variables regarding gender, position, discipline area, and work experience. Attribute Coding was also conducted to identify institutional characteristics such as year of establishment, institutional type, status and size, number of faculties, and strategic planning and goals.

Section (4.2) discusses research question one (RQ1) How do Cambodian public HEIs manage academic careers in the changing governance context? Data analysis was made to examine the practices of academic career management in relation to recruitment, professional development, performance evaluation, and academic compensation. Data interpretation was guided by theoretical and conceptual frameworks for academic human resource management (Kekâle, 2015; 2018) and the frameworks for the management of the academic workforce in the higher education sector (see Dobbins et al., 2011; Musselin, 2005; Teichler, 2021). Descriptive Coding
was performed to identify words and phrases related to each management dimension. Meanwhile, In Vivo Coding was conducted to extract verbatim quotes, and Axial Coding was performed to generate the patterns of academic career management within and between the studied institutions (see Miles et al., 2018; Saldaña, 2021).

Section (4.3) addresses research question two (RQ2) To what extent are the management practices aligned to enhance academic careers in the selected higher education institutions? The analysis of the alignment management of the academic career management system has followed a process approach to human resource management that focused on meta-features such as distinctiveness (e.g., a clear and attractive selection process), consistency (e.g., an instrumental and valid performance evaluation practice) and consensus (e.g., a fair and transparent compensation) (see Bowen & Ostroff, 2004; Wright & Snell, 1998). Descriptive Coding was performed to identify key features of each management function, while Pattern Coding was conducted to classify the patterns of alignment features of the management system.

Section (4.4) elucidates the results to address research question three (RQ3): What are the arising challenges for academic career management under the studied institutions? Descriptive Coding and In Vivo Coding (see Miles et al., 2020) were performed to explore the challenging factors. The findings were interpreted around theoretical frameworks for the academic career management (Bennion & Locke, 2010; Marini, et al., 2019; Pietilä & Pinheiro, 2020; Teicher, 2021).

5.1 The demographic information

The presentations of demographic information were divided into the participant demographics and the institutional characteristics. The four-three participants were anonymized in this study,
for example, PA1-PA6 for academic leaders at Institution A; PB7-PB11 for academic leaders at Institution B; PC12-PC15 for academic leaders at Institution C, and PD16-PD18 for academic leaders at Institution D. The academic teachers were also labelled with TA1-TA8 at Institution A; TB9-TB14 at Institution B; TC15-TC20 at Institution C, and TD21-TD15 at Institution D.

5.1.1 The participant demographics

The research participants, including academic leaders and academic teachers, had relevant backgrounds to the under-researched topic (see a summary in Table 17). Of the forty-three participants, 64% were male, and 36% were female. About 46% were faculty teaching staff; 42% were middle academic leaders holding positions as vice deans, directors, and heads of departments/offices. Only 12% were senior academic leaders working as the vice-rectors in institutional governance, primarily overseeing human resources, finance, and quality assurance systems. Among the academic leaders, 9% were directly involved with developing manuals for human resource management, finance management, and academic quality standards; 42% directly managed academic staff at the faculties and departments, while 3% were in charge of human resources offices to coordinate daily management practices in the selected institutions.

The participants also had extensive experiences, especially in academic recruitment, professional development, performance evaluation and compensation. Among the participants, 48% gained over five years of academic personnel management, 25% obtained from 6 to 10 years of experience, and 27% engaged with staff management over ten years.

Finally, the participants had multidisciplinary backgrounds. The findings showed that 32% of them specialised in science, technology, and engineering; 26% of others were working in the field of social science, such as education, languages, business management and public
administration. An estimated 30% of the remaining participants came from agriculture-related disciplines such as agriculture engineering, food science, food processing, and veterinary medicine. The findings extracted from the participants with extensive and multidisciplinary backgrounds showed different management procedures of career management that has enriched reliability, validity, and trustworthiness of the present study.

Table 17 The participant demographics

<table>
<thead>
<tr>
<th>Participants (n = 43)</th>
<th>Parameters</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>64%</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>36%</td>
</tr>
<tr>
<td></td>
<td>Senior leaders</td>
<td>12%</td>
</tr>
<tr>
<td>Positions</td>
<td>Mid leaders</td>
<td>42%</td>
</tr>
<tr>
<td></td>
<td>Academic teachers</td>
<td>46%</td>
</tr>
<tr>
<td></td>
<td>HRM, FM, &amp; QA</td>
<td>9%</td>
</tr>
<tr>
<td>Responsibilities</td>
<td>HRM &amp; QA</td>
<td>42%</td>
</tr>
<tr>
<td></td>
<td>HRM</td>
<td>3%</td>
</tr>
<tr>
<td></td>
<td>Teaching</td>
<td>46%</td>
</tr>
<tr>
<td></td>
<td>Rectorate office</td>
<td>12%</td>
</tr>
<tr>
<td>Faculty/department/office</td>
<td>Science and Technology</td>
<td>32%</td>
</tr>
<tr>
<td></td>
<td>Social Science, Language, Business</td>
<td>26%</td>
</tr>
<tr>
<td></td>
<td>Agriculture and others</td>
<td>30%</td>
</tr>
<tr>
<td></td>
<td>Less than five years</td>
<td>48%</td>
</tr>
<tr>
<td>Work experience</td>
<td>6-10 years</td>
<td>25%</td>
</tr>
<tr>
<td></td>
<td>11-15 years</td>
<td>27%</td>
</tr>
</tbody>
</table>

5.1.2 The institutional characteristics

The findings showed that the participating higher education institutions (HEIs) were government-affiliated bodies; however, they had dynamic backgrounds concerning academic career management and development (see Table 18). In general, the finding showed that the
management of academic personnel in these HEIs were largely influenced by state agencies such as the Ministry of Education, Youth and Sport, the Ministry of Public Civil Servants, and the Ministry of Finance, although they were being transformed to be Public Administrative Institutions (PAIs). The study found that two young institutions (coded A and B), established in the mid-2000s in two provincial settings, were implementing centralised and inconsistent system of academic careers. For example, Institution A, which was located in the Western province bordering Thailand, and Institution B was based in the Eastern part of Cambodia close to the Vietnamese border, have followed state procedures for academic career management. Institutions C founded in the 1960s in Phnom Penh was also using same state procedures but rather complex for academic career management since the system may have been influenced by its historical background relating to a French-based and the socialist models. In addition, the management of academic staff at Institution C has been rather conflicting due to different roles and power interplay among government agencies, for instance, the Ministry of Agriculture, Forestry and Fisheries (MAFF), the Ministry of Civil Service (MCS), and others.

Further, the study found different management practices among the participating HEIs. For example, the young and small HEIs (A and B) tended to have insufficient resources and less systematic plans in managing academic staff than those the well-established institutions. Both young institutions employed less than 200 teaching staff, including civil servants and contracted employees, while the old-established institutions (C and D) had larger number of academic employees, about 500, including civil servants and service contractors.

The study also revealed that four participating HEIs formulated similar strategic missions and goals in order to provide education quality and produce cutting-edge research in line with the national development goals to accelerate Cambodian economy progressing towards an upper-
middle-income society by 2030 and an advanced-income society by 2050. The young institutions A and B formulated their missions and goals to produce quality graduates for the national and international labour market. Institution C stated a generic goal to develop the agricultural sector and sustain natural resources by providing high education quality and research productivity that contribute to social and economic development. Institution D laid out a comprehensive mission to provide quality and equity education in science and technology to enhance individual professional ethics, capacity, entrepreneurship, creativity, innovation, virtue, conscience, responsibilities and understanding of society for developing Cambodia's economy and society.

Summary

The participants who participated in this study had diverse background, multilevel positions, and multidisciplinary profiles. Further, the participating HEIs selected for this study were state-governed bodies with dynamic characteristics in terms of academic governance and management system. Therefore, the findings obtained from this study enhance the depth and breadth of understanding of academic career management and the issues therein that, to large extent from cross-institutional perspective, to reflect the current policy reform to improve academic quality and management accountability in Cambodia. The findings from this study also provide stat-of-the art perspective on the academic career management in Cambodian HE to enable the researcher to compare the similarities and differences in the management system among the young and well-established HEIs. Finally, the findings offer significance and implications to inform all-relevant key stakeholders to strengthen academic quality and academic governance system in Cambodian HEIs in order to integrate academic career management with regional and international guidelines and standards.
<table>
<thead>
<tr>
<th>Institutions</th>
<th>Locations</th>
<th>Years</th>
<th>Types</th>
<th>Status</th>
<th>Number of Faculties</th>
<th>Number of employees</th>
<th>Mission statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Province</td>
<td>(2007)</td>
<td>Multidisciplinary</td>
<td>PAI^{13}</td>
<td>6</td>
<td>190</td>
<td>To train students for the labour market needs and conduct scientific research contributing to national economic growth.</td>
</tr>
<tr>
<td>B</td>
<td>Province</td>
<td>(2006)</td>
<td>Multidisciplinary</td>
<td>PAI</td>
<td>6</td>
<td>160</td>
<td>To produce graduates for market needs (Job) and to produce research for growth.</td>
</tr>
<tr>
<td>C</td>
<td>Capital</td>
<td>1964</td>
<td>Comprehensive^{14}</td>
<td>PAI</td>
<td>10</td>
<td>413</td>
<td>To contribute to the development of agriculture and related sectors and the sustainable use of natural resources by providing higher-education programs, research, and extension in line with national and international development issues and job market needs.</td>
</tr>
<tr>
<td>D</td>
<td>Capital</td>
<td>1960</td>
<td>Comprehensive</td>
<td>PAI</td>
<td>9</td>
<td>303</td>
<td>To provide quality and equity of science and technology education to enhance professional ethics, capacity, entrepreneurship, creativity, innovation, virtue, conscience, responsibilities and understanding of society and high commitment to develop the nation and promote research in science and technology to community to enable production and integrity</td>
</tr>
</tbody>
</table>

^{13} PAIs = Public Administrative Institutions

^{14} Comprehensive higher education institution offers specific discipline such as agriculture or technology. In comparison, multidisciplinary higher education institutions offer various subjects such as language education, business management, agriculture, and technology.
5.2 Academic career management

This section presents the findings to demonstrate how Cambodian public HEIs manage academic careers in the dynamic governance context. The presentation of the findings focuses on four management dimensions: academic recruitment, professional development, performance evaluation, and compensation. The findings are to address research question one (RQ1): How do Cambodian public HEIs manage academic careers in the changing governance context?

The data analyses and interpretations are guided by the research framework framed around the sociologic theory of academic careers (Dobinns et al., 2011; Musselin, 2005, 2013) and management theory of academic human resource management (Fumasoli, 2015; Kekäle, 2015; 2018). The research framework posits that ideal types of academic governance e.g., state-centered, self-regulated and market-oriented system have influenced the academic career management in the higher education sector. This study found, in general, that the practices of academic career management has been hybrid—combined a state-centralized model and an academic self-governance system. However, the study revealed that the market-oriented system for academic career management did not exist in the participating institutions in Cambodia. The sections that follow provide the detailed findings of academic career management, presenting it through academic recruitment, professional development, performance evaluation and compensation.

5.2.1 Academic recruitment

Based on the literature review, academic recruitment involves various activities and procedures, such as designing a position, preparing a job call, assessing, selecting a candidate, negotiating an agreement, and placing a successful candidate in the right position (Fumosasli
& Kehm, 2017; Musselin, 2013). The recruitment of academics can be procedural, using different techniques, approaches, and preferences (Henningsson & Geschwind, 2021; Musselin, 2005). For example, the state recruitment approach is generally bureaucratic in selecting and nominating civil servants to academic staff; the academic self-governance gives freedom to educational leaders (e.g., rectors, deans) to set recruitment criteria, develop selection tests, and promote academic staff, and the market-oriented system involves external stakeholders (e.g., funders, recruitment agencies) in screening and selecting academic personnel (Dobbins et al., 2011). Against this backdrop, the study found that the implementation of academic recruitment in the participating HEIs has followed the state-centric approach and academic self-regulated system.

4.2.1.1 State academic recruitment

The study reveals that implementation of the state recruitment system appears centralized and complex that requires the participating HEIs tightly follow the government policies and regulations under the control of state agencies such as the Ministry of Education, Youth and Sport (MoEYS). The centralised recruitment process is generally applied to select civil servants to be academic staff in the four institutions.

At Institution A, all academic leaders (PA1-PA6) described state recruitment as a bureaucratic system tightly controlled by the Ministry of Education, Youth and Sport (MoEYS) especially for selecting civil servants to become academic staff at academic institutions. For example, the senior leader (PA1), a vice rector in charge of human resource management said, “the MoEYS plays a central role in the selection processes—calling for positions, screening, and testing candidates, and selecting and deploying them to work with the higher education institutions”. The acting head of the human resource office (PA6) also reiterated the process
that, “the MoEYS uses pro forma recruitment—commonly setting a quota for the employment of academic civil servants for all public HEIs in Cambodia. Other leaders echoed the selection process of academic staff in different ways:

The Ministry of Education, Youth and Sport (MoEYS) conducts annual recruitment through state sit-in exams to assess individual subject knowledge, general knowledge, and language competencies. (PA1, Vice-Rector, HRM, FM & QA)

The teachers recruited by the MoEYS mostly have sufficient subject knowledge but less professional ethics and attitudes. (PA2, Vice Dean, Faculty of Business Administration).

The university always receives 50% of academic staff recruited by the government, which this figure is less than the proposed quota. This problem causes a shortage of academic staff to work with HEIs. (PA6, Acting Head of the Personnel Office)

The above comments from mid-level leaders revealed that the state recruitment and selection processes tend to be effective in assessing subject knowledge and tacit competencies. The state selection procedure seems less efficient in evaluating individual behaviours and attitudes to become academic personnel. This issue has always resulted in the employment of an unsuitable academic workforce for the participating HEIs.

Further, the study also found that Institution B followed the state recruitment procedures conducted by MoEYS to select and hire people to be civil servants. All academic leaders (n = 5) at Institution B shared similar selection processes for academic civil servants. For example, the vice-rector (PB8) in charge of human resource management reaffirmed that the MoEYS rigidly manages civil servants through hiring, promoting, and compensating them. Other academic leaders (PB7, PB9, PB10, PB11) agreed with the vice rector's statement. They echoed, “the MoEYS prepares a job call, arranges the selection exams, decides the hiring results, and deploys the selected candidates to the workplaces”. The vice-rector (PB8) in
charge of human resources together with the mid-level leader (PB11) who have experienced in academic selection for years contended:

The university follows an annual recruitment plan directed by the Ministry of Education, Youth and Sport. The university propose recruitment quotas highlighting the need of subject areas, but the university cannot involve in the hiring decision. (PB8, Vice Rector, HRM & FM)

The Ministry of Education, Youth and Sport publicly call for the vacancies, screens the applications, arranges the selection exam, and deploys successful candidates to the targeted institution. (PB11, Vice Dean, Faculty of Education and Humanities)

The above comments on the academic recruitment undertaken by the MoEYS indicate rigid process to elicit people to become academic personnel in HEIs. As some academic leaders (e.g., PB9, PB10, PB11) emphasized, “the state recruitment is linear, strictly regulated by state laws such the Law on the Common Statute of Civil Servants of Cambodia” (see RGC, 1994). One leader (PB10) continued, “This state law tightly imposes civil servants' employment conditions and procedures”. Other leaders criticised the state selection process as follows:

The Ministry of Education, Youth and Sport sets recruitment conditions and procedures, and we must follow them. (PB7, Vice Rector, Academics & Quality Assurance)

Some government teachers do not have sufficient qualifications to be higher education teachers. However, the university does not have the power to punish or remove them. (PB11, vice dean of faculty of education)

The above responses reveal that the centralised hiring process conducted by MoEYS has not only supplied the unsuitable academic staff but also limited the institutional authority to remove any unproductive staff from the careers. One leader echoed:
The faculty needs teachers to teach the subjects of animal science, agricultural science, and rural development, but the government cannot provide them. (PB9, Vice Dean, Faculty of Agriculture)

The above findings indicate that the use of state employment procedures has always resulted in the supply of the mismatched academic workforce to HEIs. This is because there is a lack promising approach to negotiate staff planning and recruitment process between state agencies and higher education institutions in Cambodia. Not surprisingly, the state recruitment has been more complex in the institution under supervision of different state agencies.

The study found that the state academic recruitment was not only centralised but also conflicting to select civil servants to be academic teachers at Institution C since it was managed by more than one state agencies. For instance, the senior leader (PC12), the vice-rector in human resource management, explained that the Ministry of Agriculture, Forestry and Fisheries (MAFF) had managed the selection conditions and procedures. At the same time, other line ministries, such as the Ministry of Civil Service (MCS) has controlled academic appointments and promotions, and the Ministry of Economy and Finance (MEF) has controlled the purse for academic payment and rewards. Although sit-in exams were commonly used to select civil servants, some leaders (PC15, PC16) shared that the state exams conducted by MAFF lacked rigours to assess candidates' attribution to academic performance that contribute to institutional development. In addition, academic leaders (PC12, PC13, PC14) complained that the state recruitment procedure was bureaucratic, and that the institution could not have a chance to negotiate for a better selection process. In this case, some leaders commented:
The hiring process for government teachers is complex and always limits staffing quota. The university does not have the autonomy to select civil servant teachers. (PC13, Vice Dean, Faculty of Veterinary Medicine)

The Ministry of Agriculture, Forestry, and Fisheries (MAFF) limits the number of teaching staff recruited for the university. The recruitment is delayed sometimes, due to budget constraints. (PC14, Vice Dean, Faculty of Agriculture Engineering)

The recruitment of government teachers at the Faculty of Land Management and Urban Planning follows complex procedures setting between the Ministry of Land Management, Urban Planning, and Construction (MLMUPC) and the Ministry of Agriculture, Forestry and Fisheries. (PC15, Vice Dean, Faculty of Land Management and Urban Planning).

The complex hiring procedures described by the participants has happened due to overlapping agentic roles between the MAFF, MCS and other ministries. Although the *Legal Statue on Public Civil Servants 1994* has been the sole national regulatory framework for employment of civil servants, the recruitment process conducted by MAFF is not the same to the selection process handled by MoEYS. In this context, the recruitment of civil servants to become educational staff at Institution C tends to be more controversial.

By and large, the study found that the state academic recruitment seems to be more decentralised at Institution D than other participating institutions (A, B, & C) in employing the civil servants to be academic staff. All academic leaders (PD16-PD18) at Institution D told the researcher that the institution had sufficient freedom to conduct internal recruitment and negotiate with state agencies, e.g., the Ministry of Education, Youth and Sport (MoEYS) in nominating the potential candidates to sit for state exams to become civil servants. Through interviews, some academic leaders (PD16, PD17, PD18) described that Institution D had decentralised the decision to the mid-level leaders such as the faculty deans and departmental heads to identify, select, and hire people with knowledge, skills, and attitudes to become
academic teachers and researchers. One leader (PD16) explained the process, “First, the faculties form a recruitment committee to identify the need for a position, advertise an open position, screen applications, interview candidates, and negotiate with candidates for agreement signing”. Another leader (PD18) reiterated, “The faculties conduct interviews to assess individual interest and motivation before asking them to sign a work agreement”. In addition, the leader (PD17) confirmed that the institution needed a high-motivated academic staff; therefore, the institution gives authority to the central level leader to determine how to select the right people for the job since the teaching career was not very much paid compared with other jobs in private sectors. In this case, the faculties and departments can self-regulate the criteria and process for employing contract staff.

4.2.1.2 Academic self-regulated recruitment

The study found that the academic self-regulated recruitment appears reactive and inconsistent in screening, selecting, and hiring academic contracted employees within and between the participating HEIs.

In the case of Institution A, most academic leaders (e.g., PA2, PA3, PA5) described that the self-regulated recruitment was reactive, and being used to hire contract staff for the rising demand when there is an increasing student enrolments. Further, the academic leaders (e.g., PA1, PA3, PA4, PA5) explained that the academic self-regulated recruitment lack of consistency since it was sometimes undergone through verbal negotiation and personal preference. Below are their comments:

The faculties recruit their contract teachers because the university does not have a strategic staff planning and policy. The faculties hire teachers based on the increasing
number of students. And if we know someone who can teach the subject for the faculty, we hire him/her. (PA3, Vice Dean, Faculty of Education)

We have procedures for internal recruitment. We advertise the vacancies, assess candidates’ qualifications, negotiate working conditions and wages, and orient them to the jobs. (PA5, Director of the Language Institute)

The different comments from mid-level leaders showed inconsistent internal recruitment while being conducted in a less proactive way. The current practice of internal recruitment of academic staff reflects a lack of local policies and guidelines at the Institution A. Likewise, the internal recruitment of academic staff appeared to be problematic at the Institution B.

The findings showed that the internal academic recruitment was also inconsistent and non-standardized at the Institution B. Through interviews, two senior academic leaders (e.g., PB7, PB8) elaborated that the internal hiring process was systematic—using job ads, interviewing candidates, and negotiating work contracts. However, the mid-level leaders (PB11, PB13) argued that the internal recruitment procedures varied across the faculties and departments.

Below are their arguments:

The university has procedures for recruiting contract teachers. The university advertises the vacancies, screens the qualifications, and interviews the candidates. (PB10, Vice Dean, Faculty of Business)

The university does not have any procedures for employing contract positions. The employment procedures vary from one faculty to another. Some teachers are hired without going through any selection process. (PB11, Vice Dean, Faculty of Education)

The inconsistencies of internal recruitment, as indicated by mid-level leaders through interviews, imply a lack of comprehensive guidelines for the management of academic staff which have occurred due partly to negligence of institutional leaders in strengthening the academic career system at the studied institution.
Concurrently, the lack of proactive recruitment of contracted staff was also identified at Institution C through interviews with academic leaders and group discussions with teachers. Two leaders briefly explained:

We have internal recruitment for contract teachers. We decentralise processes to the faculties and departments. The qualified candidates must have a higher degree and experience relevant to the teaching and learning programmes. (PC12, Vice Rector, HR & Finance)

So far, we still need systematic guidelines for recruiting contract staff. We use the internal resources, the people nominated by the faculty and university. [...] to work as volunteers. [...] We do not have money to hire people from outside. (P13, Vice Dean, Faculty of Veterinary Medicine)

The above descriptions of internal recruitment show an inertia career or inbreeding system in that Institution C which employs its homegrown workforce by providing the students with voluntary or internship opportunities. All academic leaders (PC13, PC14, PC15) explained the this process that the faculties and departments asked the students to work part-time volunteering or internship positions with a promise to offer them full-time jobs after they graduated. Some teachers (TC18, TC19, TC20) shared from their experiences:

We do not go through any rigorous recruitment process to become a teacher at the university. We have worked as volunteers for some projects and then became full-time staff. (FGD2C, contract teachers)

Contrast the above findings, the study found that Institution D has applied strategic procedure for selecting and hiring contract employees. All academic leaders (PB16-PB17) told the researcher that internal recruitment was part of the institutional strategic plan in promoting teaching and research excellence. Therefore, the recruitment and selection of faculty staff was made accordingly to the institutional personnel planning and policy guideline to ensure that
the contract employees had sufficient competencies. For example, a deputy director (PD17) who was in charge of staff management said, “The faculties and departments assess their workforce demand, identified needs for the positions, conducted selection tests and interviews, and negotiated with successful candidates for signing agreements”. Consistently, all leaders (PD16, PD17, PD18) agreed that faculty management teams conducted rigorous planning for internal recruitment. One of them explained:

The faculty deans lead the recruitment team in identifying the position, setting the qualifications, and undertaking selection processes. The deans have authority to make a hiring decision if the candidates are qualified for the positions. (PD16, Deputy Director)

However, the study found that academic recruitment was rather inbreeding since the institution tended to hire its graduates for the jobs. All academic leaders (PD16, PD17, PD18) emphasised that the institution preferred hiring its alumni to employing outsider candidates for the job since it was believed that the alumni had good understanding of the institutional working environment. Therefore, employing its alumni to work tend to more productive than hiring other people from outside. Through interviews, most academic leaders (PD16, PD17, PD18) revealed that the recruitment information was institutionally circulated so that people within the institution had more opportunities to apply for the open positions. In other words, the academic recruitment at Institution D targeted small-pool selection rather opened for public candidates. As evidence, some teachers shared their experiences:

I am an alumnus. I worked as a contract staff for a few years before getting a nomination to take exams at MoEYS. (T21, government teacher)

In a job interview, the committee ask me about my expertise, teaching method and job interest. The committee also ask my contribution to teaching and research improvement at the faculty and institute. (T24, contract teachers)
The above responses from teachers showed that although Institution D has implemented somewhat proactive internal recruitment to employ contracted staff, the actual practice remains influenced by academic inbreeding and, as a result, it has restricted the implementation of market-oriented system to hire public candidates for the job. This narrow recruitment practice limits the opportunity to diversify academic workforce for the emerging multidisciplinary educational programmes.

5.2.2 Academic professional development

Professional development is a continuing process to enhance subject knowledge, skills, and attitudes to academic professions. Professional development is also considered a process whereby academic staff acquire skills, knowledge, attitude, belief, and action for better practices in teaching and research (Mitchell, 2013). The present study found that implementing academic professional development in all participating institutions appeared to be periodical, resource dependency and lacking strategic planning.

The study found that the periodical trainings were organised to develop academic professions at Institution A as well as other HEIs since they did not establish any strategic plan for academic career development. All academic leaders (PA1-PA6) described that the characteristics of professional development as periodical and resource dependency based on project interventions. Although the senior leader (PA1) firmly confirmed that professional training and development were strategically designed to enhance academic professional standards, professional ethics and research skills, the study revealed that the existing training and development programmes did not embrace such clear purposes.

Through repeated interviews, several leaders (e.g., PA2, PA3, PA4) told the researcher that the existing training relied on external funders, giving little attention to developing specific
disciplines and skills. One mid-level leader (PA2), who was also experienced in managing academic personnel for years, told the researcher that the probationary training was just a routine process to nominate a lifetime employment of civil servants. Other leaders (PA3, PA5, PA6) repeatedly said, “Many training programmes [they have attended] follow the agenda of external partners; therefore, the purposes sidestepped from institutional and teacher needs”.

Some of them echoed:

[…] Yes, there is training in the university, but most training programmes orient teachers to administrative tasks. Other programmes are funded by the Erasmus+ projects and the Higher Education Improvement Project (HEIP). (PA2, Vice Dean, Faculty of Business)

We have several trainings that the Australian language specialists support. We conduct training once or twice a year. (PA5, Director of Language Institution).

The external reliance for academic professional development in the participating HEI reflects unhealthy resources and a lack of initiatives for organising relevant programmes for academic career development. In group discussions, some teachers (TA1, TA3, TA4) shared those previous trainings, workshops, and seminars [they had attended] focused less on developing subject knowledge and pedagogic skills. Other teachers (TA5; TA8) thought there was a limited funding and scholarship opportunity for them to develop their competencies. One teacher emphasised:

The funding to attend professional development is limited. I am given few opportunities to develop a career life. (TA5, contract teachers)

Similarly, the ad hoc training and development was conducted to support academic professions at Institution B. All academic leaders (PB7-PB11) told the researcher that development partners financed the trainings, workshops, and seminars. All the academic
leaders confirmed the institution did not provide pre-service training for academic staff regardless of civil servants and contract employees. Although the probation was mandatory for civil servant entrants, the senior leader (PB8) in charge of human resource management confirmed that there was no intensive trainings and development programmes during their probationary appointment. In addition, all academic leaders (PB7-PB11) agreed that the institution did not have sufficient funds; therefore, relying on external partners for in-service training and development to foster academic professions. Some of them elaborated:

The university needs more resources to establish a strategic plan for teacher development. The university has relied on external funders to support teacher training. (PB8, Vice Rector, HRM & FM)

The university receives funding from the Higher Education Improvement Project (HEIP) for teachers pursuing master's and doctoral studies at the Royal University of Phnom Penh (RUPP), the Royal University of Agriculture (RUA), and the Institute of Technology of Cambodia (ITC). The university receives financial support to send teachers to higher degree studies in Thailand, Hong Kong, and Europe. (PB7, Vice Rector, Academics and Quality Assurance)

The provision of periodical professional development and trainings may concern internal budget deficiency, which often created tensions and conflicts among teachers in the studied institution, despite the senior leader (PB7) maintaining that the institution has given individuals equal opportunities to academic staff for professional development. Most teachers disagreed with that statement. In group discussions, some teachers (TB9, BT10) argued that the training opportunities were restrictive and mainly offered to senior staff. Especially, contract teachers emphasised that they could not have good opportunity for long-term professional development. They were offered only attend short-term training, while long-term ones prioritised civil servants. All contract teachers collectively echoed:
The university primarily provides scholarship opportunities to government employees. Contract teachers mostly attend orientation training which is less effective in enhancing teaching professions. (FGD2B, contract teachers)

The lack of investment fund for academic professional development has also made Institution C offer ad hoc training and development programmes to enhance academic professions. The interview with the senior leader (PC12) in charge of human resource management revealed that Institution C has yet to follow the national career pathways to promote academic professions, although in principle there are career ladder for teachers—starting from an apprentice to an expert and professionalism. In reality, the senior management acknowledged that Institution C did not follow this career system to promote professorial ranking. Therefore, some mid-level leaders (e.g., PC13, PC014) argued that academic professional development was taken for granted. They commented:

We do not have a principle to provide pedagogical training to government teachers during their probations. We have orientation sessions for them before they start their jobs with the faculties. (PC12, Vice Dean, Faculty of Land Administration and Planning)

Consistently, the teacher echoed:

There needs to be pedagogical training for us. We upgrade ourselves through various training opportunities offered at the university and other capacity-building workshops and seminars offered by partners. (T14, government teacher)

The issue of academic professional development in Institution C indicates a lack of investment schemes for training and development. This issue concerns a lack of a local career ladder or an absence of a transformative model for academic career development at the participating HEI.

Surprisingly, the findings showed Institution D had strategic and transformative professional
development plan and practice since they were designed to meet institutional and individual needs. One academic leader (PD16) said the institution has integrated professional development into its ten-year strategic planning to promote academic professions. Thus, professional development trainings were strategically designed to develop the capacities of faculty members. Other academic leaders (PD17, PD18) reiterated that their institution had allocated the government funds and international financial assistance to support short-and long-term teacher education in Thailand, France, Japan, and the United States. More recently, Institution D has received financial support from the Higher Education Improvement Project (HEIP) for staff development. Through HEIP, one academic leader (PD18) told the researcher that the institute had sent six faculty staff to attend the Master Teacher Programmes and PhD studies overseas. Consistently, teachers confirmed their appreciation for the training and development that they had attended. They expressed:

Hmm, I have attended several trainings of my most interest and need. The training [I have attended] focuses on developing subject content, project management, financial management, and quality assurance. (TD20, government teacher)

Yes, I have joined training in Cambodia and overseas. I have been to French to attend training on program development relevant to my expertise. (TD21, government teacher)

Yeah, I have joined some training on syllabus design and quality assurance. (TD24, contract teachers)

I have attended several trainings on teaching methods, pedagogies, and research methods. The training objectives meet my expectations, and I must improve my competencies. (TD 25, contract teacher)

The above expressions from academic staff at Institution D reveal that, although there is a lack of investment fund from the participating institution, there is essential that the institutional leader need to diversify the external resources for staff capacity building through offering extensive and relevant training programmes. To diversify the resource, the institution needs to have its strategic plan in place.
5.2.3 Academic performance evaluation

Academic performance evaluation is a process to determine individual achievement as agreed in job contrasts (Gómez and Valdés). The evaluation also embeds a social process to determine academic products and experiences for escalating value, virtue and meaning of academic career life (Hamann & Beljean, 2017). The present study revealed that academic performance evaluation in the four institutions was summative, driven by national quality assurance standards rather than local policies.

The study found that the academic performance evaluation at Institution A followed the summative objective, implementing to meet the quality assurance guidelines in measuring teaching effectiveness and program outcomes. For example, all academic leaders (e.g., PA1, PA2, PA3, PA4, PA5) said that Institution A had followed the evaluation forms and objectives directed by the Accreditation Committee of Cambodia (ACC) at the MoEYS. The evaluation aimed to determine teacher effectiveness and to fulfil the quality assurance requirements, and the evaluation rubrics included teaching quality, classroom management, teacher-student interactions, professional ethics, and lesson outcomes. In addition, the senior leader (PA1) furthered that the evaluation forms were designed with scales ranging from 1 to 2 for teacher-self-assessment, 1 to 3 for faculty assessment, and 1 to 4 for student assessment. The senior leader (PA1) echoed that using multiple rubrics and scales could enhance the accurate evaluation results. Contrasting to the senior leader’s view, the middle leaders argued:

The faculty assessment is generally good, but teacher-self and student assessments must be more credible regarding reliability and transparency. [……]. We need a strong quality assurance team to conduct the assessment. (PA2, Vice Dean, Faculty of Business)

The summative evaluation measures teacher effectiveness rather than improving teacher competence, attitude, and behaviour.” (PA4, Vice Dean, Faculty of Education)
The performance evaluation is to find a good teacher who teaches well and …err…the one who makes students learn the subject content. (PA5, Director of Language Institute)

The different opinions shared by academic leaders show that the current form of academic evaluation has been the *ex-post* practice used to measure teaching effectiveness rather than to monitor the efficiency and accountability of academic staff. This type of evaluation has paid little attention to improving specific issues in teaching and fostering research productivity that contribute to institutional and societal development. This type of evaluation was functional being conducted to meet the quality assurance requirements for accreditation of educational programmes.

Similarly, the study found that the summative form of academic performance evaluation at Institution B. Through interviews, all academic leaders (PB7-PB11) defined performance evaluation as a summative practice aimed primarily at assessing teacher effectiveness.

Although the senior leader (PB7) in charge of quality assurance confirmed that the evaluation form was carefully designed to measure teaching quality, classroom practices, teacher-student relationship, course content and learning outcomes, most middle leaders (PB8, PB9, PB11) disagreed, saying that the evaluation was taken for granted. The main goal was to meet the quality assurance requirements for program accreditations. Two middle leaders highlighted:

Regarding the evaluation, we follow guidelines for quality assurance. We evaluate teachers by using surveys with students. The survey results help faculty and institution to produce reports for quality assurance. (PB8, Vice Rector, HRM and FM)

In evaluation, we assess teacher teaching quality, classroom management, course contents, and teachers' communication with students and colleagues. We need to produce reports to fulfil quality assurance and program accreditation. (PB9, Vice Dean, Faculty of Agriculture)
The above responses imply that the current evaluation form has been driven by the national qualification framework that focuses on achieving program outcomes rather than on developing teacher performance competencies. Therefore, many teachers addressed similar issues of performance evaluation in group discussions that the evaluation virtually existed and did not associate with other management functions such as promotion and rewarding. Two teachers (TB12-TB14) emphasised:

The purpose of teacher evaluation needs to be clarified. We never receive any feedback after evaluation. The evaluation is ad hoc and sometimes does not exist. (FGD2B, Government Teachers)

The emphases from academic staff reveal that the current evaluation form lacks cohesive procedural and validity to assess individual performance competences. The evaluation practice has focused on teaching and learning outcomes more than classroom environment and teacher well-being. In other words, the performance evaluation and its results did not reflect teacher performance competencies and well-being since it does not connect with promotion and compensation, as highlighted by teachers at the studied institution.

In addition, the study found that Institution C also applied summative form for academic performance evaluation. The narratives from academic leaders (PC12-PC15) showed that the performance evaluation measured teacher outcomes rather than focused on professional development and career promotion. Although the senior leader (PC12) said the evaluation tools were well designed with 1 to 5 scales to assess teaching outcomes and academic activities, some middle leaders (PC13, PC14) disagreed. One (PC13) thought the evaluation tools needed revamped to collect accurate information to promote teacher professions. Another leader (PC14) contended that the evaluation should be made with constructive
feedback to enhance teacher performance. In this case, it was perceived that the evaluation practice had little effect on teacher advancement. One middle leader reiterated:

The evaluation places importance on teaching and learning outcomes. If teachers teach the subject well, students must be able to do the job. Also, the evaluation focuses on teachers’ time management and professional ethics. If teachers can handle classes effectively, meaning teachers are good teachers. (PC15, Vice Dean, Faculty of Land Administration and Planning).

Of the participating HEIs, the implementation of performance evaluation at Institution D tended to be more strategic focusing on teaching and research outputs since the evaluation form combined summative and formative objectives. All academic leaders (e.g., PD16, PD17, PD18) described that the evaluation was conducted twice in a study term. The mid-term evaluation was undertaken in week 8, and the final evaluation was carried out by the end term, saying week 16. The faculty leader (PD16) also confirmed that the mid-term evaluation aimed to collect students' feedback for improving teaching quality, class management, instructional materials, and teacher-student interactions. The end-term evaluation mainly assessed teaching and learning outcomes against course outlines. The deputy director (PD17) maintained that, after evaluation, feedback was anonymously made for teacher improvement. She shared:

We keep feedback confidential. We do not share what weaknesses teachers have. We work to improve teacher weaknesses case-by-case. If teachers need to improve at teaching or give learning materials to students, we consult them personally. We arrange a meeting for anonymous feedback. (PD17, Deputy Director, Graduate School)

The academic leaders emphasized that combining formative and summative evaluation provided clear picture of teacher performance and the underlying issues that the faculties and departments could offer immediate remedies. Some teachers expressed:
I am a teacher-researcher, so the evaluation is twofold. The faculty conduct one by collecting feedback from students using questionnaires. Another evaluation is handled by Research Innovation Centre (RIC). This evaluation focuses on research outputs and project engagement. (TD21, government teacher)

The faculty produces evaluation reports on teaching performance. Based on the evaluation results, teachers are rated from 1 to 3. Rating 3 means the most outstanding teacher or the most popular teacher. The quality assurance team releases the final evaluation results annually in September. (TD22, government teacher)

In parallel, contract teachers (FGD2D) commented:

Regarding teacher evaluation, […] we have two types. One is conducted by the Research Innovation Centre (RIC), and another evaluation is carried out by faculty through students' survey feedback. The RIC’s assessment focuses on research productivity, while faculty evaluation includes teaching quality and supervision of [PhD, master, undergraduate] students. (TD23, contract teacher)

I was evaluated at the end of the academic term. The evaluation has been made by the student and the faculty, focusing on teaching effectiveness, teacher-student interaction and other indicators mentioned in the work agreement. (TD24, contract teacher)

The emphases made by teachers indicated that Institution D has used a robust evaluation system to promote their performance competencies. It is also noted that the implementation of performance evaluation at Institution D has connected merit-based practices since it links the performance outcomes with financial rewards and other benefits to motivate faculty staff, both lecturers and lecturer-researchers, to pursue teaching and research excellence.

5.2 Academic compensation system

Academic compensation, including salaries and career promotion, is central to securing individual well-being and sustaining institutional development (Altbach et al., 2012). Therefore, academic compensation must be fair and transparent to all academic employees.
(Kekäle, 2015). However, this study found that the academic compensation in the studied institutions was rigid and variable, lacking fair and transparent process in rewarding and promotion of academic staff. In this context, the practice of compensation has affected academics’ well-being and motivation.

At Institution A, the study found that the compensation in terms of salaries and incentives for academic civil servants has followed the government pay grid. At the same time, the payment for contracted staff has been variable to the teaching rate accounted for the obtained degree and experience. All academic leaders (PA1-PA6) said that the salary system was rigid, with an estimated amount of 1,539,874 Riels (about 384.96 US dollars), and likely increased to 1,671,000 Riels (USD 417.75 US) after getting a promotion. In addition, government teachers could receive financial incentives, pensions, and free Medicare at a state expense. Academic leaders (PA1, PA2, PA6) explained variant remuneration regarding contract teachers. One leader said:

The teaching wages differ on qualifications and experiences. A teacher with a bachelor's degree can get 5$ per teaching hour; a teacher with a master's degree receives 8$ per teaching hour, and a teacher with a doctoral degree can get over 10$ or more depending on negotiation. (PA6, Acting Head, Personnel Office)

Similarly, the study found that the government pay grids were applied for the academic compensation and rewards especially for civil servants at Institution B. In the case of civil servant teachers, the government payroll set a fixed salary scale and pension plan. In contrast, the payment of contract teachers was viable for teaching hours with different rates. The senior leader (PB8) in charge of human resources estimated that the government teachers could receive a monthly salary ranging from US$380 to US$ 450 UD. The different salaries depended on teacher seniority and work experience. The different salary scales also affected
teacher motivation. Some teachers felt discouraged from continuing their careers with the institution. Two teachers (TB12, TB13) contended:

We receive only wages from our teaching. We always need to realise if the university has any incentives and rewards for teachers. We have yet to receive any so far. (FGD2B, contract teachers)

The findings imply that academic compensation and reward system at Institution B do not follow merit-based approach or pay for performance practice. In this context, the rigid payment system has been less attractive to competent people to enter academic careers.

In addition, the study found that Institution C applied the same compensation and reward system for academic staff. All academic leaders (PC12-PC15) at Institution C described the rigid payment and reward system. Generally, the government salaries ranged between 340 US dollars to 450 US dollars depending on teacher seniority and positions. A senior leader in human resources said the government teachers also received financial incentives for their teaching and administrative tasks and a bonus for Khmer New Year. In addition, non-financial incentives were given as appreciation letters and medals for government officials holding management positions. The government teachers could receive pensions and free Medicare at public hospitals. However, the remuneration for contract teachers varied, depending on qualifications and experiences. In general, contract teachers received wages accounted for their teaching services. One middle leader explained:

We give teaching wages to contract teachers. Teachers with master’s degrees receive $8 per hour, and PhD holders can get $9 per hour. The associate professors get $9.5, and professors may get $10. The university gives the remuneration. (PC15, Vice Dean, Faculty of Land Administration and Planning)
In short, the payment system in Institution C rigidly followed the government payroll in the case of civil servants. At the same time, the remuneration of contract teachers varied, depending on qualifications and experiences. The findings imply that the payment system under study does not follow performance-based or merit-based pay.

Among the participating HEIs, the study found a merit-based pay used by Institution D. The academic leaders described that lecturers and lecturer-researchers were paid by the government salary scale and the institution's pay policy. The deputy director (PD17) explained that lecturers and lecturer-researchers were compensated and rewarded for teaching excellence, research engagement, publication, and project implementation. An interview with a vice dean (PD018) confirmed that the annual bonus was around US$ 320 US equivalent to the 13th-month salary for teachers and researchers. Several teachers commented:

- The faculty sets indicators for incentivising and rewarding teacher-researchers. The indicators include publications, project works and thesis supervision. (TD22, government teacher)

- I have received an appreciation letter in recognition of my outstanding performance. The letter is displayed on the institute's website. The faculty management also treats dinner top-performance staff. (TD23, government teacher)

- Besides teaching wages, I earn extra from the projects. For example, I manage two projects, so I receive more income. (TD24, contract teacher)

- I have been awarded as an outstanding researcher, so the institute has given me the 13th-month salary as a bonus. (TD25, contract teacher).

The responses from teachers regarding compensation and benefits at Institution D indicate good movement to use merit-based pay approach. Although some teachers feel the amount of incentive is not equate to the workloads, it is a good motivation practice.
Summary

A summary in Table 19 reveals variant practices of academic career management in the four higher education institutions. In general, the study found that state recruitment is widely conducted by government agencies, e.g., the Ministry of Education, Youth and Sport (MoEYS), the Ministry of Agriculture and other line ministries to select and hire civil servants to be academic staff. Additional to the centralised recruitment process, state agentic roles and powers create controversial recruitment process at Institution C. Although the centralisation is deregulated for academic recruitment at Institution D, the practice remains following academic inbreeding. To a less extent, the academic self-regulated recruitment is carried out by the participating institutions. However, the current practice has been reactive and inconsistent across the participating faculties and institutions. The market-oriented system has not been in place due to a lack of external involvement in the academic recruitment process. This also concerns the nature of the participating institutions that are state-funded bodies; therefore, there is limited the involvement of external stakeholders in staff management process.

The professional development is resource dependency; therefore, it has been periodically conducted in most case institutions due to a lack of strategic planning and institutional investment funds. Therefore, the existing professional development programmes rely on project interventions, such as the Higher Education Improvement Project (HEIP). Although some programmes are conducted for enhancing subject knowledge and research skills, resource shortages limit the opportunities for academic staff to attend long-term training and development programmes.

The implementation of performance evaluation is mostly summative to assess teaching and program outcomes. Although various forms and multiple rubrics are designed to assess
teaching quality, classroom management, teacher-student interaction, and academic activities, the evaluation primarily aims to determine teacher effectiveness and fulfil quality assurance requirements. Among the participating HEIs, the study found Institution D has combined formative and summative assessments to identify the strengths and weaknesses of academic staff and to develop their competencies especially in responses to the rising demand of specialised academic workforce.

Finally, academic compensation such as salaries, incentives and benefits are piecemeal and barely enough to support academic well-being and their families. The civil servants can receive teaching wage to supplement the basic salary from the government; however, the amount is not enough to sustaining their living standards. Small pensions and free Medicare are given to civil servants, and career promotion follows a seniority structure. Although Institution D provides a more generous payment, including annual bonuses, research incentives, and other benefits, the faculty staff feel that the workloads have outweighed the renumeration, and as a result, cause a high turnover rate among young talented academics.
Table 19 A summary of academic career management among the studied HEIs

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Institution A</th>
<th>Institution B</th>
<th>Institution C</th>
<th>Institution D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic recruitment</td>
<td>MoEYS conducts recruitment to select civil servants. Internal recruitment is conducted by faculty and department. But it is inconsistent and reactive.</td>
<td>MoEYS selects civil servants; internal recruitment is inconsistent and reactive, conducted without proper guideline.</td>
<td>The Ministry of Agriculture selects civil servants. Internal recruitment is conducted by faculties and departments using different processes.</td>
<td>Faculties and departments identify job need, advertise a vacancy, and conduct recruitment. The faculties can propose a nomination of potential contracted staff to sit for state exams to become civil servants.</td>
</tr>
<tr>
<td>Academic professional development</td>
<td>No pre-service training, but probation is required for civil servants; in-service training is conducted based on external funds</td>
<td>No pre-service training, but probation is mandatory for civil servants. In-service training is periodical, relying on external stakeholders.</td>
<td>No pre-service training, but probation is required for civil servants. In-service trainings depend largely on project interventions.</td>
<td>No pre-service training; probation is required for civil servants. In-service training is conducted based on need assessment yet remains relying on external funders</td>
</tr>
<tr>
<td>Academic performance evaluation</td>
<td>Summative assessment to determine teaching effectiveness and to meet quality assurance requirements</td>
<td>Summative assessment to evaluate teacher effectiveness and to fulfil quality assurance requirements</td>
<td>Summative assessment to evaluate teacher effectiveness and to fulfil quality assurance requirements</td>
<td>Formative and summative assessment to identify strengths and weakness and to determine performance outcomes against work agreement</td>
</tr>
<tr>
<td>Academic Compensation</td>
<td>Government salary grid and internal wage system; pension, free Medicare, and seniority-based promotion</td>
<td>Government salary and teaching wage, additional financial support for administrative positions</td>
<td>Government salary plus teaching incentives, additional income from projects</td>
<td>Government salary plus teaching incentives, research incentives, annual bonus</td>
</tr>
</tbody>
</table>
5.3 Alignment of academic career management

This section presents the findings about the alignment features of academic career management to address research question two (RQ2): To what extent are academic career management practices aligned to enhance academic teachers’ competencies?

Based on the research framework, the concept of ‘alignment’ stems from human resource management (see Delery & Doty, 1996; Wright & Snell, 1998), which refers to the degree of ‘congruence/linkage’ between management dimensions and institutional strategy, or the “mutability/consistency” among management dimensions within the system (Boxall, 2012).

Based on the process approach, the alignment of management dimensions can be observed by distinctiveness (e.g., attractiveness, clarity), consistency (e.g., legitimacy, relevance), and consensus (e.g., fairness and transparency).

5.3.1 Distinctiveness

The distinctiveness of management practices is crucial to attracting individual attention and interest to the job (Bowen & Ostroff, 2004). The distinctive management system exhibits a clear task and an attractive salary package to capture competent people to enter academic professions (OECD, 2020). The present study, however, found that the practices of academic career management did not exhibit distinctive features such as job descriptions and attractive salary packages. Therefore, the management system contains high ambiguity.

The review of the educational strategic plan showed that Institution A attempted to strengthen the academic career management system to improve quality teaching and cutting-edge research. In doing this, Institution A outlined its strategic plan that the faculties, departments,
and offices had to conduct a selective selection process and provide benefits to attract effective teaching personnel. Further, Institution A was expected to develop human resource management (HRM) and development (HRD) manuals\textsuperscript{15} to enhance professional standards, professional ethics, and research-industry linkage.

The abovementioned documents showed policies specific to attracting and retaining academic staff. However, the findings from interviews and group discussions revealed contrastive aspects. Although the senior leader (PA1) in charge of human resource management claimed: that the institution has a straightforward procedure to elicit candidates, the mid-level leaders (PA2, PA3, PA5) share different opinions. The mid-level leaders (PA2, PA3, PA4) observed that the recruitment process was not followed any clear standards nor had any descriptions of tasks and benefits. The acting head of the human resources office (PA6) firmly ascertained that the recruitment of contracted staff was enclosed and discretely carried out by individual faculty. He told the researcher:

The recruitment of teachers is carried out by individual faculty and department. I am not sure about the process. I do not know when and how the faculties select and hire their teaching staff. (PA6, Acting Head of Human Resource Office).

In this case, the management of academic careers at Institution A does not present unambiguous procedures to the concerned offices. The hiring process is not open to fair competition.

\textsuperscript{15} When this study was conducted, the human resource management and development manuals were not yet developed and implemented at Institutions A, B and C. The manual was being piloted at the institution D.
Similarly, the study also found a lack of distinctive features of academic recruitment at Institution B. The strategic planning review\textsuperscript{16} showed a similar initiative to manage and develop academic human resources by ensuring effective recruitment and professional development to enhance professional standards, ethics, and research-industry linkage. In contrast to these policy statements, the findings showed high ambiguity in the academic career management system.

The senior leader (PB8) in charge of human resource management told the researcher that the current execution of academic career management did not have clear selection, evaluation, and promotion guidelines. The leader reiterated that the management of academic civil servants followed state procedures while internal management guideline was not in place. In group discussions, teachers (TB9, TB10, TB11) also confirmed that the recruitment was not publicly advertised. One teacher recalled:

\begin{quote}
I know about the open position from my friend working here. So, I come here to apply for the job. (TB10, government teacher)
\end{quote}

The comment from teachers indicates a need for a more open process to hire academic staff at Institution B since the selection process seemed to be enclosed. Such narrow recruitment practice was also implemented by Institution C.

\textsuperscript{16} The strategic goals of Institution B are relatively similar to the goals of Institution A because both institutions are relatively young and have several common characteristics such as size, resources, and number of faculties.
The study showed that Institution C aimed to develop agriculture and sustain natural resources by providing quality education and research programmes\textsuperscript{17}. To achieve its goals, Institution C planned to introduce the manuals for human resource management (HRM) and development (HRD) to ensure competitive recruitment and careful evaluation to improve teaching and research quality. The review of its strategic planning also indicated a clear policy intent to strengthen academic career management and enhance professional standards, professional ethics, and research skills. However, the findings showed contrasting features of academic career management.

The senior leader in charge of human resources (PC12) reluctantly described whether there was any alignment feature of personnel management since she perceived that the government agencies legitimated the existing system. The leader further emphasised that state legitimacy, such as the law on public civil servants, has mandated the selection criteria and procedures for government officials. The middle leaders (PC13, PC14, PC15) added that state employment laws gave no voice to the institution conducting an attractive selection process. The leader commented:

\begin{quote}
I am unsatisfied with the government's procedure for selecting civil servants, but there is no better alternative. […] Government teachers have adequate subject knowledge but limited competencies in pedagogy, communication, and professional ethics. (PC12, vice-rector)
\end{quote}

\textsuperscript{17} The 10-year strategic planning 2021-2030 was written in Khmer. The statement missions were translated from Khmer to English languages in this study.
The above narrative reflects unclear procedures to conduct standardised recruitment to select high-competent academic staff.

Among the four institutions, the findings showed that Institution D had implemented a clear hiring process and displayed attractive benefits to academic staff to achieve its ten-year strategic plan\(^\text{18}\) of providing quality and equity education in science and technology to accelerate Cambodia's economy. In so doing, Institution D integrated a clear process into academic career management to ensure effective recruitment and selection. As observed from interviews with leaders (PD16-PD18), the faculties and departments had rigorous staffing processes to ensure effective selection. One academic leader (PD16) explained that the faculties and departments had identified the needs of the academic workforce with clear job descriptions. Another academic leader (PD17) consistently reiterated that the faculties had a recruitment committee to conduct job specifications and design the recruitment plan in line with the human resource management strategy. These processes ensure that recruitment is clear and attractive to draw competent and talented people to enter academic professions.

### 5.3.2 Consistency

Consistency establishes the constant effect of management practices through time and space regardless of modalities and interactions. Consistency is illustrated by instrumentality and validity to guide individual effort, behaviour, and action towards achieving strategic goals (Bowen & Ostroff, 2004). The present study revealed that the current practices of academic career management did not compose strong instrumentality and validity to shape individual

\(^{18}\) The strategic goals of Institution D are more ambiguous than the goals of other HEIs in this study.
effort, behaviour, and action to achieve teaching and research excellence as stated in the institutional strategies.

At Institution A, the middle leaders (PA2-PA6) said the institution had yet to establish a systematic process and plan for academic professional development. Some leaders (PA2, PA5) described that the existing training programmes relied on external funders; therefore, the training objectives were unlikely relevant to developing institutional capacities and teacher competencies. In a group discussion, some teachers (e.g., TA1-TA8) shared:

> Previous trainings [we have attended] are less relevant to developing our knowledge and skills. Those trainings serve more purposes for the project goals. (FGD1A, government teachers)

The lack of instrumental components of academic career management could not enhance individual capacity, skills, and behaviour to meet the institution’s goals.

Concurrently, the study found a similar practice of academic career management at Institution B. It needed to embrace fundamental instruments and rigorous elements to evaluate and develop academic professions as outlined in strategic planning. Teachers (TB9; TB10; TB12, BT13) complained that professional development programmes were irrelevant, while performance evaluation lacked constructive feedback.

For Institution C, the senior leader (PC12) said the recruitment lacked rigorous procedures to measure individual contribution to institutional development. Other leaders (PC12-PC15) also emphasised the rigorous process for recruitment, development, evaluation, and compensation since the implementation of these management dimensions was disconnected and varied from one faculty to another. Other middle leaders (PC13-PC15) described that
academic recruitment was not rigorous to elicit the best candidate from large pools. The recruitment implied a lack of workforce mobility.

Academic career management at Institution D presents better rigour and validity concerning the selection process and professional development. All academic leaders (PD16-PD18) described that Institution D has developed its strategic recruitment and professional development plan to ensure individual career advancement. The leaders (PD16-PD18) explained that the faculties and departments developed their plans based on teacher needs assessment. The plan was finally submitted for review and approval. In another interview, the deputy director (PD17) told the researcher that the faculties had committees for conducting the training need assessment and designing the training packages. In the discussions, teachers confirmed the relevance of training content and the objective to enhance their competencies.

Teacher commented:

There are many training programs. We can select the relevant ones to improve our capacities. […]. The training outcomes are excellent and relevant to build research capacities and project management. (TD21, government teachers)

5.3.3 Consensus

Consensus is demonstrated through employees’ agreed perceptions of whether the management practices adhere to a core principle of transparent management and shape individual attitudes and behaviours towards the intended goals (Bowen & Ostroff, 2004). In this study, the consensus feature is low, demonstrated through the disagreed perceptions among academic leaders and teachers as to whether the practices of academic career management are procedural, interactional, and transparent. The findings showed, in general,
that the academic leaders and teachers had disagreed perceptions of academic performance evaluation and compensation.

At Institution A, the disagreed perceptions were observed from the senior leader (PA1), mid-level leaders (PA2, PA4, PA5) and teachers (TA1-TA8) regarding whether the practice of evaluation and compensation was procedural and interactional. The senior leader (PA1) tried to ascertain the interactions between performance evaluation and compensation systems; however, the middle leaders (PA2, PA3, PA4, PA5) contented that the evaluation was mainly driven by quality assurance requirements with little interaction with compensation practice. Here are their disagreed comments:

We change the evaluation procedures—from the end semester to mid-semester, hoping to have a clear picture of teacher performance. We also use three evaluation forms modifying evaluation rubrics and including multiple scales to ensure accurate evaluation results. (PA1, Vice Rector)

In contrast, the middle leaders argued:

Regarding the evaluation, yes, we have three forms for faculty, student, and teacher. The faculty assessment is generally good, but teacher-self and student assessments are questionable. So, we need an excellent evaluation team and a robust system. (PA2, vice dean of business faculty)

In group discussions, some teachers (TA3, T5, T6) emphasised their concerns about performance evaluation and compensation practices. Although the senior leader (PA1) claimed the procedural practice of performance evaluation using student assessment, teacher-self assessment, and faculty assessment, the teachers (TA1-TA8) did not perceive such positive views. Some teachers (TA1, TA2, TA4) observed: that the evaluation lacks integral and unreliable elements to reflect classroom practices. Two teachers echoed:
The practice of performance is not rightly done. […] The problem concerns using the same questions for three assessors: faculty, student, and teacher. So, the evaluation results are not accurate. (TA2, government teacher).

The practice of performance evaluation is improving, but using teacher-self-assessment is problematic. As a teacher, I always evaluate myself as 'good'. (TA4, government teacher).

The use of three forms for performance evaluation is effective. […] The evaluation results increase my teaching wage. (TA7, contract teachers)

Besides, a lack of consensus on performance evaluation and compensation was also confirmed by the participants at Institution B. Some teachers felt sceptical about the impact of performance evaluation on individual performance and career development. Some teachers (TB9, TB15) echoed that performance evaluation did not cover fundamental aspects of classroom practices. In contrast, others complained that the practice of performance evaluation was just a token without valid tools to determine individual work outcomes. This finding implies a need for more agreed perceptions among teachers regarding the effectiveness of performance evaluation.

In addition, some teachers at Institution C complained about the lack of equal opportunity for their professional development and promotion. Although the senior leader (PC12) reaffirmed that the institution [has] sent academic staff for short- and long-term professional development in the Philippines, Thailand, and European countries, teachers (e.g., TC13, TC14) argued that most training was given to academic civil servants. One teacher criticised:

There are several training programmes. However, they are for government officials, especially those with high positions. I only attend short-term training, which is irrelevant to developing teaching and research competencies. (TC17, contract teacher)
Teachers in group discussions also confirmed the lack of transparency in compensation systems. Some teachers (TC16, TC17, TC19) complained that academic promotion and rewarding practices did not reflect individual efforts and outcomes. Contract teachers noted that some inactive staff [government officials] were also getting promotions and salary raises. It was not a fair practice.

In the context of Institution D, academic leaders and teachers also emphasised different opinions on compensation and promotion practices. For example, the deputy director (PD18) lamented that the government pay schemes legitimated the salary scales and other incentives not equated to the workloads. The rigid pay was barely enough to support the living conditions. Some teachers shared:

I do not know how fair and transparent evaluation and compensation are. I am not entirely ok with the compensation system which follows the government payroll. It is hard enough to support family life. (TD22, government teacher)

Last year, I got an outstanding performance in research but only received an appreciation letter. […] There is no specific compensation policy for contract teachers. So far, I have received only teaching wages from my teaching services. (TD25, contract teacher)

The above findings imply a limited consensus perception among academic leaders and teachers regarding the practices of academic career management, mainly underlying performance evaluation and compensation systems.

**Summary**

In summary, the study shows limited alignment features of academic career management in the present study. The academic recruitment through state agencies and institutions lacks
distinctive features; therefore, it is less visible to attract large competent pools to apply for the positions. The lack of distinctive feature of academic recruitment may concern a tight state of control on selection conditions and procedures. For example, the state sets prerequisites for selecting civil servants as university teaching staff. The state also regulates pay grid and promotion of academic civil servants. Also, the state selection exams also fail to assess individual contribution to develop academic professions and institutions.

It was also observed that managing academic careers in most studied institution lacks consistent features to legitimate individual attitude and behaviour to meet the institutional needs. The findings also show a lack of relevant training programmes to enhance knowledge and pedagogical competences to achieve institutional goals on improving teaching quality. It was noted that the objectives of training programs are more relevant to the agenda of funders rather than institutional goals on development academic professions. Although a probationary training is mandatory, it is less legitimated to enhance teaching and research competencies. In this case, the probationary appointment is defined as a token formality for the employment of civil servants.

In addition, the academic performance evaluation and compensation are disconnected; therefore, it is less effective and transparent. It was observed that performance evaluation is driven by quality assurance requirements, giving more attention to determining teaching effectiveness. The performance evaluation is less accurate in reflecting the reality of classroom practices.

Finally, the academic compensation system regarding salaries and teaching wages is barely enough to support the living conditions. The salaries are piecemeal, unequal to the workloads
that academic teachers had to hold. Therefore, they feel demotivated and likely want to quit the academic positions in the studied contexts.

5.4 Challenges for academic career management

This section presents the findings about key challenges for academic career management to address research question three (RQ3): What are the challenges for academic career management in the studied institutions? Thematic analysis revealed three key challenges for academic career management, including national factors (e.g., the influence of state agency, legitimacy), institutional factors (e.g., institutional negligence, tacit guideline) and contextual factors (e.g., lack of human resources, financial shortage).

5.4.1 Influence of legitimacy and agentic power

The potential challenge for academic career management in the studied institutions concerns the influence of state agencies and regulatory frameworks on the practices. All academic leaders (PA1-PA6) at Institution A described that state policies and agentic powers remained to shape the recruitment of academics at the institutional level. The senior leader (PA1) in charge of human resources explained: that the government employment laws mandate the selection conditions and procedures, and other state agencies, e.g., the Ministry of Education, Youth and Sport, the Ministry of Public Civil Servants, Ministry of Finance tightly control the process of recruitment, appointment, promotion, and compensation system. In this context, the institution had little power to manage academic civil servants. One academic leader said:

The university does not have the power to sanction or remove civil servants. They have got lifetime employment. (PA4, Vice Dean, Faculty of Science and Technology)
The influence of state legitimacy on academic recruitment also resulted in an unsuitable and inadequate workforce to meet the rising demand for student enrolment. Two leaders commented:

There is a need for more science teachers in my faculty, but the government cannot provide them. The faculty must rely on something other than government recruitment. (PA4, vice dean, faculty of technology and science)

The university receives less than 50% of the staffing quota proposed to the government, e.g., MoEYS. This issue happens to all public HEIs. (PA06, acting head, personnel office)

The state agencies and legitimacies have also shaped the practices of academic career management at Institution B. All academic leaders (e.g., PB7-PB11) mentioned that state agencies, especially the MoEYS, controlled the whole process of academic employment. The senior leader noted that the coverage of national policies and laws limited institutional autonomy to conduct a competitive selection of academic staff.

Similarly, the tight control of government agencies tended to provoke complex and conflicting processes of academic career management at Institution C. Academic leaders (e.g., PC012, PC15) described the bureaucratic process of recruitment, promotion, and compensation limited institution freedom to attract and motivate academic staff. The senior leader (PC12) told the researcher that line ministries had more administrative power over academic power; therefore, the selection and promotion of academic personnel, especially civil servants, were not rightly done based on individual merits.

The influence of state agencies and legitimacies remains a crucial constraint to the staffing process at Institution D, although it has been decentralised to promote autonomy in
recruitment and promotion. Through interviews, all academic leaders (PD16-PD18) maintained that state agencies and employment laws could threaten institutional autonomy. One leader (PD18) contended that the government employment laws tightly controlled the purse for academic payment and reward. Consequently, the rigid pay affected academic motivation and caused a high turnover rate, especially among young talented staff. The leader shared:

I observe young, competent staff leaving their jobs, although they have been working for years. (PD16, vice dean, faculty).

5.4.2 Institutional negligence and tacit guideline

Institutional factors such as negligence and a lack of comprehensive guidelines were considered critical challenges for operating academic recruitment, professional development, and performance evaluation. All academic leaders (PA1-PA6) at Institution A repeatedly mentioned that the current practices of academic recruitment had not followed any specific guidelines, nor had they yet to develop one suitable for the practice. Furthermore, some leaders complained about the conflicting roles of supporting offices and departments, such as between the Office of Administration and Finance, the Office of Human Resource Management, and the Office of Quality Assurance. One leader (PA2) noted that these supporting offices tried to compete for power, creating an unpleasant working environment which affected individual motivation and lost job interest. One teacher echoed:

The complex management process causes uncertainty in our career life. The complex management also takes our motivation and retention away. We will leave our teaching jobs to start a business in the future. (TA2, government teacher)

The institutional negligence in building a robust management system also affected the
promotion of corporate culture and collaborative working environment. Some teachers (e.g., TA5, TA6 and TA7) shared their impressions and experiences while encountering at their workplaces that the line supervisors did not fairly treat them. One teacher complained:

I feel unmotivated and lost interest in pursuing my career at the university. An unpleasant working environment has affected my career life and unliveable wages. (TA4, government teacher)

The institutional negligence and tacit guideline have also affected academic career management at Institution B. All leaders (PB7-PB11) noted that a lack of clear guidelines caused inconsistent selection across faculties and departments. One middle leader (PB9) noted that the faculties and departments could less likely select suitable teachers for the programs without comprehensive guidelines. In this case, teachers shared their experiences of getting employed without going through the selection process. Some teachers (TB14, TB15) said they got the job without getting through any hiring procedures.

Likewise, at Institution C, the negligence of faculties to build attractive programmes and generate income is a pivotal challenge to hire more staff for their needs. The senior leader (PC12) explained:

I note that some faculties are poor, lacking attractiveness to attract student enrolments, but the faculty management does nothing. They are waiting for the supply of teachers from the government. (PC12, vice-rector)

Regarding tacit guidelines, another leader mentioned that the institution did not have proper policies and procedures for compensation and promotion, which caused uncertainty in academic career prospects. One mid-level leader commented:
Because of no proper policy for compensation and promotion, academic teachers feel discouraged and are likely to quit their job in the future. (PC14, vice dean)

The concern of tacit guidelines for academic career management was also described by academic leaders (PD16-PD18) at Institution D. One leader (PD16) noted that the institution still needed a precise staff planning and monitoring system to enhance effective personnel management and performance outcomes. Another leader (PD17) recognised that the tacit guideline for compensation and promotion resulted in unfair assessment and less transparent promotion. One leader complained:

Because of less transparent promotion, I observe that young people leave their jobs although they have worked here for years. Young academics have a high turnover rate because the institution does not have a proper motivation system. (PD18, vice dean)

**5.4.3 Resource shortage and conflicting working environment**

Besides tacit guidelines and institutional negligence, contextual factors such as the scarcity of human capital and finance have restrained the practices of academic career development in the studied institution.

In the context of Institution A, academic leaders (PA1-PA6) considered that the shortage of human and financial resources was a potential threat to establishing a solid system of academic staff management. Some leaders (e.g., PA1, PA2, PA6) noted that the institution had yet to establish a comprehensive system for teacher management, and others (e.g., PA3, PA5) emphasised that the institution did not have career pathways and policy on professorial ranking. In this case, the institution could face challenges promoting and retaining effective teachers since they [teachers] felt uncertain in their careers.
Similarly, the contextual factors also shaped the implementation of academic career management at Institution B. In another interview, a middle leader (PB10) described that resource scarcity restrained teacher career advancement since they [teachers] did not want to continue long-term study programmes. Teachers shared the concern:

More financial support is needed when I pursue a higher degree study. I need to make income and take care of families. (TB14, contract teacher)

Due to financial shortage, the compensation in terms of salaries was rigid and variable, affecting motivation and interest to continue their career with the institution. Some teachers (TB9, TB11) felt that the government salaries system was insufficient to sustain family life, while contract teachers (TB12, TB14) were concerned about unstable incomes. They earned very little from teaching services. One complained:

The teaching wage needs to be more secure to support living standards. During term break, I cannot make income from teaching. (TB12, contract teachers)

The less generous remuneration has affected teacher retention to stay working with the institution. Therefore, academic teachers become moonlighting, hunting for a second job for extra income.

The contextual constraints to academic career management also occurred at Institution C. All academic leaders (PC12-PC15) told the researcher that an unclear management structure caused several complexities in daily management. The senior leader (PC12) emphasised that the fractures in corporate governance related to human resource management, finance allocation and academic area ignited several constraints to managing and promoting academic careers. Some middle leaders (e.g., PC13, PC14) mentioned an unbalancing power
among the supporting departments as provoking tensions in the management system. The lack of corporate culture also created ambiguity in working together to develop teacher professions.

Another challenge was less financial robustness to strengthen the academic management system. Most educational leaders (PC013; PC14; PC15) agreed that financial deficits could not make teacher professions attractive to competent people. One middle leader (PC13) emphasised that without a healthy budget, the faculties could not hire people outside the institutions; therefore, their graduates were prioritised for interns and volunteers. Although most academic leaders acknowledged that their graduates had 70% to 80% of subject knowledge for the job, one leader (PC14) shared the concern that employing their graduates could lead to a homogenous work culture, lacking diversity in the academic workforce. One leader commented:

Another concern relates to internal employment since we hire graduates for the job. We assign them tasks without giving them sufficient training. Those graduates do not have a deep understanding and extensive experience in university teaching. (PC13, faculty of veterinary medicine).

The final challenge to academic career management concerns rigid compensation and piecemeal incentives. Most educational leaders (PC13, PC14, PC15) briefly described that the institution did not have a generous pay system. The current practice follows the seniority pay system. Academic leaders (PC13, PC14) perceived that such payment could not motivate and retain teachers, and consequently, they [teachers] would likely quit their jobs. Another leader (PC15) agreed that someone with a PhD might not work for a less-paid job. As the teacher complained:
The university does not have generous compensation, although teacher workloads are heavy. We [teachers] receive not small remuneration, just 8$ per hour. The total amount is around 300$ and sometimes less than this. (TC14, contract teachers)

The rigid payment was also considered a pivotal constraint to maintaining individual commitment and career development at Institution D. The deputy director of graduate school (PD17) noted that some lecturers felt laid-back and lost endeavour to improve their capacities in response to the educational reform because they concerned income generation. Other academic leaders (PD17, PD18) concurred that senior academic staff tended to have poor commitment and motivation to advance their careers.

The final constraint to academic management in Institution D concerns unclear job assignments and career ladders. Although a job agreement was made between academic staff and the institution, some teachers (TD21, TD22, TD23) echoed that the job design needed to be specified the tasks. Therefore, one teacher emphasised:

I do not know what to do regarding my job. We need a consistent system. This concern links with teacher compensation. We do not have precise regulations. (TD22, government teacher)

Contract teachers (TD24, TD25) also raised similar concerns regarding job descriptions, that the unclear job roles and responsibilities were due to a lack of career pathways for contracted employees. In this case, they felt absurd in career planning.

Summary
The findings show three potential challenges to academic career management in the studied contexts. It was noted that state agencies and national employment laws, such as the Law on
the Common Statute on Public Civil Servants, legitimated uniform conditions and recruiting procedures for academic civil servants. The influence of state agencies and laws has limited institutional autonomy to hire suitable people for the right position.

The institutional negligence and tacit guideline also restrained the establishment of robust management systems in the studied contexts. The tacit guideline has also caused fragments in the academic recruitment management at Institutions A, B and C. The institutional negligence has also provoked tensions and conflicts among supporting offices and departments to manage the academic staff in all institutions.

The final challenge to the practices of academic career management concerns contextual factors such as a scarcity of human and financial resources. It was noted that a lack of human and financial resources had limited the opportunities for professional development and affected individual motivation to pursue academic excellence. Therefore, academic teachers feel demotivated to continue their careers with the studied institutions.
CHAPTER 6: QUANTITATIVE DATA ANALYSIS

This chapter presents quantitative data from an online survey of 200 academic teachers collected in the final research phase. SPSS Statistics Software was run to analyze the quantitative data to examine academic career management practices and alignment features in the studied institutions. The data analysis also highlighted key challenges to academic career management practices in the studied contexts. The following sections present the procedures for quantitative analyses and findings to address the research questions.

Section (5.1) describes descriptive statistics, including Frequency, Percentage, Mean, and Standard Deviation, to present the participants’ demographics. Tables and bar charts were used to illustrate the findings regarding gender, age, career type, and year of work experience.

Section (5.2) presents the findings to address research question (RQ1): How do Cambodian public higher education institutions manage academic careers in the changing governance context? The presentation of findings began with the scale reliability analysis to generate the value of Cronbach’s Alpha to show the internal consistency of the tested items. Descriptive analysis was performed to see the mean and overall mean scores. The Independent-samples t-test was run to compare statistically significant differences in the academics’ responses to career management practices in relation to gender (male and female) and career type (civil servant and contracted employee). One-way ANOVA was performed to compare the differences in the academics’ responses to career management practices among the four institutions. Meanwhile, Levine’s test, ANOVA’s Welch test, and Post Hoc-Games-Howell were conducted to compare the mean scores of unequal sample sizes selected from four Institutions A, B, C and D.
Section (5.3) describes the alignment practices in academic career management in the four HEIs. The findings address research question 2 (RQ2): To what extent are the management practices aligned to enhance academic careers in the selected higher education institutions? This section began with the scale reliability analysis to internal consistency based on the value of Cronbach’s Alpha. Descriptive analysis was conducted to see the observed items’ mean and overall mean scores. The *Independent-samples t-test* was performed to compare the responses between male and female groups and civil servants and contract teachers. *One-way ANOVA* was conducted to compare the alignment practices in academic career management among the four institutions. *Levine’s, ANOVA’s Welch, and Post Hoc* were tested to compare the academics’ responses to the alignment practices in the four institutions. The inferential statistics were reported and interpreted to examine the alignment practices of academic career management systems.

Section (5.4) explores key challenges to academic career management in the studied institutions. The findings answer research question 3 (RQ3): What are the arising challenges for academic career management under the studied institutions? The analysis began with the scale reliability test to display the value of Cronbach’s Alpha and was followed by descriptive statistics to see the mean item and overall mean score. The *Independent-samples t-test* examined academic teachers’ responses to key challenges in relation to gender and career type. *One-way ANOVA* was tested to compare statistically significant differences in academics’ responses to key challenges among the four institutions. The results from *Levine’s, ANOVA’s Welch, and Post Hoc tests* were reported and interpreted to examine statistically significant differences in academics’ responses to key challenges across the studied institutions.
In brief, the quantitative data were interpreted to verify the academic career management practices, the alignment features, and the challenges explored in the qualitative research phase.

6.1 The Participants' Demographics

Of 200 online survey forms administered to academic teachers through emails and online platforms (e.g., Telegram, Messenger, WhatsApp), 125 (estimated 63%) responses were obtained for the analysis. The response distribution was scattered across the four institutions: 53 were from Institution A, 34 obtained from Institution B, 21 returned from Institution C, and 17 others were from Institution D. Gender distribution was widened since over 80% of respondents were male, while female participants were accounted less than 20%. The dispersed distribution of gender was also observed regarding career types and institutions.

A cross-tabulation (see Table 20) shows that huge gender gap across the four institutions, revealing 44 males: 9 females at Institution A; 27 males: 7 females at Institution B; 19 males: 2 females at Institution C, and 11 males: 6 females from Institution D. More male than female academics imply the gender disparity among Cambodian academics participated in the study and reflect gender difference among Cambodian academics in the public higher education sector.19

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19 Cambodia’s Education Congress 2020-2021 showed that only 21.40 per cent, an estimated 3,518 of 16,438 academic staff in higher education were females. This figure is fourfold less than male staff (MoEYS, 2022).
The participants’ demographics presented in Table 21 also shows variant age groups among the academic respondents. As can be seen, more than half (52%) of the participants were aged between 31 and 35; 28% of others were between 26 and 30, and 17.6% of the remaining figures were between 20 and 25 years old. Few participants (combined 24%) were aged below 20 and over 36. More academics aged over 30 reflect the age eligibility to enter academic careers through government employment and contracted channel. Further, the majority of academic participants obtained master's degrees, accounting for 78.4%, followed by 16% doctoral degree holders and 5.6% bachelor's degree holders. Civil servants composed 75.2%, considered threefold more than contracted employees (24.8%). Of the academic participants, 40% were teachers/lecturers (teaching-only roles), 33.6% were lecturer-administrators, and 26.4% were lecturer-researchers. More academics with master’s degree holders reflects that a master’s degree is a basic requirement for entering

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20 Cambodia’s Education Congress 2020-2021 reported that 67.24% of Cambodian academic staff were master’s degree holders, 24.1% were bachelor’s degree holders 8.74% were doctorate degree holders (see MoEYS, 2022, p.p. 97 for a full report).
academic employment regardless of civil servants and contract positions in the present study of Cambodian higher education.

Table 21 A summary of the participants’ demographics

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<td></td>
<td>98</td>
<td>78.4%</td>
</tr>
<tr>
<td>Doctoral Degree</td>
<td></td>
<td>20</td>
<td>16.0%</td>
</tr>
<tr>
<td>Civil servants</td>
<td></td>
<td>94</td>
<td>75.2%</td>
</tr>
<tr>
<td>Employment type</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contract staff</td>
<td></td>
<td>31</td>
<td>24.8%</td>
</tr>
<tr>
<td>Teacher/lecturers</td>
<td></td>
<td>50</td>
<td>40.0%</td>
</tr>
<tr>
<td>Positions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher-admin</td>
<td></td>
<td>42</td>
<td>33.6%</td>
</tr>
<tr>
<td>Teacher-researcher</td>
<td></td>
<td>33</td>
<td>26.4%</td>
</tr>
<tr>
<td>Social science</td>
<td></td>
<td>85</td>
<td>68.0%</td>
</tr>
<tr>
<td>Science and technology</td>
<td></td>
<td>33</td>
<td>26.4%</td>
</tr>
<tr>
<td>Expertise/subject taught</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture and food science</td>
<td></td>
<td>7</td>
<td>5.6%</td>
</tr>
<tr>
<td>&lt; 1</td>
<td></td>
<td>8</td>
<td>6.4%</td>
</tr>
<tr>
<td>2-5</td>
<td></td>
<td>56</td>
<td>44.8%</td>
</tr>
<tr>
<td>6-10</td>
<td></td>
<td>31</td>
<td>24.8%</td>
</tr>
<tr>
<td>11-15</td>
<td></td>
<td>19</td>
<td>15.2%</td>
</tr>
<tr>
<td>16-20</td>
<td></td>
<td>6</td>
<td>4.8%</td>
</tr>
<tr>
<td>&gt; 20</td>
<td></td>
<td>5</td>
<td>4.0%</td>
</tr>
<tr>
<td>Personal interest</td>
<td></td>
<td>74</td>
<td>59.2%</td>
</tr>
<tr>
<td>Family influence</td>
<td></td>
<td>1</td>
<td>.8%</td>
</tr>
<tr>
<td>Peer influence</td>
<td></td>
<td>2</td>
<td>1.6%</td>
</tr>
<tr>
<td>Employment reasons</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Career prestige</td>
<td></td>
<td>11</td>
<td>8.8%</td>
</tr>
<tr>
<td>Income generation</td>
<td></td>
<td>4</td>
<td>3.2%</td>
</tr>
<tr>
<td>Self-development</td>
<td></td>
<td>32</td>
<td>25.6%</td>
</tr>
<tr>
<td>Lifetime employment</td>
<td></td>
<td>1</td>
<td>.8%</td>
</tr>
<tr>
<td>Total (N)</td>
<td></td>
<td>125</td>
<td>100%</td>
</tr>
</tbody>
</table>
The academic participants had multidisciplinary backgrounds. For example, 68% of them engaged in social science, such as language, education, business management, and public administration. 26.4% of others worked in science and technology related to engineering, computer science, and autonamtion, while 5.6% taught various subjects in agriculture, such as food security, animal science, and agriculture engineering. The small number of academic respondents from science, technology, and agriculture reflects a limited academic workforce in these areas. The participants had a ranging experience, as 44.8% of teachers experienced between 2 and 5 years, 24.8% between 6 and 10 years, and 15.2% between 11 and 15 years. A smaller number of teachers had over 15 years of experience in teaching and research. The distribution of work experience related to the employment age and education level, as the majority were aged between 30 to 35 and were master’s degree holders.

Regarding employment reasons, intrinsic motivation is a more crucial factor influencing individuals to take up higher education teaching professions. It was shown that 59.2% of academic staff chose careers for personal interest; 25.6% of others thought of self-development opportunities. Few participants considered external motivation, as 8.8% of others opted for career prestige and 3.2% for income generation. Surprisingly, less than 2% of the participants chose academic careers for family and peer influences and lifetime employment. The results indicate less attractiveness for academic careers due to low prestige and remuneration.

6.2 Academic career management

The practices of academic career management were measured by 24 statement items, designed with the 5-Likert scale ranging from ‘1 strongly disagree to 5 strongly agree’. The first six statement items examined the practices of academic recruitment, the second six
statement items examined professional development practice, the third six statement items focused on academic performance evaluation, and the final six items examined the academic compensation system.

The scale reliability analysis was performed to show the value of Cronbach’s Alpha of the twenty-four statement items. The reliability statistics revealed the value of Cronbach’s Alpha at 0.911, indicating excellent internal consistency of the tested items. The descriptive statistics also showed the overall mean score at 3.09 (SD = 0.55), revealing little more than neutral responses to academic career management practices, including recruitment, professional development, performance evaluation, and compensation dimensions.

6.2.1 Academic recruitment

The six statements regarding academic recruitment practice were designed with the 5-Likert scale from ‘1 strongly disagree, 2 disagree, 3 neutral, 4 agree and 5 strongly agree’. The reliability statistics showed the value of Cronbach’s Alpha of the tested items at 0.78, indicating acceptable internal consistency. The overall mean score was 3.79 (SD = 0.76), showing neutral responses among academics to academic recruitment practice.

As can be seen in Table 22, most academics chose a ‘disagreed’ response to statement items 1, 3, and 4, showing the mean scores at 2.96 (SD = 1.050), 2.99 (SD = 1.043) and 2.82 (SD = 0.995), respectively. The findings revealed that Cambodian academics considered academic recruitment less competitive and non-standardised in selecting and hiring candidates. In addition, the academic participants maintained their neutral responses to statement items 2, 5 and 6, as the mean scores of these items were, in order, at 3.03 (SD = 0.995), 3.04 (SD = 879), and 3.23 (SD = 917). These results showed that the Cambodian academics felt
uncertain about whether the current recruitment practice clearly described the qualifications and competencies for the tasks and if the recruitment process involved key stakeholders and utilised multiple tools to select large pools.

Table 22 Descriptive statement of academics' responses to recruitment practice

<table>
<thead>
<tr>
<th>Statements</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>The university/institute publicly disseminates information regarding academic recruitment.</td>
<td>125</td>
<td>2.96</td>
<td>1.05</td>
</tr>
<tr>
<td>The university/institute clearly defines the qualifications and competencies of candidates in the job announcement.</td>
<td>125</td>
<td>3.04</td>
<td>0.99</td>
</tr>
<tr>
<td>The university/institute uses standardized tests to assess candidates' performance competencies.</td>
<td>125</td>
<td>2.99</td>
<td>1.04</td>
</tr>
<tr>
<td>The university/institute interviews candidates to assess their interests and motivation for a given job.</td>
<td>125</td>
<td>2.82</td>
<td>0.99</td>
</tr>
<tr>
<td>The university/institute invites representatives from relevant offices/departments/faculties to assess the candidates.</td>
<td>125</td>
<td>3.03</td>
<td>0.87</td>
</tr>
<tr>
<td>The university/institute uses valid tools (e.g., interviews, tests, etc.) to select the most competent candidates to become academic staff.</td>
<td>125</td>
<td>3.23</td>
<td>0.91</td>
</tr>
</tbody>
</table>

Overall mean 3.79
Overall standard deviation 0.76
Cronbach’s Alpha .780

The Independent-Sample t-test was run to compare statistically significant differences in the academics' responses to the recruitment practice regarding gender and career type. The results from the t-test were at t (31.028) = -1.165, P > .05, male teachers (M = 2.97, SD = 0.64) and female teachers (3.17, SD = 0.15), indicating no statistically significant differences between the responses of male and female academics to academic recruitment practice. However, the responses to academic recruitment appeared different in career type since the t-test was at t (71.221) = -1.772, p < .05, civil servant teachers (M = 3.32, SD = 0.66) and contract teachers
These findings revealed statistically significant differences in the responses between civil servants and contracted employees. With Cohen’s d of 0.67, career type had a medium effect size on the responses to statement items regarding academic recruitment practices.

One-way ANOVA compared the mean scores of academics’ responses to recruitment practices among the four institutions. At a significant 0.05 level, the ANOVA’s results were at $F(3, 121) = 48.475$, $p < .05$ showing statistically significant differences in academics’ responses to recruitment practices at the four institutions. The eta-squared value of 0.54 indicated that the institutions [which academic participants were working with] had a medium effect on their responses to the tested item (see Table 23).

### Table 23 The results of ANOVA for comparison of recruitment practice

<table>
<thead>
<tr>
<th>Perceptions of the recruitment process</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>η²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>31.088</td>
<td>3</td>
<td>10.363</td>
<td>48.475</td>
<td>&lt;.001</td>
<td>0.54</td>
</tr>
<tr>
<td>Within Groups</td>
<td>25.866</td>
<td>121</td>
<td>.214</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>56.954</td>
<td>124</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Post Hoc Test showed that Institution D significantly affected academics’ perceptions of the recruitment practice. The mean score of academics’ responses from Institution D was positive at 4.23 (SD = 0.34). In contrast, the mean scores of academics’ responses to recruitment practice at Institution B (M= 2.98, SD = 0.58), Institution A (M= 2.78, SD = 42), and Institution C (2.63, SD = 0.38) appeared to be negative. These findings imply that
academic recruitment practice at Institution D tended to be better than the academic practice at other institutions.

According to the *Games-Howell Test* in Table 24, statistically significant differences in academics’ responses were observed between Institution D-Institution A (p < .05), Institution D-Institution B (p <.05), and Institution D-Institution C (p<.05), but not between other institutions.

Table 24 The Games-Howell Test for comparison of recruitment practice by institutions

<table>
<thead>
<tr>
<th>(I) HEIs</th>
<th>(J) HEIs</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>95% Confidence Interval</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>A</td>
<td>1.44599* .10281</td>
<td>&lt;.001</td>
<td></td>
<td>1.1677-1.7243</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>A</td>
<td>1.60037* .11994</td>
<td>&lt;.001</td>
<td></td>
<td>1.2772-1.9236</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>A</td>
<td>1.25490* .13190</td>
<td>&lt;.001</td>
<td></td>
<td>.9037-1.6061</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>D</td>
<td>-1.44599* .10281</td>
<td>&lt;.001</td>
<td></td>
<td>-1.7243-1.1677</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>A</td>
<td>.15439 .10312</td>
<td>.449</td>
<td></td>
<td>-.1221-.4308</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>A</td>
<td>-.19108 .11682</td>
<td>.368</td>
<td></td>
<td>-.5006-.1185</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>D</td>
<td>-1.60037* .11994</td>
<td>&lt;.001</td>
<td></td>
<td>-1.9236-1.2772</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>B</td>
<td>-.15439 .10312</td>
<td>.449</td>
<td></td>
<td>-.4308-.1221</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>B</td>
<td>-.34547 .13215</td>
<td>.055</td>
<td></td>
<td>-.6960-.0051</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>C</td>
<td>-1.25490* .13190</td>
<td>&lt;.001</td>
<td></td>
<td>-1.6061-.9037</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>B</td>
<td>.19108 .11682</td>
<td>.368</td>
<td></td>
<td>-.1185-.5006</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>B</td>
<td>.34547 .13215</td>
<td>.055</td>
<td></td>
<td>-.0051-.6960</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*. The mean difference is significant at the 0.05 level.
5.2.2 Academic professional development

The examination of professional development contained six statement items, designed with the 5-Likert scale from '1 strongly disagree, 2 disagree, 3 neutral, 4 disagree, and 5 strongly disagree'. The scale reliability analysis showed good internal consistency since the value of Cronbach’s Alpha was 0.88. The overall mean score of the items was 3.37 (SD = 0.79), revealing more than neutral responses from academics to professional development practice.

Based on descriptive statistics in Table 25, the academic participants responded similarly to statement items regarding professional development.

<table>
<thead>
<tr>
<th>Statements</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>The university/institute has provided training programmes based on need</td>
<td>125</td>
<td>3.33</td>
<td>1.09</td>
</tr>
<tr>
<td>analysis to enhance knowledge competence.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The university/institute has provided training programmes to develop</td>
<td>125</td>
<td>3.30</td>
<td>0.97</td>
</tr>
<tr>
<td>pedagogical competence.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The university/institute has provided training programmes to develop</td>
<td>125</td>
<td>3.41</td>
<td>0.97</td>
</tr>
<tr>
<td>personality and ethics.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The university/institute has provided training programmes to develop</td>
<td>125</td>
<td>3.42</td>
<td>0.95</td>
</tr>
<tr>
<td>research skills.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The university/institute has provided training programmes to develop</td>
<td>125</td>
<td>3.49</td>
<td>0.94</td>
</tr>
<tr>
<td>technological skills.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The university/institute has provided training programmes to develop</td>
<td>125</td>
<td>3.30</td>
<td>1.04</td>
</tr>
<tr>
<td>professional development competence.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall mean</td>
<td></td>
<td>3.37</td>
<td></td>
</tr>
<tr>
<td>Overall standard deviation</td>
<td></td>
<td>0.79</td>
<td></td>
</tr>
<tr>
<td>Cronbach’s Alpha</td>
<td></td>
<td>0.88</td>
<td></td>
</tr>
</tbody>
</table>
In ascending order, the lowest mean score was on item 2 at 3.30 (SD = 0.976) and item 6 at 3.30 (SD = 1.047), followed by the mean score on item 1 at 3.33 (SD = 1.91). These results indicated that academics neutrally responded to professional development practice. The existing training programmes are less likely to develop specific subject knowledge, pedagogy, and professional development competence. In addition, the mean scores of academics’ responses remained neutral, albeit close to an 'agreed response', for instance, at 3.41 (SD = 0.976) on item 3; 3.42 (SD = 0.952) on item 4 and 3.49 (SD = 0.947) on item 5. The findings showed that most academics could not decide whether the existing professional development programmes positively enhanced their personality, professional ethics, technological knowledge, and research skills.

*The independent-sample t-test* was computed to compare statistically significant differences in the academics’ responses to professional development regarding gender and career type. The results $t(45.317) = -0.939, p > .05$, showed no statistically significant difference in the responses from male academics ($M = 3.34, SD = 0.83$) and female academics ($M = 3.48, SD = 0.61$) to professional development practices. However, the responses to professional development appeared to be statistically significant differences in career type, as the results were at $t(69.507) = -2.667, p < .05$, civil servant teachers ($M = 3.28, SD = 0.82$) and contract teachers ($M = 3.65, SD = 0.60$). Cohen's $d$ of 0.79 showed that career type had a larger medium effect size on academics’ responses to the practice of academic professional development in the studied contexts.

*A one-way ANOVA test* showed statistically significant differences in academics’ responses to professional development practices across the four institutions (see Table 26) since the results
at F (3, 121) = 23.671, p < .05. The eta-squared value of 0.37 revealed a small effect size that the institutions had on academics’ perceptions of professional development practice.

Table 26 The results of the ANOVA test for professional development practice by institutions

<table>
<thead>
<tr>
<th>Professional development</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>η²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>28.952</td>
<td>3</td>
<td>9.651</td>
<td>23.671</td>
<td>&lt;.001</td>
<td>0.37</td>
</tr>
<tr>
<td>Within Groups</td>
<td>49.333</td>
<td>121</td>
<td>.408</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>78.285</td>
<td>124</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results of the Post-Hoc Test in Table 27 showed the difference in statistical significance of teachers’ perceptions among the four institutions. At a significant value of 0.05, the results showed there were significantly different perceptions of teachers between Institution D-Institution C (p < .05) and between Institution D-Institution B (p < .05), not between Institution D and Institution A. The results also revealed a significant difference in teachers’ perceptions of professional development between Institution A-Institution C (p < .05) and between Institution A-Institution B (p < .05).

In comparison, results in Table 27 show that Institution D had a more significant effect on academics’ perceptions of professional development, as the mean score was at M = 4.02 (SD = 0.31) greater than the mean scores of academics’ perceptions from Institution A (M = 3.71, SD = 0.76), Institution C (M = 2.89, SD = 0.65) and Institution B (M = 2.80, SD = 0.51).

This means that Institution D have better management system of academic careers than other participating institutions in the study.
Table 27 The results from Post Hoc Games-Howell for the comparison of academic professional development by institutions

<table>
<thead>
<tr>
<th>(I) HEIs</th>
<th>(J) HEIs</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>95% Confidence Interval</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>A</td>
<td>.31872</td>
<td>.12968</td>
<td>.077</td>
<td>-.0234 to .6608</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>A</td>
<td>1.13259*</td>
<td>.16268</td>
<td>&lt;.001</td>
<td>.6901 to 1.5751</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>A</td>
<td>1.22059*</td>
<td>.11597</td>
<td>&lt;.001</td>
<td>.9117 to 1.5295</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>D</td>
<td>-.31872</td>
<td>.12968</td>
<td>.077</td>
<td>-.6608 to .0234</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>D</td>
<td>.81387*</td>
<td>.17818</td>
<td>&lt;.001</td>
<td>.3374 to 1.2903</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>D</td>
<td>.90187*</td>
<td>.13686</td>
<td>&lt;.001</td>
<td>.5432 to 1.2605</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>D</td>
<td>-1.13259*</td>
<td>.16268</td>
<td>&lt;.001</td>
<td>-1.5751 to -.6901</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>B</td>
<td>-.81387*</td>
<td>.17818</td>
<td>&lt;.001</td>
<td>-1.2903 to -.3374</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>C</td>
<td>.08800</td>
<td>.16846</td>
<td>.953</td>
<td>-0.3665 to .5425</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>B</td>
<td>1.22059*</td>
<td>.11597</td>
<td>&lt;.001</td>
<td>-1.5295 to -.9117</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>C</td>
<td>-.90187*</td>
<td>.13686</td>
<td>&lt;.001</td>
<td>-1.2605 to -.5432</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>-.08800</td>
<td>.16846</td>
<td>.953</td>
<td>-.5425 to .3665</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* The mean difference is significant at the 0.05 level.

5.2.3 Academic performance evaluation

The six statement items, designed with the 5-Likert scale—ranging from 1 strongly disagree to 5 strongly agree, contained an acceptable internal consistency, with the value of Cronbach’s Alpha at 0.77. The overall mean score of the statement items was 3.09 (SD = 0.64), showing little more than neutral perceptions among academics regarding the performance evaluation.
Based on the descriptive statistics in Table 28, the academic teachers had a neutral opinion on whether the performance evaluation had focused on teaching effectiveness (item 1, $M = 3.16$, $SD = 0.911$) and determined the effectiveness of teaching pedagogy (item 2, $M = 3.19$, $SD = 0.913$). Concurrently, the academic teachers tended to be uncertain about whether the performance evaluation had given feedback to improve their personalities and work ethics (item 3, $M = 3.07$, $SD = 0.935$) and provided them with opportunities for professional development (item 6, $M = 3.25$, SD 0.981). In addition, the academic teachers did not consider that the university and institution had assessed their research outputs and the use of technological skills since the mean scores of these items were at 2.94 (SD = 0.96) and 2.96 (SD = 0.89), respectively. The results pointed out that the current practice of academic performance evaluation has focused on teaching effectiveness more than research outputs and technological knowledge competence.

<table>
<thead>
<tr>
<th>Statements</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance evaluation of the university/institute determines the</td>
<td>125</td>
<td>3.16</td>
<td>0.91</td>
</tr>
<tr>
<td>teaching effectiveness of the subject area.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance evaluation of the university/institute determines the</td>
<td>125</td>
<td>3.19</td>
<td>0.91</td>
</tr>
<tr>
<td>effectiveness of teaching pedagogy.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance evaluation of the university/institute provides feedback to</td>
<td>125</td>
<td>3.07</td>
<td>0.93</td>
</tr>
<tr>
<td>improve individual personality and ethics.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance evaluation of the university/institute focuses on the</td>
<td>125</td>
<td>2.94</td>
<td>0.96</td>
</tr>
<tr>
<td>research outputs.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance evaluation of the university/institute includes the use of</td>
<td>125</td>
<td>2.96</td>
<td>0.89</td>
</tr>
<tr>
<td>technological skills.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance evaluation of the university/institute focuses on continuing</td>
<td>125</td>
<td>3.25</td>
<td>0.98</td>
</tr>
<tr>
<td>career development.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall mean</td>
<td></td>
<td>3.09</td>
<td></td>
</tr>
<tr>
<td>Overall standard deviation</td>
<td></td>
<td>0.64</td>
<td></td>
</tr>
<tr>
<td>Cronbach’s Alpha</td>
<td></td>
<td>.900</td>
<td></td>
</tr>
</tbody>
</table>
The results from the Independent-sample t-test showed no statistically significant differences in the perceptions of performance evaluation in relation to gender and career type. At significant value 0.05, the results t (35.452) = -1.779, p > .05, revealing no significant differences in the perceptions of performance evaluation between male academics (M = 3.04, SD = 0.63) and female academics (M = 3.29, SD = 0.62). Similarly, the results t (49.774) = -1.349, p > .05, showing no different perceptions of performance evaluation between civil servants (M = 3.04, SD = 0.63) and contracted staff (M = 3.23, SD = 0.65) at the studied institutions.

However, the results from One-way ANOVA at F (3, 121) = 13.662, p < .05 indicted statistically significant differences in academics’ perceptions of performance evaluation among the four institutions (see Table 29). In comparison, the academic staff from Institution D tended to have more neutral views on performance evaluation (M = 3.90, SD = 0.50). In contrast, academic staff from institutions B, A, and C did not agree with the statement items regarding performance evaluation since the mean scores were, in order, from 2.98 (SD = 0.64), 2.97 (SD = 0.57) and 2.92 (SD = 0.42). The findings showed that the implementation of performance evaluation at Institution D had a more positive effect on the perceptions of academic teachers than did the performance evaluation being implemented by institutions A, B and C. However, the eta squared ($\eta^2$) of 0.25 showed a small effect of the institution on academics’ perceptions of the observed items.
Table 29 The results from the ANOVA test for comparison of academics’ responses to performance evaluation

<table>
<thead>
<tr>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>η²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>12.867</td>
<td>3</td>
<td>4.289</td>
<td>13.662</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Within Groups</td>
<td>37.985</td>
<td>121</td>
<td>.314</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>50.852</td>
<td>124</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Post Hoc Game-Howell test in Table 30 showed statistically significant differences in the perceptions of performance evaluation between academic staff at Institution D-Institution A (p< .05), Institution D-Institution B (p < .05) and Institution D-Institution C (p < .05), but not between Institution A-Institution B, Institution A-Institution C, and Institution C-Institution B since p-value was greater than significant level 0.05.

Table 30 The results from Post Hoc Games-Howell for the comparison of academics’ responses to performance evaluation by institutions

<table>
<thead>
<tr>
<th>Games-Howell</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>(I)</td>
<td>(J)</td>
<td></td>
<td></td>
<td>Lower Bound</td>
</tr>
<tr>
<td>HEIs</td>
<td>HEIs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>A</td>
<td>.93026*</td>
<td>.14478</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>C</td>
<td>D</td>
<td>-.93026*</td>
<td>.14478</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>B</td>
<td>A</td>
<td>.97339*</td>
<td>.15251</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>C</td>
<td>D</td>
<td>-.97339*</td>
<td>.15251</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>B</td>
<td>C</td>
<td>.04313</td>
<td>.12159</td>
<td>.985</td>
</tr>
<tr>
<td>C</td>
<td>D</td>
<td>-.01360</td>
<td>.13415</td>
<td>1.000</td>
</tr>
<tr>
<td>A</td>
<td>D</td>
<td>.04313</td>
<td>.12159</td>
<td>.985</td>
</tr>
</tbody>
</table>
B  |  -.05672  |  .14246  |  .978  |  -.4347  |  .3212  
B  |  -.91667*  |  .16270  |  <.001  |  -1.3530  |  -.4803  
A  |  .01360  |  .13415  |  1.000  |  -.3400  |  .3672  
C  |  .05672  |  .14246  |  .978  |  -.3212  |  .4347  

*. The mean difference is significant at the 0.05 level.

### 5.2.4 Academic compensation

The measure of academic compensation contained six statement items—designed with the 5-Likert scale ranging from ‘1 strongly disagree, 2 disagree, 3 neutral, 4 disagree and 5 strongly agree’. The value of Cronbach’s Alpha at 0.88 indicated good internal consistency of the observed items. The overall mean score of the items was 2.90 (SD = 0.76), showing ‘disagreed’ responses among academics to statements regarding the implementation of academic compensation at the studied institutions.

The descriptive statistics in Table 31 showed that most academics disagreed to statement item 1 (M = 2.89, SD = 0.95), item 2 (M = 2.82, SD = 0.942), item 4 (2.85, SD = 1.04), item 5 (M = 2.84, SD = 0.937) and item 6 (M = 2.99, SD = 0.94). It means that the academic staff did not believe that the current compensation system provides salaries, benefits and recognitions based on individual merit, outstanding knowledge transfer, research outputs, and technological knowledge advancement.

The academic staff also disagreed that the university and institution had given short- and long-term professional development programmes. The academics’ responses appeared neutral to statement item 3 (M = 3.02, SD = 0.91), indicating that the university and institution had given benefits and recognition for good personality and work ethics. The results imply that the implementation of academic compensation in the studied institution had yet to focus on
performance-based or merit-based pay. The compensation remains traditional considering individual attitude and personality as key attribution to academic professions.

Table 31 Descriptive statistics of academics' responses to the academic compensation

<table>
<thead>
<tr>
<th>Statements</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>The university/institute provides financial incentives, benefits, and recognition to individuals with outstanding knowledge transfer.</td>
<td>125</td>
<td>2.89</td>
<td>.952</td>
</tr>
<tr>
<td>The university/institute provides financial incentives, benefits, and recognition for individuals teaching excellence.</td>
<td>125</td>
<td>2.82</td>
<td>.942</td>
</tr>
<tr>
<td>The university/institute provides financial incentives, benefits, and recognition to individuals with good personality and work ethics.</td>
<td>125</td>
<td>3.02</td>
<td>.911</td>
</tr>
<tr>
<td>The university/institute increases financial incentives, benefits, and recognition of individual research outputs.</td>
<td>125</td>
<td>2.85</td>
<td>1.040</td>
</tr>
<tr>
<td>The university/institute provides opportunities for individuals to advance technological knowledge.</td>
<td>125</td>
<td>2.84</td>
<td>.937</td>
</tr>
<tr>
<td>The university/institute provides opportunities for short- and long-term professional development.</td>
<td>125</td>
<td>2.99</td>
<td>.946</td>
</tr>
<tr>
<td>Overall mean</td>
<td></td>
<td>2.90</td>
<td></td>
</tr>
<tr>
<td>Overall standard deviation</td>
<td></td>
<td>0.76</td>
<td></td>
</tr>
<tr>
<td>Cronbach’s Alpha</td>
<td></td>
<td>.949</td>
<td></td>
</tr>
</tbody>
</table>

Further, the perceptions of the compensation system appeared to be no significant difference between male academics (M= 2.85, SD = 0.75) and female academics (M = 3.09, SD = 0.78) with the results from Independent-sample t-test at t (33.810) = -1.359, p > .05. In contrast, the perceptions of compensation system appeared to be statistically significant differences in terms of career type with t (61.620) = -2.070, p < .05, civil servants (M = 2.82, SD = 0.78) and contracted staff (M = 3.12, SD = 0.64). The results showed that career type had a medium effect size on academics’ perceptions of compensation system since Cohen’s d was at 0.75.
The study also found that the academics’ perceptions of the compensation system differed statistically significantly depending on the workplace since the results from One-way ANOVA were at $F(3, 121) = 13.874, p < .05$.

The descriptive statistics in Table 32 show that the academics at Institution had little more neutral perceptions of compensation system showing the highest mean score at 3.86 (SD = 0.42). In contrast, academic staff showed negative perceptions of compensation system being implemented by institutions B, A and C since the mean scores were 2.80 (SD = 0.70), 2.80 (SD = 0.73) and 2.65 (SD = 0.56), respectively. In addition, the eta-squared value ($\eta^2$) at 0.25 showed a small effect of institutions on academics’ perceptions of the compensation system. (See ANOVA’s results in Table 32)

### Table 32 The results from ANOVA for academic teachers’ perceptions of the compensation system

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>$\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>18.516</td>
<td>3</td>
<td>6.172</td>
<td>13.874</td>
<td>&lt;.001</td>
<td>0.25</td>
</tr>
<tr>
<td>Within Groups</td>
<td>53.827</td>
<td>121</td>
<td>.445</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>72.344</td>
<td>124</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results from the Post Hoc Games-Howell test (see Table 33) showed significant differences in the academics’ perceptions in relation to the workplace, as results showed statistically significant differences in the perceptions of academics between Institution D-Institution A, Institution D-Institution B, and Institution D-Institution C ($p < .05$). However, the results did not reveal any differences in the perceptions of compensations between
academics working at Institution A-Institution B, Institution A-Institution C, and Institution B-Institution C (p > .05).

Table 33 The results from Post Hoc Games-Howell for comparison of academics’ responses to the compensation system

<table>
<thead>
<tr>
<th>Games-Howell</th>
<th>Dependent Variable: Academic compensation system</th>
</tr>
</thead>
<tbody>
<tr>
<td>(I)</td>
<td>(J)</td>
</tr>
<tr>
<td>HEIs</td>
<td>HEIs</td>
</tr>
<tr>
<td>D</td>
<td>A</td>
</tr>
<tr>
<td>C</td>
<td>1.21195*</td>
</tr>
<tr>
<td>B</td>
<td>1.13235*</td>
</tr>
<tr>
<td>A</td>
<td>D</td>
</tr>
<tr>
<td>C</td>
<td>.15424</td>
</tr>
<tr>
<td>B</td>
<td>.07464</td>
</tr>
<tr>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td>A</td>
<td>-.15424</td>
</tr>
<tr>
<td>B</td>
<td>-.07960</td>
</tr>
<tr>
<td>B</td>
<td>D</td>
</tr>
<tr>
<td>A</td>
<td>-.07464</td>
</tr>
<tr>
<td>C</td>
<td>.07960</td>
</tr>
</tbody>
</table>

* The mean difference is significant at the 0.05 level.

Summary

In brief, the study showed that the 24 statement items regarding academic career management contain excellent internal consistency. The overall mean score was 3.09 (SD = 0.55), indicating neutral academic perceptions of career management in the four participating institutions. The comparison in Figure 5 shows the mean score of professional development
at 3.37 (SD = 0.79) revealing that academic staff who participated in the study had neutral perceptions. The figure also showed that the academics had more neutral perceptions of performance evaluation and academic recruitment since the mean score are at 3.09 (SD = 0.64) and 3.01 (SD = 0.67), respectively. In contrast, a negative perception of academics was observed on the compensation items at 2.90 (SD = 0.76), showing that academic compensation such as financial incentives, benefits, and recognition remains problematic at all participating institutions.

![Figure 5 Comparisons of academics' responses to career management by dimensions](image)

In addition, the results from the *Independent-sample t-test* showed that gender did not influence academics' perceptions of career management in all case institutions since the results were at $t(33.854) = -1.632, p > .05$, male academics ($M = 3.05, SD = 0.54$) and female academics ($M = 3.26, SD = 0.56$). However, the career type had a statistically significant effect on the perceptions of career management since the results were at $t(64.238) = -2.756, p < .05$, civil servants ($M = 3.02, SD = 0.56$) and contracted employees ($M = 3.30, SD = 0.45$). The findings reflect different conditions of career management between academic civil servants and contracted employees working in public higher education in Cambodia.
Moreover, the results from One-way ANOVA showed statistically significant differences in academics' perceptions of career management across the four institutions. At a significant value of 0.05, the results at F (3, 121) = 36.020, p = .001 indicated that the institutions [where the participants worked] significantly affected their thoughts on career management practices.

In comparison, Figure 6 shows that academic staff from Institution D had more positive views on the career management system, with the highest mean score of 4.00 (SD = 0.25). The mean score of academics’ perceptions at Institution A showed neutral thinking, with a mean score of 3.06 (0.44). In contrast, the mean scores of academics’ perceptions regarding career management systems at institutions B and C were negative, at 2.87 (SD = 0.45) and 2.77 (SD = 0.29), respectively. The findings showed variant perceptions of career management systems among academics from different institutions, which reflect different quality management of academic careers in each institution.

![Figure 6 Comparison of academics’ responses to career management by institutions](image)

The results from Post Hoc Tests showed statistically significant differences in academic’ perceptions of career management between Institution D-Institution A (p < .05), Institution D-Institution B (p < .05) and Institution D-Institution C (p < .05). The results imply that academic career management at Institution D had a more positive effect on developing
subject knowledge, pedagogy, technological and research skills. Implementing academic career management at Institution D also promotes continuing professional development of academic personnel.

6.3 Alignment practices in academic career management

The alignment practices in academic career management were measured by six statement items focusing on clarity, attractiveness, legitimacy, relevance, agreement, and transparency. The 5-Likert scale, ranging from ‘1 strongly disagree, 2 disagree, 3 neutral, 4 agree, and 5 strongly agree’, was used to measure the statement items regarding the alignment practices. The scale reliability analysis showed an acceptable internal consistency of the tested items since the value of Cronbach’s Alpha at 0.75. The overall mean score of these items was 2.98 (SD = 0.62), showing negative perceptions among academics on the alignment practices in career management. Of six statement items, the mean score of 3.22 (SD = 0.55) indicated little more than neutral perceptions of performance evaluation. Meanwhile, the neutral view was observed on statement item 6 and item 4, with mean scores of 3.18 (SD = 0.97) and 3.02 (SD = 0.88), respectively.

The results indicate that the academic participants reluctantly acknowledged that the institutions [they were working] had neither implemented valid performance evaluation tools nor conducted relevant training for professional development. The academic participants tended to feel uncertain about whether there was a fair and transparent compensation system in their workplace. (See descriptive statistics in Table 34 below).
Table 34 Descriptive statistics of academics’ responses to alignment practices

<table>
<thead>
<tr>
<th>Statements</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>The university/institution clearly describes qualifications, tasks, and responsibilities in the job announcement.</td>
<td>125</td>
<td>2.86</td>
<td>1.00</td>
</tr>
<tr>
<td>The university/institution shows attractive salary packages and benefits in the job calls.</td>
<td>125</td>
<td>2.84</td>
<td>0.87</td>
</tr>
<tr>
<td>The university/institution uses a rigorous process to screen, select and hire the right people for the right job.</td>
<td>125</td>
<td>2.77</td>
<td>0.99</td>
</tr>
<tr>
<td>The university/institution provides extensive training programs contributing to individual and institutional development.</td>
<td>125</td>
<td>3.18</td>
<td>0.97</td>
</tr>
<tr>
<td>The university/institution conducts performance evaluations to promote, reward and incentivize individual staff.</td>
<td>125</td>
<td>3.22</td>
<td>0.88</td>
</tr>
<tr>
<td>The university/institution provides fair and transparent pay and reward.</td>
<td>125</td>
<td>3.02</td>
<td>0.88</td>
</tr>
</tbody>
</table>

Overall mean 2.98
Overall standard deviation 0.62
Cronbach’s Alpha .75

In addition, the results from the Independent Sample t-test showed no differences in the perceptions of alignment practices regarding gender. The results at t (45.028) = -2.140, p > .05 showed no significant difference in the perceptions of alignment practices between male academics (M = 2.93, SD = 0.64) and female academics (M= 3.18, SD = 0.48). Likewise, the career type did not significantly affect academics’ perceptions of alignment practices. The results at t (58.520) = -1.914, p > .05 indicated no significant different perceptions between civil servant teachers (2.92, SD = 0.63) and contract teachers (3.15, SD = 0.55) on the tested items to indicate the alignment practices in academic career management.

The results in Table 35 from One-way ANOVA showed variant academics’ perceptions of the alignment practices in career management among the four institutions. The results at F (3,
121) = 50.233, p < .05 revealed that the institutions [where academic teachers were being employed] had a significant effect on their perceptions of alignment practices in career management. The eta-squared value of 0.55 revealed the medium effect of the academics’ perceptions.

Table 35 The results from ANOVA for academics' responses to alignment practices

<table>
<thead>
<tr>
<th>ANOVA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alignment practices in academic career management</td>
</tr>
<tr>
<td>--------------------------------------------</td>
</tr>
<tr>
<td>Between Groups</td>
</tr>
<tr>
<td>Within Groups</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

The results from the Post Hoc Games-Howell Test in Table 36 showed statistically significant differences in the academics’ perceptions of alignment practices in career management between Institution D-Institution A (p < .05), Institution D-Institution B (p < .05), and Institution D-Institution C (p < .05), but not between Institution A-Institution B, Institution A-Institution C, and Institution B-Institution C since the p-value was greater than 0.05.
Table 36 The results from the Post Hoc Test for comparing academics’ responses to alignment practices by institutions

<table>
<thead>
<tr>
<th>Multiple Comparisons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent Variable: Alignment practices in academic career management</td>
</tr>
</tbody>
</table>

### Games-Howell

<table>
<thead>
<tr>
<th>HEIs</th>
<th>HEIs</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower Bound</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Upper Bound</td>
</tr>
<tr>
<td>D</td>
<td>A</td>
<td>1.21865*</td>
<td>.10293</td>
<td>&lt;.001</td>
<td>.9398</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.4975</td>
</tr>
<tr>
<td>C</td>
<td>D</td>
<td>1.46078*</td>
<td>.12433</td>
<td>&lt;.001</td>
<td>1.1259</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.7957</td>
</tr>
<tr>
<td>B</td>
<td>D</td>
<td>1.40196*</td>
<td>.11615</td>
<td>&lt;.001</td>
<td>1.0909</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.7130</td>
</tr>
<tr>
<td>A</td>
<td>D</td>
<td>-1.21865*</td>
<td>.10293</td>
<td>&lt;.001</td>
<td>-1.4975</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.9398</td>
</tr>
<tr>
<td>C</td>
<td>A</td>
<td>-.24214</td>
<td>.10742</td>
<td>.128</td>
<td>-.0467</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.5310</td>
</tr>
<tr>
<td>B</td>
<td>A</td>
<td>-.18331</td>
<td>.09783</td>
<td>.249</td>
<td>-.0746</td>
</tr>
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<td></td>
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<td></td>
<td>.4412</td>
</tr>
<tr>
<td>C</td>
<td>A</td>
<td>-.05882</td>
<td>.12014</td>
<td>.961</td>
<td>-.3791</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.2614</td>
</tr>
<tr>
<td>B</td>
<td>A</td>
<td>-1.40196*</td>
<td>.11615</td>
<td>&lt;.001</td>
<td>-1.7130</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-1.0909</td>
</tr>
<tr>
<td>C</td>
<td>A</td>
<td>-.18331</td>
<td>.09783</td>
<td>.249</td>
<td>-.4412</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.0746</td>
</tr>
<tr>
<td>C</td>
<td>A</td>
<td>.05882</td>
<td>.12014</td>
<td>.961</td>
<td>-.2614</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.3791</td>
</tr>
</tbody>
</table>

*. The mean difference is significant at the 0.05 level.

### Summary

The study revealed different responses from the participants who answered the survey on the alignment practices in career management. The results from the Independent-Sample t-test showed no significant differences in academics’ responses to alignment practices regarding gender and career type. Both civil servants and contracted employees had neutral responses to the alignment practices of career management at the case institutions. In contrast, One-way ANOVA’s results revealed that the institutions where the participants worked significantly
affected their perceptions of the alignment practices. The results imply that the alignment practices or the strong system of academic career management largely depend on institutional factors such as leadership, local policies and guidelines, and resources, including human and finance.

Considering the above factors, Institution D, the leading higher education institution, tends to have better alignment practices in academic career management. As can be seen from Figure 3, the participants from Institution D had positive responses to the alignment practices since the mean score was 4.12 (SD = 0.35), much higher than the mean scores of academics’ responses from Institution A at (M = 2.90, SD = 0.42), Institution B (M = 2.72, SD = 0.46) and Institution C (M= 2.66, SD = 0.41). Undoubtedly, Institution D is the leading institution with strong institutional policies and wealthier resources. (See Figure 7)

6.4 Challenges for academic career management

The challenges for academic career management were measured by eight statement items designed with the 5-Likert scale, ranging from '1 strongly disagree, 2 disagree, 3 neutral, 4
agree, and 5 strongly disagree'. The scale reliability analysis showed the value of Cronbach’s Alpha of 0.90, indicating excellent internal consistency of the tested items.

Results in Table 37 showed the overall mean of tested items was 3.80 (SD = 0.69), revealing neutral responses to key challenges. The participants considered institutional factors such as a lack of a positive working environment a potential constraint since the mean score of on this item was 4.27 (SD = 0.85). The participants also agreed that the lack of financial support for professional development was the second key challenge in their career progressions. The mean score on this item was 4.18 (SD = 0.85). In addition, it was believed that a lack of fair compensation and motivation (M = 4.10, SD = 0.86) and a lack of career pathways were equally challenging to academic career management in all case institutions. However, the academics in this study maintained their neutral responses to the statement about the influence of line ministries (3.19, SD = 1.29), the centralization of national laws (M = 3.46, SD = 1.20), the lack of institutional attention (M = 3.10, SD = 1.26) and the lack of framework for career management (3.96, SD = 0.97).

The findings revealed that academics in this study may have considered institutional factors such as working environment, financial support, and compensation directly impacting their academic careers. Meanwhile, they perceived that the state agencies and laws may have indirect control over their academic life. In addition, the participants may consider the institutional policy and guidelines less crucial to academic career management in government-affiliated institutions under study.
Table 37 Descriptive statistics of academics’ response to challenges

<table>
<thead>
<tr>
<th>Statements</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line ministries (e.g., MoEYS) tightly control the management of academic staff at the university/institution.</td>
<td>125</td>
<td>3.19</td>
<td>1.29</td>
</tr>
<tr>
<td>The national laws centralise the management of academic staff at the university/institution.</td>
<td>125</td>
<td>3.46</td>
<td>1.20</td>
</tr>
<tr>
<td>A lack of institutional attention challenges the management of academic staff at the university/institution</td>
<td>125</td>
<td>3.10</td>
<td>1.26</td>
</tr>
<tr>
<td>A lack of a clear framework challenges the management of academic staff at the university/institution</td>
<td>125</td>
<td>3.98</td>
<td>0.97</td>
</tr>
<tr>
<td>A lack of a fair compensation system limits academic motivation and intention to academic careers at the university/institution.</td>
<td>125</td>
<td>4.10</td>
<td>0.86</td>
</tr>
<tr>
<td>A lack of academic career pathways causes uncertainty for academic staff to work with the university/institution.</td>
<td>125</td>
<td>4.10</td>
<td>0.93</td>
</tr>
<tr>
<td>A lack of financial support limits professional development at the university/institution.</td>
<td>125</td>
<td>4.18</td>
<td>0.85</td>
</tr>
<tr>
<td>A lack of positive working environment discourages individuals from working with the university/institution.</td>
<td>125</td>
<td>4.27</td>
<td>0.85</td>
</tr>
</tbody>
</table>

Overall mean 3.80  
Overall standard deviation 0.69  
Cronbach’s Alpha 0.90

The results from the Independent-sample t-test at $t (38.924) = 0.274$, $p > .05$ indicated no significant different perceptions between male teachers ($M = 3.81$, $Sd = 0.71$) and female teachers ($M = 3.77$, $SD = 0.62$) on challenges to academic career management. Concurrently, the results from the Independent-sample t-test, $t (47.633) = 1.001$, $p > .05$, revealed that career type did not influence the responses from civil servant teachers ($M = 3.84$, $SD = 0.68$) and contract teachers ($M = 3.69$, $SD = 0.74$) to the statement of challenges. The findings
implied that academic teachers, regardless of gender and career type, may have encountered similar work conditions. The several challenging factors to academic career management in the studied institutions relate to a lack of a conducive workplace, inadequate financial support, an absence of career pathways and little generous compensation system.

One-way ANOVA’s results in Table 38 were $F (3, 121) = 9.975, p < .05$, showing a statistically significant difference in the responses among academic participants to key challenges for academic career management. Based on descriptive statistics, Institution B encountered more challenging issues since the mean score of responses was 4.11 (SD = 0.69), comparatively higher than its counterparts. Meanwhile, the responses from academic teachers at Institution A and Institution C were more or less similar to the neutral level at 3.80 (SD = 0.75) and 3.89 (SD = 0.64). In contrast, the responses from participants at Institution D showed the smallest mean at 3.10 (SD = 0.50), which means that the participants may have experienced fewer constraints at Institution D.

Table 38 The results from ANOVA for comparison of challenges by institutions

<table>
<thead>
<tr>
<th>Key challenges</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>η²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>11.945</td>
<td>3</td>
<td>3.982</td>
<td>9.975</td>
<td>&lt;.001</td>
<td>0.19</td>
</tr>
<tr>
<td>Within Groups</td>
<td>48.299</td>
<td>121</td>
<td>.399</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>60.244</td>
<td>124</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on the Post Hoc Test in Table 39, a significant difference in responses to challenges for academic career management was observed between Institution D-Institution A (p < .05), Institution D-Institution C (p < .05), and Institution D-Institution D (p < .05), but not between
Institution A-Institution B, Institution A-Institution C, and Institution B-Institution C since the p-value were greater than significant level at 0.05. The findings imply that Institutions A, B and C have faced similar challenges in academic career management.

Table 39 The results from the Post Hoc Test for multiple comparisons of key challenges

<table>
<thead>
<tr>
<th>Multiple Comparisons</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent Variable: Key challenges</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Games-Howell</td>
<td>HEIs</td>
<td>HEIs</td>
<td>Mean Difference (I-J)</td>
<td>Std. Error</td>
<td>Sig.</td>
</tr>
<tr>
<td>D A</td>
<td>-0.70000*</td>
<td>.16002</td>
<td>&lt;.001</td>
<td>-1.1285</td>
<td>-0.2715</td>
</tr>
<tr>
<td>B</td>
<td>-0.79524*</td>
<td>.18598</td>
<td>&lt;.001</td>
<td>-1.2962</td>
<td>-0.2943</td>
</tr>
<tr>
<td>B</td>
<td>-1.01765*</td>
<td>.14316</td>
<td>&lt;.001</td>
<td>-1.4081</td>
<td>-0.6272</td>
</tr>
<tr>
<td>A D</td>
<td>.70000*</td>
<td>.16002</td>
<td>&lt;.001</td>
<td>.2715</td>
<td>1.1285</td>
</tr>
<tr>
<td>C</td>
<td>-.09524</td>
<td>.17462</td>
<td>.947</td>
<td>-.5620</td>
<td>.3715</td>
</tr>
<tr>
<td>B</td>
<td>-.31765</td>
<td>.12805</td>
<td>.070</td>
<td>-.6533</td>
<td>.0180</td>
</tr>
<tr>
<td>C D</td>
<td>.79524*</td>
<td>.18598</td>
<td>&lt;.001</td>
<td>.2943</td>
<td>1.2962</td>
</tr>
<tr>
<td>A</td>
<td>-.09524</td>
<td>.17462</td>
<td>.947</td>
<td>-.3715</td>
<td>.5620</td>
</tr>
<tr>
<td>B</td>
<td>-.22241</td>
<td>.15931</td>
<td>.511</td>
<td>-.6544</td>
<td>.2096</td>
</tr>
<tr>
<td>B D</td>
<td>1.01765*</td>
<td>.14316</td>
<td>&lt;.001</td>
<td>.6272</td>
<td>1.4081</td>
</tr>
<tr>
<td>A</td>
<td>.31765</td>
<td>.12805</td>
<td>.070</td>
<td>-.0180</td>
<td>.6533</td>
</tr>
<tr>
<td>C</td>
<td>.22241</td>
<td>.15931</td>
<td>.511</td>
<td>-.2096</td>
<td>.6544</td>
</tr>
</tbody>
</table>

* The mean difference is significant at the 0.05 level.

Summary

In brief, the study found that participants’ responses to statements of key challenges to academic career management were not significantly different in gender and career type. The results from the Independent-Sample t-test showed that regardless of the males and females,
and of civil servants and contracted employees, who participated in this study may have experienced similar difficulties in career life. Therefore, they had similar responses to the statement of key challenges. In comparison, the participants viewed working conditions and unhealthy finance to support professional development and to provide generous salaries as potential challenges to career management in the studied institutions. The participants also considered subtle constraints relating to the influence of government agencies, legal framework, institutional negligence, and tacit career management guidelines. Among the four institutions, Institution D faces few difficulties in managing academic careers than its counterparts A, B and C.
CHAPTER 7: DISCUSSION

This chapter discusses key findings from qualitative and quantitative studies. The chapter begin with a summary of the study highlighting the objectives, conceptual framework, and methodological procedures. The chapter continues with a cross-tabulation of qualitative and quantitative findings before offering a comprehensive discussion to address the three research questions.

7.1 Research summary

This study primarily assesses the practices and challenges of academic careers in Cambodian public HEIs. More specifically, the study examines the practices of academic career management, investigates the alignment features of the system, and explores key challenges in the participating HEIs. To achieve these objectives, the study utilises mixed-methods research (MMR) with a specific exploratory sequential design to collect data from qualitative and quantitative phases (see Creswell, 2014; Creswell & Clark, 2018). In the qualitative phase, semi-structured interviews and focus-group discussions were used to collect data from 46 participants, including 20 academic leaders and 26 academic staff. In the quantitative phase, online surveys were administered to 200 academic staff to capture a broader picture of the research problem. The reasons for beginning the qualitative study were to explore data patterns and generate the research concepts and variables for quantitative study (Creswell, 2014; Schoonenboom & Johnson, 2017; Teddlie & Tashakkori, 2015). The qualitative data also helps validate the theoretical discussion for statistical analysis (Creswell & Clark, 2018). Drawing on data from the two phases, this study has generated and discussed the results based on three themes (1) academic career management in dynamic uncertainty; (2) academic
career management with limited alignment features, and (3) academic career management under structural complexities. To establish a trade-off between qualitative and quantitative data from discussion, the cross-tabulation technique was applied to generate the similar and different patterns of the findings.

7.2 Cross-tabulation of qualitative and quantitative findings

Table 20 cross-tabulates key findings from the qualitative and quantitative studies in order to show convergent and divergent patterns of academic career management, the alignment features, and key challenges among the participating HEIs.

As highlighted in the Table, both qualitative and quantitative studies show consistent results, indicating that the practices of academic career management vary within and between the studied HEIs. Based on the qualitative findings, the management of academic careers in terms of recruitment, professional development, performance evaluation and compensation differ from faculties and institutions. For example, the academic recruitment has been more centralised and inconsistent at Institutions A and B and more complex at Institution C. In comparison, the academic recruitment appears more decentralised and strategic at the Institution D.

The variability of the academic career management practices is confirmed by the Independent-Sample t-test, as the results indicate a statistically significant difference in the mean score of the perceptions between civil servants and contracted employees on the academic career management in the studied instructions. For example, the mean score for civil servants is 3.02 with a standard deviation of 0.56, while for contracted employees, the mean score is higher at 3.30 with a standard deviation of 0.45. The t-value is -2.756 with a
degree of freedom of 64.238, and the p-value is 0.01, which is less than the commonly used significance level of 0.05, indicating that the difference is statistically significant. The effect size, as measured by Cohen's d, is 0.54, suggesting a medium effect size. This means that the difference in mean score between the civil servant and contract staff groups is not only statistically significant, but also of practical significance.

In addition, the ANOVA test has also confirmed the variant practices of the academic career management in the studied HEIs since the results show different mean scores among the four groups. In comparison, the mean scores of academic perceptions on academic career were at 4.00 at institution D, followed 3.06 at Institution; 2.87 at Institution B, and 2.77 at Institution C. The different mean scores indicate different perceptions of academic staff on the management practices. In other words, the management of academic at Institution D appears to be better than Institutions A, B, and C.

In addition, the findings derived from interviews and FGDs show different degree of alignment features of academic career management. In general, the participants argued that the academic career management lacks clear content and consistent processes to ensure rigorous selection and to provide relevant professional development. The interviewees also claimed that there was a lack of consistent procedures for the academic career management in relation to performance evaluation and compensation system. In addition, the qualitative findings indicated that the management of academic careers lacked consensus feature to ensure fair and transparent processes in performance evaluation, payment, and promotion. Although the Independent-Sample t-test did not confirm the different perceptions of academic staff on the alignment features, the results from the One-way ANOVA revealed a significant difference in academics' perceptions of alignment features of career management.
system among the participating HEIs. The results showed $F (3, 121) = 50.233$ and a p-value of 0.01. In comparison, the results showed that Institution D has better alignment of its academic career management than its counterparts e.g., Institutions A, B, and C. The effect size, as measured by Eta-squared, is 0.555, suggesting that the type of HEIs accounts for approximately 55.5% of the variance in academic career management in the studied context. Therefore, the type of institution is a significant factor shaping the alignment features of academic career management in the studied context.

Finally, Table 20 shows consistent results from qualitative and quantitative studies on key challenges for academic career management in the studied institutions. The qualitative findings showed that the four HEIs faced different degree of difficulties in academic career management. In general, the participants argued that the influence of state legal frameworks, the dominant roles and powers of state agencies, the weak institutional leadership, and the resource deficiency are the potential factors shaping the practices of academic career management. These challenging factors are confirmed by the quantitative analysis through the ANOVA test. As displayed in Table 20, the result showed a difference in academics’ perceptions of key challenges for academic career management among HEIs, with $F (3, 121) = 9.975$, $p = .001$. In comparison, the Institution B tended to face more challenges than other participating HEIs A, C and D since the mean score of the perceptions among academics from Institution B is higher than others in participating institutions.
### Table 40 Cross-tabulations of the qualitative and quantitative findings

<table>
<thead>
<tr>
<th>Management dimensions</th>
<th>Qualitative findings</th>
<th>Quantitative results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic career management</td>
<td>Academic career management varies within and between HEIs. (e.g., recruitment is centralized and inconsistent across faculties and institutions).</td>
<td>• The Independent sample t-test confirmed the variance in academic career management regarding career types since the result shows $t(64.238) = -2.756, p = .008$, civil servants ($M = 3.02, SD = 0.56$) and contracted employees ($M = 3.30, SD = 0.45$).</td>
</tr>
<tr>
<td>Alignment features</td>
<td>Academic career management has different degrees of alignment features, lacking clarity, consistency and consensus.</td>
<td>• The ANOVA test also reveals variance in academic management among the four HEIs, $F(3, 121) = 36.020, p = .001$. In comparison, institution D has better management of academic careers than Institutions A, B, and C.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• The One-way ANOVA reveals a difference in academics’ perceptions of management alignment features among HEIs, with $F(3, 121) = 50.233, p = .001$. Institution D has a better alignment of academic career management than Institutions A, B and C.</td>
</tr>
<tr>
<td>Key challenges</td>
<td>The qualitative findings show that HEIs face structural challenges such as the influence of state agentic powers, weak institutional leadership, and resource deficiency.</td>
<td></td>
</tr>
<tr>
<td>----------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• The One-way ANOVA shows a difference in academics’ perceptions of key challenges for academic career management among HEIs, with $F(3, 121) = 9.975$, $p = .001$. Institution B, followed by A and C, faces more challenges than institution D.</td>
<td></td>
</tr>
</tbody>
</table>
7.3 Discussion

The findings are discussed based on three main themes: (1) academic career management in dynamic uncertainty; (2) academic career management with limited alignment features, and (3) academic career management under structural complexities.

7.3.1 Academic career management in dynamic uncertainty

The findings derived from qualitative study in Chapter 5 and quantitative study in Chapter 6 indicate that the practices of academic career management vary within and between the participating HEIs due to the dynamic uncertainty. At the institutional level, the qualitative findings (Chapter 5) drawn from semi-structured interviews with senior and mid-level academic leaders (e.g., vice-rectors and faculty deans) revealed that the management of academic staff who are civil servants through recruitment, professional development, performance evaluation, and compensation was tightly controlled by state agencies such as the Ministry of Education, Youth, and Sport (MoEYS) and other line ministries. At career level, findings from FGDs showed that the management of contracted academics has been inconsistent and non-standardized across the faculties and institutions due to lack of comprehensive content guidelines for recruitment, professional, and performance evaluation.

The variant practices of academic career management are also confirmed by the statistical results generated from the Independent Sample t-test and One-way ANOVA (see Chapter 6). In terms of career factor, the results from the Independent Sample t-test were at t (64.238) = -2.756, p < .05, civil servants (M = 3.02, SD = 0.56) and contracted employees (M = 3.30, SD = 0.45), showing a statistically significant difference in the management of academic careers. Concerning institutional factor, the differences in the management practices are tested by the
One-way ANOVA, with the results, F (3, 121) = 36.020, p = .001, indicating the institutions [where the participants worked] significantly affected the practices of academic career management. In comparison, Institution D have implemented a better academic career management expressed through recruitment, professional development, performance evaluation, and compensation than other participating HEIs.

Drawing on the above findings, the practices of academic career management in the four public HEIs as well as through sector wide HE in Cambodia are influenced by some factors. The first factor may concern the different management frameworks for academic staff; that is, between civil servants and service contractors. As highlighted in the finding Chapter 5 and 6, although different state agencies have controlled civil servants expressing through professional development, career promotion, and salaries, they obtain more secure careers, pension plans, and clear pathways to promotion. In contrast, despite the contract staff can have flexible jobs, they obtain less secure incomes, and thus affecting their well-beings.

Consistently, Chhaing (2022), together with Ros and Oleksiyenko (2018), found that the unequal opportunities for academic professional development, payment, and promotion, and inflated career value, identity, and competency of Cambodian academics to pursue academic excellence. Heng (2023) echoed that the precarious conditions have also restrained academic motivation and engagement in doing research in Cambodia.

The second factor that make the practices of academic career management differ among the participating HEIs may relate with historical backgrounds, infrastructures, and geographical conditions. As described in previous Chapters 5 and 6, the academic career management systems at young, small, and provincial HEIs have been more centralised and inconsistent than those well-established ones. In addition, the institutional capacity, leadership style, and
resources are also accounted to be the potential factors that shape the different practices of academic career management in the studied HEIs in Cambodia. The findings echoed Kekäle’s (2015; 2018) argument that the institutional leaders played a central role in managing academic human resources in higher education since academic leaders could steer management processes by offering professional development, nurturing good working conditions, and motivating staff to perform for academic excellence.

The third factor that affect academic career management in the studied HEIs concerns the contest between emerging state legitimacy and power and growing institutional autonomy and accountability amidst of policy reform process. In the context where a benchmark is not yet in place for the management of academic staff, the introduction of new policies and procedures become new sources of tensions and controversies (Ender & Naidoo, 2019), especially in developing HEIs with less ideal governance system. As discussed in the research framework, the ideal types of academic governance can direct the practices of academic career management. For example, the state-centric governance imposes state administrative authority and power managing, hiring, and promoting academic professions. The framework furthers that the self-regulated governance grants a certain level of institutional autonomy in managing academic staff, while the market-oriented governance involves external stakeholders in academic employment to ensure transparency (Dobbins et al., 2004, Sporn, 2007). In these participating HEIs, however, the management system of academic careers has been on the borderline between state-centric governance and self-regulated system. Therefore, the management system of academic careers in these public HEIs as well as through the sector has yet to be mainstreamed into a managerial logic as those systems being implemented in the European universities (Dobbins et al., 2011;
Musselin (2013). These reluctant practices of academic career management have given rise to dynamic uncertainty, contesting between state agencies and the institutional actors among the studied HEIs and across sector in Cambodia.

The above discussed conditions have made the academic career management in Cambodian HE a unique case, distinguishing itself from those European frameworks, for example, in Finland and Norway, where HEIs are granted full autonomy and freedom to manage their academic staff, to conduct result-based evaluation, and to implement pay for performance (Fumasoli, 2018; Kekäle, 2018; Musselin, 2013; Pausits et al., 2022). The management system of academic careers in Cambodia, as indicated by this study, has yet to be a full-fledged model that integrate comprehensive components for staff policy planning, job analysis and recruitment plan, performance-based evaluation, pay for performance, and other functions as reported in European higher education (Pausits, 2022). Lacking comprehensive management functions has made the academic career system in Cambodian HE less advanced, if compared it with Malaysian and Singaporean counterparts. It was reported the academic staff management in these nations have been developed with full autonomy and freedom for recruitment, evaluation, and promotion of academic professions (Eng Thye Tan, 2018; Jarvis & Mok, 2019, Lee, 2018). For example, the National University of Singapore (NUS) has sufficient leeway to plan, recruit, evaluate and terminate academic staff without state intervention (Eng Thye Tan, 2018). The well-established universities in Malaysia have full authority to recruit, nominate, and promote academic staff and mid-level leaders without state interference (Lee, 2018).

Against the above discussions, the management system of academic careers in Cambodian public HE, as indicated by this study, has been mainstreamed to any as European nor Asian
system. Although it has been hybridized, a lack of clear content guidelines and procedures for the practices has caused uncertainty expressing through recruitment, professional development, performance evaluation and pay system. In such uncertain conditions, the management practices of academic careers at the participating HEIs as well as through the HE sector in Cambodia have been sidetracked from the national and international career standards.

As discussed in the framework, academic careers refer to sequential positions starting from a lecturer or an assistant professor to a full professor as a topic career level. The framework furthered that the academic recruitment embraced multiple activities and processes to elicit high competent people to be academic staff (Kekäle, 2018; Musselin, 2013; Pausits et al., 2022). The findings from this study, however, revealed that the career structure of academic staff is not clear, while the recruitment follows a linear process using sit-in exams as the selection tools. This recruitment practice has followed state logic (Henningsson & Geschwind, 2022) which differ from managerial, professional and market recruitment logics (see Pietilä and Pinheiro, 2020 for further discussions). In other words, the current practice of academic recruitment has tightened well to the state administrative system rather than streamlined to the new initiatives to promote managerialism as prescribed in the manuals developed by MoEYS (2021b, 2021c). These manuals stated that Cambodian public HEIs have autonomy to plan and manage their academic staff; however, the complex agentic roles and powers at the ministerial level have limited institutional authority to exercise their agency to manage academic staff, especially civil servants. As indicated by the narratives from the senior and mid-level leaders (e.g., PA1, PB8, PC12), the MoEYS has tightly controlled the management of civil servants by setting recruitment quota, arranging the selection exams,
and determining the results without institutional involvement. The dominant power of state agencies over the management of civil servants has generally resulted in hiring unsuitable people to become academic personnel. As noted by Chet et al. (2022), who is the rector of the Royal University of Phnom Penh, the state agencies had authority to recruit civil servants for academic positions; however, most civil servants had mismatched qualifications and skills for the academic positions. Consistently, Jarvis and Mok (2019) found a similar issue at many Asian universities that the state agentic power inflated academic career system, especially in developing countries such as Cambodia, where institutional autonomy was not fully granted. In this case, the state agencies remain playing a dominant role in academic employment, especially the case of civil servants.

Based on the research framework, professional development is a continuing process to develop knowledge, skills, and attitudes to academic staff (Kennedy, 2014). The professional development must cover institutional and individual needs (Allui & Shani, 2016) to enable academic staff to adapt to the organisational changes (Pausits et al, 2022). The findings from this study, however, indicate that the participating HEIs have offered professional development based on resource dependency funded by development partners. As described by mid-level leaders through interviews, most training and development opportunities have relied on external funding sources such as the World Bank, Erasmus+ projects and others. In group discussions, the academic staff argued that relying on external funding sources was a less ideal approach to developing their capacities. Therefore, the academics reluctantly confirmed through surveys that the institutions [where they worked] had offered enough training and development programmes to enhance their careers. This issue pointed to a lack of national and institutional investment funds to provide an extensive professional
development to academic staff in the participating HEIs and across sector-wide in Cambodia. As Sok and Bunry (2021) noted, a lack of state investment schemes has restrained the development of academic capacities to promote the higher education quality to reach regional and international standards. The use of resource dependency model for academic professional development was observed in other Asian higher education contexts. For example, Shin (2018) and Wang and Jones (2021) found that the scarcity of investment fund also affected academic profession development in Chinese universities. In China, the state controls the purse for academic career development, and therefore, resource dependency is applied for continuing professional development. The lack of financial support for training and development of academic professions was widely observed in some colonial territories under the former Soviet Unions. In this case, the legacy of Soviet Unions has infiltrated the Cambodian higher education system, mainly through personnel management policies and practices.

The findings show that the management of academic careers, especially concerning performance evaluation, remains functional, following national evaluative procedures and standards. In other words, the evaluation of academic performance in the four HEIs have not fully followed the result-based management as discussed in the research framework. Based on the framework, performance evaluation helps measure academic outputs and maintain teaching and research performance towards excellent results (Hamann & Beljean, 2017). In so doing, the performance evaluation must be aligned with institutional strategy and individual career goals (Gomez & Valdes, 2019). At the participating HEIs, however, the senior leaders (e.g., PA1, PB7, PC12; PD16) described that the current practice of academic performance evaluation was functional driven by the national quality assurance framework to
assess teacher effectiveness and program outputs. The evaluation was summative since it focuses less on research outputs and academic contribution to institutional development. In this case, the performance evaluation was not designed with clear indicators to ensure more result-based management that can promote teaching and research outputs and other activities beyond the institutional boundary. The practice of performance evaluation was much inclined to boundaried/institutional career system as suggested by Marini et al. (2019) and Whitchurch et al. (2023). In addition, the academic performance evaluation in Cambodian HEIs remains traditional if compared with other academic systems in Asian region such as Hong Kong, Singapore, and Malaysia. Huang (2020) found that the evaluation of academic professions in these countries has emphasized more research publication and academic contribution to society.

Finally, the findings from this study reveal that the compensation system, including salaries and financial incentives in the participating HEIs as well as the Cambodian HE system has followed the government pay grids and variable payment system. In the studied context, the compensation is not generous to promote social welfare of academic staff, as suggested by Altbach et al., (2012). For example, the academic teachers complained in group discussions that the renumeration was in small amount and barely enough to support their living conditions while there is a rising inflation as nowadays. The low pay scale has made academic staff in the participating HEIs moonlighting for extra income generation. In comparison, the renumeration for Cambodian academics is much lower than its peers such as Thailand, Malaysia, and Singapore. In this case, the less generous pay system was affecting academic motivation and intention to pursue their academic professions, especially in developing countries (Altbach, 2013). This issue is happening not only in the studied
institutions but also through the Cambodian HE sector. The low salary scale with few benefits have caused uncertainty to academic professions and affected their well-being. Therefore, there is a high turnover rate among young academia in the studied institutions as well as in the HE sector in Cambodia.

In sum, the management of academics in Cambodian public higher education, especially in the participating HEIs has been hybridized to managerialism in order to promote autonomy. However, the actual management practices remain facing dynamic uncertainty due mainly to a difference in career systems and a contest between state agentic powers and the institutional actors to formulate and implement a comprehensive system for academic career management. Consequently, the management practices of academic careers in the studied institutions as well as in Cambodian HE sector contains limited alignment features.

7.3.2 Academic career management with limited alignment features

The qualitative and quantitative findings (Chapter 5 and 6) reveal that the management of academic careers in the participating HEIs does not contain strong vertical and horizontal alignment features. At the vertical level, the management of academic careers does not link with the institutional strategy to develop academic professions in teaching and research. At the horizontal level, the management practices in the studied HEIs do not embrace meta-features of the process approach to human resource management to develop employee competency, skills, and attitudes (Bowen & Ostroff, 2004). In this study, although the senior leaders (e.g., PA1, PB7) described through semi-structured interviews that the current practices of academic career management had been aligned with the national and institutional management framework for developing academic professions, the management practices lack
clarity, consistency and consensus which are key features to promote teaching and research competences. In addition, the mid-level leaders (e.g., PA2, PB11, PC24) reiterated different management processes, indicating a lack of consistency and consensus on recruitment, professional development, performance evaluation, and compensation. The current management of academic career does not align with proposed framework that argues a strong management practice must contain distinctive, consistent, and consensus processes (Bowen & Ostroff, 2004; Delery & Doty, 1996; Wright & Snell, 1998; Boxall, 2012). In brief, the management of academic careers in the participating HEIs is not consistent to the European management framework which presents clear content, consistent processes, and instrumental components to foster academic professions (Hénard & Roseveare, 2012; Kekäle, 2018; Sušanj et al., 2020). In this case, the management of academic careers as expressed through recruitment, professional development, performance evaluation, and compensation contain very limited alignment features to foster teaching and research in the studied context.

First, as discussed in the framework, strong management practices must present visible content guidelines and consistent processes to employees that they perform well according to the management principles (Bowen & Ostroff, 2004). In the participating HEIs, the findings show tacit framework for academic recruitment and professional development. For example, the narratives from mid-level leaders and frontline staff showed that the recruitment of civil servants has to follow the state recruitment conditions and procedures as prescribed by the Cambodian employment framework. Although the mid-level leaders claimed to have involved with the recruitment of civil servants, they do not seem to have any room to make any hiring decision because the state has already set the selection conditions and procedures. In this case, the participating HEIs do not decide on the recruitment of civil servants to be the
academic staff. In addition, the internal management of contract employees in the studied HEIs does not present specific conditions and procedures for recruitment and selection of contract staff. This issue points to a lack of policy alignment in staff planning and recruitment in the participating HEIs. The findings are consistent to the study by Ros and Oleksiienko (2018) that found structural misalignment of Cambodian policies on academic professional development. The misaligned management processes are also inflated by tradition administrative system in Cambodian higher education, as Sen (2022) has argued the influence of traditional administrative procedures restrict the innovation of HE management and affected academic professions. The findings in this study also echoed the argument made by Sok and Bunry (2021) addressing that a lack of clear process for HE management restrain the development of human resources to promote academic quality to international standards. Overall, the limited alignment of academic career management as revealed by this study has affected the development and motivation of academic professions to improve teaching and research productivity in the studied context.

Second, the management of academic careers does not present consistent practices, lacking instrumental and valid components to foster academic professions. Based on the framework, the consistent feature plays a central role to establish coherent management practices to shape employee behavioural performance to accomplish the organisation goal (Bowen & Ostroff, 2004). In this study, the lack of instrumental and valid components for academic career management has affected academic motivation and commitment to perform for academic excellence. This issue was depicted by the responses from academic teachers who complained about unequal payment and promotion opportunities in the participating HEIs. The lack of consistent practices of academic human resources management in this study has
been widely observed by researchers in Cambodia and other European and Asian nations. In Europe such as at Finland, Norway, Switzerland, and Austria, Fumasoli (2015) found that the academic career management in these nations remained socially and culturally influenced and misaligned the practices although their management systems are more advanced than Cambodian management model. This issue has affected academic human resource management and consequently led to variability of academic performance outcomes. In the Asian context, Huang (2020) conducted a cross-national survey on the challenge to academic careers, and found several issues related to consistency of administrative procedures. In comparison, Huang (2020) found that Cambodia was among the nations with complex administrative system to support the academic professions. In sum, the study argues that the management of academic careers in the participating HEIs and through sector wide in Cambodian HE lacks benchmark for the practices; therefore, there are inconsistencies within and between the studied HEIs.

Third, the findings reveal little agreement among senior leaders, middle management, and academic staff regarding the practices of academic career management in the participating HEIs. In several instances, the senior leaders referred to the national competency framework for developing academic professional standards, research capacities, and work ethics. However, none of these competencies were mentioned by mid-level leaders and academic staff. In most studied institutions, the mid-level leaders were reluctant to confirm if academic staff had sufficient competencies as prescribed in the human resource management manual introduced by the Cambodian government (see MoEYS, 2021b). In addition, the faculty staff were hesitated to elaborate if they had all the described competencies. This situation reflects a lack of consensus that procedural and transparent management practices to ensure event-
effect on organisation performance (Bowen & Ostroff, 2004). The findings from this study is similar to the argument made by Hum and Choi (2020), although their research focus was on language policy formation and implementation in a Cambodian public university. Hum and Choi (2020) found that the policy formulation and implementation was less ideal to have consensus process due to a lack of micro-politic perspectives, especially from mid-level leaders and frontline staff who could share the realities for better improvement. The findings from this study also tied well with the argument made by Mak et al. (2019) that the mid-level and staff felt reluctant to share their voices and engagement with institutional management due mainly to the political reasons (see also Brehm, 2019). This issue has silent the voice from mid-level and frontline staff and resulted in a lack of consensus decision-making in the implementation of academic career management as highlighted by this study.

Overall, the limited alignment processes of academic career management reflect the conventional practices of academic career management which has been partly enforced by state legitimacy, and mainly because of weak institutional capacity and leadership to establish comprehensive content guideline for the management of academic staff. Political environment has also been accounted as influencing factors on academic career management in the participating HEIs and across sector in Cambodia.

### 7.3.3 Academic career management under structural challenges

The findings show that the management of academic careers in Cambodian public HEIs, as highlighted by this study, is facing structural challenges. At the national level, all mid-level leaders agreed state agencies and regulatory frameworks such as the *Law on the Common Statute on Public Civil Servants*, set uniform standards and procedures for the management of
civil servants. This issue has limited institutional authority to manage, promote, and remove civil servants who are not productive from university employment in the studied contexts. Regarding the influence of state agencies, Un and Sok (2018) noted that strong agentic roles and powers on the higher education management have affected individual engagement and commitment contributing institutional management (Mak et al., 2019). Consistently, Sen (2022) noted that the state influence has infiltrated through policy discourses, for instance, the Royal Decree on Professorial Ranking (RGC, 2013). Sen furthered that the Degree gives dominant roles and powers to national agencies in appointing and promoting professorial ranking in Cambodia. He argued that the academic promotion has been hierarchically bureaucratic suppressing institutional leeway in Cambodia. The findings from this study are similar to the academic career system, for example, at Chinese universities where state policy remains tightly enforced for academic selection and promotion (Xia et al., 2023). Such practices are common in the countries using civil services like Cambodia and China, although the Western management model has been introduced to promote result-based management in HEIs. In addition, the findings from this study are also confirmed by researchers in the developed nations such as in the United Kingdom, where the emerging of state roles and powers become new form of pressures on the management of academic professions (Enders & Naidoo, 2019). Likewise, the policy shifts from the state control to managerialism has become a new source of pressures to the participating institutions to adapt changes in academic career management. This is a global phenomenon, as highlighted by Whitchurch et al (2023) who found a number of changing parameters on academic career management. Some of the factors, as pointed out by Whitchurch and colleague (2023) concerned emergence of new national policies and frameworks for developing academic professions.
The fast-paced policy changes have led to departmental and operational misalignments and posed dramatic effect on academic well-beings, as indicated by this study.

This study also found another potential challenge for academic career management concerns the limited institutional leadership and commitment to establish a strong content guideline for human resources management in the participating institutions. As indicated by the study, there is no comprehensive management framework being used for academic recruitment and professional development, especially in the case of contract employees. This may be the reason that the mid-level leaders together with frontline staff described different selection and hiring processes. In addition, the institutional negligence to nurture corporate culture and collaborative working environment tend to provoke tensions and conflicts among supporting offices and departments. As highlighted in the theoretical discussion, the implication of corporate governance and culture can empower academic staff to handle academic workloads and increase productivity to promote knowledge-based society (Middlehurst, 2013; Kenny, 2017). In the participating HEIs, as echoed by the head of academic personnel office, there is a lack of internal coordination among faculties and departments in managing academic staff. The head office emphasized that some faculties hire staff without inform the office in charge of personnel management. At one participating institution, through FGDs, the academic staff complained a conflicting role between the academic affair department, the administrative and financial department, personnel management office, and quality assurance office in daily management. The findings show a lack of corporate culture that can shape individual belief and behaviour to perform for the shared goal and value of HEIs (Kenny, 2017). Due to a lack of corporate culture as depicted by this study, there is a conflicting role among central level leaders that Tang et al (2023) pointed out that the central leadership played a crucial role in
daily management through the establishment of collaborative working environment and collaboration among teachers for subject-wide competence development and continuing professional growth. A comparative study by Wan et al. (2018) also argued that a lack of corporate governance delayed the development of academic professions in the Cambodia if compared with Malysia counterpart. In this case, Un and Sok (2018) argued that the institutional leaders had to play a strategic role in response to the changing government policy and reform on higher education; otherwise, there is a rising tension between autonomy and accountability. Similarly, Pietilä and Pinheiro (2020) contended that the role of academic leaders could manage and negotiate with external stakeholders to sustain the event-effect on recruitment and profession development.

The final challenge influencing the management of academic careers in the studied institutions concerns in contextual factors, including resource shortages and a lack of conducive working environment. As noted in Chapter 5 and 6, a lack of human and financial resources has restricted the opportunities for developing academic professions and affected individual motivation and intention to pursue academic careers in the studied institutions. In addition, the academic staff repeatedly mentioned the concern over unpleasant working conditions due to lacking collaborations and supports from peers and supervisors. The issue of resource constraints has been commonly raised by other researchers such as Sen (2022) and Sok and Bunnry (2021). Sok and Bunnry (2021) argued that the lack of investment schemes cross key stakeholders affected the development of academic professions and limited the institutional capacity to improve teaching and research quality. The poor investment funds on the management of academic professions has become a complex issue deteriorate the value and identity of academic other developing countries (Altbach et al,
2012). Consistently, a cross-national study by Welch (2005) found that financial constraints, administrative bureaucracy, and an unpleasant working environment had negative impact on the academic work globally. This issue not only occurred in the developing nations in East and Southeast Asia, but it has been common in the European nations. For example, Musselin (2005) noted that financial deficiency affected incentive systems to encourage academics to perform academic excellence in France and Germany, too.

Drawing from the findings, Cambodia like other developing nations regardless of geographical, social, and cultural differences has encountered similar challenges for academic career management. The most common challenges for the management of academic professions concerns the legacy of national laws and regulations that has been tied deeply in the institutional management system. In addition, the complex agentic roles and powers that has fabricated in the management functions and procedures also affect the recruitment and promotion of academic professions in the participating institutions. Another potential challenge for academic career management in the studied context relates institutional factors such as poor institutional capacity and leadership quality to establish internal mechanism for academic career management. The final factor concerns the influence of contextual factors such as a lack of financial robust to promote academic motivation and commitment to pursue academic excellence. These key challenges have caused uncertainty to the management of academic careers in the participating HEIs and the sector wide in Cambodia.
CHAPTER 8: CONCLUSION AND IMPLICATIONS

This chapter concludes the research findings to real the research objectives and provides implications for improvement of academic career management. The chapter suggests theoretical, policy, and practical implications for research and practice in the field of academic career management. The chapter finishes by discussion of future direction for research practice in the field in higher education of Cambodia and beyond.

8.1 Conclusion

This study mainly analyses the current practices and challenges for academic career management in Cambodian HEIs in order to promote academic professions in teaching and research. The study has addressed three research questions to accomplish the research objectives. In answering the first research question, the study found that the current practices of academic career management in the four participating HEIs, as well as throughout the sector, has been hybridized, moving from state-centered model to academic self-governance. However, the unclear mechanism and agentic roles to decentralise the decision-making processes on academic recruitment, promotion, and payment, especially in the case of civil servants has made complex conditions for academic career management in the selected HEIs and in Cambodian public HE system as a whole.

The study also achieves its objective to address the second research question, revealing that the management system of academic careers in the selected HEIs has limited alignment feature. As the highlighted in finding and discussion chapters (5, 6 & 7), the limited alignment feature of academic career management in the participating HEIs has been due to a strong influence of state legitimacy and agentic powers in managing academic careers. For
example, the use of national framework and legal procedure for hiring and promoting civil servants as academic personnel has restricted the university autonomy to exercise its agency to conduct competitively select competent people to work in academic institutions. In addition, the enforcement of state laws and regulations on salary scales and promotion have limited institutional accountability and transparency to manage academic staff and to attract and retain talented people to work in the higher education sector. This issue has limited the effectiveness of self-regulated system and the implementation of market-oriented approach to ensure accountable and transparent management processes in the studied contexts.

In addition, the study has achieved its final objective to address research question on exploring key challenges for academic career management in the participating HEIs. The findings show that the potential challenges, as highlighted in previous sections, primarily concern the institutional capacity and poor leadership to establish local guidelines and procedures for developing academic careers. The weak institutional and central leadership have caused tensions and controversies at the departmental management and weakened the corporate culture to create collaborations among academic staff. This issue has resulted in less conducive working environment and affected social welfare of academic staff in the participating institutions and across the sector in Cambodia.

In conclusion, the management of academic careers in the case institutions as well as across the sector in Cambodia has yet to be a full-fledged self-regulation and market-oriented system model that is desired by the Cambodian government. It is noted from this study that the selected HEIs as well as the Cambodian government are implementing the project, entitled HEIP to improve higher education quality and strengthen academic governance. However, the implementation of HEIP seems to be at a trial-and-error stage, and thus, it is
too early to conclude how the project has promoted the management of academic careers in the studied HEIs and across the sector. It is hoped that the HEIP will help develop academic career system through the promotion of accountable and transparent governance sector and the human resource engagement system for Cambodian higher education.

8.2 Implications

Drawing on this study, the practices of academic career management remains a central issue that need immediate attention from all-key stakeholders; therefore, some implications are proposed to expand the theoretical framework and to improve policy planning and practice in academic career management in the Cambodia and beyond.

8.2.1 Theoretical implications

The findings from this study suggest that the management of academic careers in the selected HEIs as well as through the sector-wide higher education system has arrived at a crossroads between state control and self-regulated system. Therefore, there is a need for more research to examine the phenomena in such dynamic uncertainty. Although the proposed framework using sociological and managerial theory has captured the institutional and operational aspects of academic career management, the findings have demonstrated so little between social, economic, and political aspects and the management practices of academic careers in this study. Therefore, the future research framework needs to incorporate multidimensional aspects to address the underlying issue of the field (See Figure 8).

For example, while the sociology theory has enhanced the understanding of the relationship between institutional governance and management practices in this study, the findings are
limited to institutional aspects of academic career system; therefore, there is a need of discussions on the social and political processes to understand a full picture of academic career system in Cambodia. Hence, the future research framework needs to broaden the theoretical lenses to examine the national capacity/leadership, the government policy and legal framework, social and political environment that shape the academic governance system and the management structure of academic careers in Cambodia and beyond.

Figure 8 Modification of theoretical framework (based on the findings)

In addition, in the proposed framework, the application of managerial theory through a process approach has generated the findings of micro-level relationship of the management components. Findings from this study can reflect only the horizontal alignment between the management functions and academic career development. Future study needs to provide deeper insights into institutional factors relating institutional capacity, leadership style and
cultural environment that fabricate academic career system in order to assess contextual dimensions that shape the coordination processes.

Therefore, future theoretical framework needs to consider integrating cross-pollinated concepts, as also suggested by Whitchurch et al. (2023), in order to enable the researchers to gain a comprehensive understanding of academic careers in the changing environment. The future framework needs to embrace cybernetic concepts to examine the complexities given rise by external and institutional factors that underscore the changing parameters of academic career system in Cambodia and beyond.

8.2.2 Policy implications

The findings from this study also reveal policy vignettes for academic career management among the participating HEIs and the sector-wide system in Cambodia. As highlighted by the previous chapters (5, 6 & 7), the management of academic careers at the four HEIs lacks strong features to link the practices of career management with national and regional policy frameworks. For example, while senior leaders in the studied institutions discussed the national policies and procedures for academic staff management, the mid-level leaders did not seem to be well aware of those frameworks. Therefore, this study suggests needs, especially institutional leaders (e.g., rector/president) to establish a strong connection between regional, national, and institutional policies to ensure sustainable management and development of academic careers. In so doing, the academic leaders, especially the university rectors, need to play strategic roles in policy formulations and implementations to balance roles and powers among key stakeholders such as the state, academic community, and the market. Balancing the role and power relations among these stakeholders can ensure
sustainability of policy implementation for the management and development of academic professions in Cambodia.

In so doing, Cambodian HEIs should consider the proposition made by Sporn (2007) that HEIs should adopt a governance model such as the shared governance, the corporate governance, and the flexible governance that fit the local context. The well fit governance system helps all actors negotiate the roles and power relations through reform processes to achieve the shared value and mission. This suggestion is applicable to Cambodian HEIs where different polities such as state agencies, international donors, and market representatives are weaning for powers and influences in the in higher education system. Balancing the roles and power relations also needs multiple logic model that contain state, managerial, academic, and market domains so that the academic leaders are able to response to the changing policy on the management and promotion of academic careers in such dynamic context (Pietilä & Pinheiro (2020), as Cambodia and other developing countries in the Asian region.

8.2.8 Practical/institutional implications

The findings reveal that the implementation of academic career management in the participating HEIs as well as through the sector-wide system does not seem effective enough to promote academic professions in teaching and research desirable to achieve the national and institutional vision in transforming Cambodia to be the knowledge-based society. The potential factors that restrict the effectiveness of academic career management in the studied HEIs are associated the limited institutional capacity and leadership ability; not to mention the political complexity, nepotism, and corruption highlighted by other studies(see Da Wan et
al, 2018; Brem, 2019). To resolve the above issue, the findings suggest that academic leaders, especially the central level, must play a vital role in establishing a strong system for academic career management. In doing so, some practical implications are proposed for considerations.

First, the findings show high inconsistencies of academic recruitment occurs due to a lack of comprehensive frameworks and content guidelines in the studied HEIs. This suggests that the academic leaders especially among faculty and departmental level need to establish a clear framework for academic recruitment and performance evaluation. In so doing, the participating HEIs as well as other institutions in Cambodia can learn from its peers such as Malaysia or Singapore, where academic recruitment and selection is internationally competitive to select candidates from large pools (see Lee, 2018; Eng Thye Tan, 2018). Considering the case of Malaysia, the well-established universities such as Universiti Sain Malaysia (USM) require candidate with not only obtained doctoral degrees but also had research and public experience (Lee, 2018; Teichler et al., 2013). Similarly in Singapore, the National University of Singapore (NUS) and the Nanyang Technological University (NTU) have set a competitive selection process to ensure that the selected candidates are capable to work in academia (Eng Thye Tan, 2018).

Taking the two countries for consideration, the Cambodian HEIs should also change the recruitment and selection procedures—removing the sit-in exam to implementing multiple hiring processes so that they can evaluate individual subject knowledge, behaviour and job interest, and research skills. In addition, the academic employment decision should be more decentralised and opened to external stakeholders to join the selection process ensuring transparency and accountability at faculty and departmental level. The decentralised recruitment helps the faculty and department assess individual interest and commitment to the
academic work. In doing so, the participating HEIs should have comprehensive guidelines prescribing clear content and procedures for recruitment and selection. As suggested by Bowen and Ostroff (2004), the detailed content and processes can enhance transparency of employment conditions and direct employees to performance toward the organisation goal. Likewise, the comprehensive guidelines can enhance the effectiveness of academic employment and academic performance in HEIs as highlighted by many European researchers (e.g., Kekäle, 2015, 2018; Musselin, 2013).

Findings from this study also reveal that the current practice of academic professional development in the selected HEIs has followed resource dependency. In this case, the academic professional development is peripheral and ad hoc which is less ideal for developing academic professions. The studied HEIs should establish institutional-wide strategy and planning for academic professional development in order that they can perform to achieve competitive advantage in the rising globalisation (Boxall, 2012). Similarly in Cambodian academic setting, a continuing professional development is necessary to enhance individual capacities and skills in coping with a dynamic uncertainty for career sustainability and secure payment. Therefore, Cambodian HEIs needs to establish a strategic plan to provide the academic staff with both short- and long-term professional training. In so doing, the Cambodian HEIs especially the participating HEIs should leverage sources from different stakeholders to provide extensive training and development to academic staff. The training and development can be delivered through direct partnership or a competitive scholarship program.

In addition, the findings suggested that Cambodian HEIs need to conduct result-based evaluation rather than the conventional form that focuses on teacher effectiveness and
program outcomes. In the current practices, the evaluation procedures and tools are functional, following the national framework to assess individual teacher performance and outcome. This evaluation practice is quite traditional, though thriving to align its objective to national quality standards. In the modern perspective of academic career management, performance evaluation should focus on result-based performance including research outputs, project activities and services as key performance indicators. In doing so, Cambodian HEIs can learn from Hong Kong’s academic career system that assesses academic performance on research and publication in top ranking journals (Lo, 2018).

Finally, it is noted from this study that academic compensation system in terms of salaries and benefits is piecemeal, barely enough to support the academics’ living conditions in the participating HEIs as well as across the higher education sector in Cambodia. Such small amount of income has affected academic motivation and the intention to continue their career paths with the studied institutions. Some academic staff have shared that they would likely leave their careers for their own businesses or for new career opportunities in private sectors. This suggests that Cambodian HEIs should establish a double- or multiple-tier pay system to raise payment standards and to motivate academics to excel more commitment in their teaching and research performance. Cambodia should learn from a similar case of China, where civil service is applied for academic salary system. The leading Chinese universities have adopted a multiple-tier-pay system by leveraging different funding agencies: national and local government, universities (self-financing) and business bodies (e.g., insurance companies, industries, and funding agencies) in order to offer the payment system on the merit basis, such as tier 1, tier 2 and tier 3. Cambodian should also consider the case of Mexico or South Korea where are implementing a merit-based pays to promote social and
economic well-being of academic staff (see Galaz-Fontes & Gil-Antón, 2013; Kim, 2021). In short, the Cambodian HEIs should apply the merit pay system to enhance academic motivation to achieve teaching and research excellence.

8.2.3 Direct Implications for mid-level leaders and academic teachers

The findings from this study show a lack of departmental coordination and an absence of central leadership roles especially among deans and departmental heads to establish a strong interaction and communication channel in managing academic staff in the participating HEIs. This suggests a strong need of corporate governance (Sporn, 2007) and organisation culture (Kenny, 2017) to enhance coherence and integrity of academic personnel management. Kenny (2017) argued that corporate culture is desirable to empower the academics so that they can pursue their endeavour for academic excellence. In the same research line, corporate governance can shape individual belief, behaviour, and performance towards achieving the shared value and mission of HEIs (Ramirez & Tejada, 2018). Consistently, from managerial perspective, Delery and Doty (1996) contended that good corporate management could eliminate the overlapping roles and conflicts among line managers in order to foster conducive working environment.

Based on the researcher’s own experiences as the head of the academic personnel office in one public university, building a corporate culture for academic career management in Cambodian public higher education system is a dim hope due to a lack of departmental coordination and the perpetuation of state agentic powers into the institutional management structure. The absence of corporate culture in Cambodian HE has been due to the influence of traditional-bureaucratic system, too (Sen, 2022). To resolve this issue, there is a need of
strong central leadership, as suggested by Tang et al (2023), to build trust among multilayered leaders and to enhance teacher capacities and collaborations. It is also believed that the implication of corporate governance can eliminate the overlapping roles and conflicts among coordinating departments such as human resources, administration and finance, and quality assurance in order that they play a more concerted effort in managing and developing academic professions in Cambodia.

Overall, the findings from this study suggest a strong need for establishing a corporate governance and management system among central level departments to establish coherence, integrity, and conducive work environment. The corporate culture can also build trust among academic staff to join teaching and research collaborations.

8.3 Limitations

This exploratory sequential study limits its findings to the participating institutions which are under policy reform progress to improve the governance sector in Cambodia. The findings and discussions are limited to the participants who have shared their perceptions through interviews, group discussions and online surveys. Other studies applying, for instance, an ethnographic method (Wieser & Ortega, 2020) can get comprehensive understanding of social and historical phenomena on academic career management in the dynamic landscape of Cambodian higher education system. Future studies also need to apply a longitudinal method (McGinity et al., 2022) using advanced statistical tests with larger sample sizes to assess the impact of policy planning and practice on the management of academic careers and their performance outputs contributing to institutional and social development. The longitudinal method is also powerful to examine the impact of academic career management,
and their teaching and research performance that contribute economic development in Cambodia.

The researcher also acknowledges the limitation of the study with dispersed sample sizes in terms of wide ratios between male and female academics and between civil servants and contracted employees. The sample dispersion may affect the normal distribution and generalisation of the findings, although this study has followed the exploratory sequential nature to use quantitative strands to supplement the qualitative findings to make meaningful interpretations and discussions to address the research questions. Future studies may need to use larger sample sizes selected through a random sampling method to enhance research rigor and generalizability to a broader context. Future studies need to perform an advanced statistical analysis for hypothetical tests in order to provide numeric reliability and validity.

Finally, the findings from this study are also limited to a research timeframe and resources used for this doctoral study from 2020 to 2023, which has mainly focused on the practices and challenges for academic career management the government-funding HEIs. Other studies conducted after 2023 to trace the impact of the implementation of HEIP on academic career professions may provide different results and conclusion regarding academic career management in Cambodian higher education sector.

8.4 Future research

This study opens the door for further research using quantitative modelling or mixed methods with a more significant number of participants. This study calls for comparative research to generate broader perspectives on academic career management in Cambodia's private, non-profit, and multi-national/international corporate institutions. The study also calls for cross-
national research to understand the management system of academic careers, especially among ASEAN state members, to build a holistic framework for academic professions in the region were academic governance ranges from highly centralised to relative institutional autonomy.

Finally, this study also calls for policy debates on academic career management in Cambodia and other developing nations. Therefore, engagement from multiple stakeholders in the policy debates guarantees the efficiency and accountability of academic career management.

8. 5 Journey after PhD study

After going through a PhD journey, despite sometimes encountering psychological and emotional distress, I have developed a clear vision for my personal and professional life. At a personal level, the researcher has grown his maturity of self-control and independent decision-making to resolve issues in daily life. The researcher is also capable of deciding the paths to advance personal lifestyle and communication. At a professional level, the researcher is expected to get a promotion to a professorship ranking as recently introduced and stimulated by Cambodia. Upon graduating from this PhD study, the researcher also expects to be promoted to higher position in the institutions. Additional the current position as the head of human resource management in a public university, the researcher has recently been promoted to Director of the Research and Development Center. Obtaining this new position, the researcher will be able to engage with national and international scholars through research project or a postdoctoral scheme continue research interest in the management and development of academic careers in the higher education system in Cambodia as well in Southeast Asian region and beyond.
REFERENCES


Ahrens, L., & McNamara, V. (2014). Cambodia: evolving quality issues in higher education. Education in South-East Asia, 47–70. https://doi.org/10.5040/9781472544469.ch-003


https://doi.org/10.1007/s10734-017-0117-1


https://doi/10.1080/2331186X.2022.2062891


https://doi.org/10.1177/0018726705057156


Fumasoli, T. (2015). Strategic management of academic human resources: A comparative analysis of flagship universities in Norway, Finland, Switzerland, and Austria. In F. Ribeiro, Y. Politis, & B. Culum (Eds.), *New voices in higher education research and scholarship* (pp. 18-37). IGI Global.


https://doi.org/10.1007/s10734-013-9610-3


http://dx.doi.org/10.20511/pyr2019.v7n2.255


https://doi.org/10.1016/S0090-2616(98)90012-2


https://doi.org/10.1207/s15327930pje7904_6

https://doi.org/10.1002/hrm.20405


Huang, F. (2020). Challenges to the Asian academic profession: Major findings from the international surveys. *Higher Education Quarterly*, 75, 438–452


Kogan, M., & Teichler, U (Eds.) (2007). Key challenges to the academic profession and its interface with management: some introductory thoughts. In: *Key challenges to the academic profession* (pp. 9-16). International Centre for Higher Education Research.


Mitchell, R. (2013). What is professional development, how does it occur in individuals, and how may it be used by educational leaders and managers for the purpose of school improvement? Professional Development in Education, 39 (3), 387-400. https://doi.org/10.1080/19415257.2012.762721


RGC (2002). *Sub-decree on criteria for the establishment of university*. Phnom Penh, Cambodia.


Appendixes

Appendix A: Interview protocols for senior leaders

Research title: Practices and Challenges for Academic Career Management in Cambodian Public Higher Education

Introduction

The primary purposes of this study are exploring the common practices of academic career management, examining the alignment features, and investigating the challenges and solutions for enhance academic careers in the context of Cambodian higher education.

Your HONEST responses will be significant for my research study and for developing teacher management systems to promote teacher competencies in the context of Cambodian higher education.

The information you share about the topics and your identification will be kept for privacy and confidentiality. Your participation in this study is genuinely voluntary.

Thanks for your cooperation. Should you have any questions, please contact me at [redacted] or email: [redacted]

University code: [redacted]
Faculty code: [redacted]
Class code: [redacted]
Participant code: [redacted]

Section I: Interview questions (university/faculty strategy/mission)

1. Can you briefly describe the university characteristics…?
2. Can you briefly describe the university's strategy, mission, and goal?
3. Since the university's mission is to enhance teaching quality, what teacher competencies do you need? How do you define those competencies?
4. The university mission also enhances learning outcomes; what learning outcomes do you expect students to achieve?
5. What do you consider the key factors influencing teacher competencies? For example,

Section II Interview questions

Recruitment and selection

6. What is the general procedure to recruit and hire teachers (government teacher/full-time contract/part-time contract)?
7. How is the teacher's job designed? Who participated in the design?
8. What qualifications/competencies do you look for from the teacher candidates? Why?
9. Does the university require teacher candidates to sit for a test and to attend an interview? How long do the test and interview last?
10. Who participated in the interviews?
11. How long do teacher candidates wait for the results?
12. Who finally decides on the success or failure of the candidates?
13. What are the challenging factors in the recruitment and selection of competent teachers?

Training and development

14. To improve teaching quality/teacher performance, does the university set up a regular training and development plan?
15. How many trainings per year/semester/month?
16. What is the training priority? Who decides on it? Why?
17. Who are usually the trainers? (Internal or external)? Why?
18. How do you evaluate the training outcomes and teacher needs?
19. Does the university have other training and development plans? Who provides the funds/budget/technical assistant?
20. Any challenges do the university encounter to organize the training?
Compensation systems

21. Can you briefly tell the university compensation system: salary scale, teaching incentives, annual benefits, health benefits, and others?

22. Do you think the current salary and other incentives can influence your teaching competency? Why?

23. Does the university give non-financial compensation (rewards/medals) for high teaching achievement? What is the procedure?

24. What are the challenges to implementing a compensation system in your university?

Performance appraisal

25. Can you describe the process of teacher performance evaluation? What performance criteria do you focus on when conducting the appraisal?

26. What teacher competencies do you intend to improve?

27. What do you do to improve the desired competencies?

28. From the performance evaluation, do you think teachers have sufficient competencies (knowledge, skills, attitude) to promote the student learning outcomes?

Section III Interview questions (teacher competencies)

29. Based on your experience, do you think the university recruitment and selection is visible and valid to attract competent teachers? Why?

30. Do you think the university provide relevant training and development to your need? Can you explain?

31. Do you think the compensation system in terms of salary, incentive, and bonus influence your teaching competency? Why?

32. How do you feel about the performance appraisal in the university? Do you think it is fair and constructive? Can you explain the details?
Appendix B: Interview protocols for mid-level leaders

Research title: Practices and Challenges for Academic Career Management in Cambodian Public Higher Education

Introduction

The primary purposes of this study are exploring the common practices of academic career management, examining the alignment features, and investigating the challenges and solutions for enhance academic careers in the context of Cambodian higher education.

Your HONEST responses will be significant for my research study and for developing teacher management systems to promote teacher competencies in the context of Cambodian higher education.

The information you share about the topics and your identification will be kept for privacy and confidentiality. Your participation in this study is genuinely voluntary.

Thanks for your cooperation. Should you have any questions, please contact me at [contact information] or email: [email]

University code: ______
Faculty code: ______
Class code: ______
Participant code: ______

Section I: Interview questions (university/faculty strategy/mission)

1. Can you briefly describe the university characteristics…?
2. Can you briefly describe the university's strategy, mission, and goal?
3. Since the university's mission is to enhance teaching quality, what teacher have
competencies do you need? How do you define those competencies?
4. The university mission also enhances learning outcomes; what learning outcomes do you expect students to achieve?
5. What do you consider the key factors influencing teacher competencies? For example,

Section II Interview questions

Recruitment and selection
6. What is the general procedure to recruit and hire teachers (government teacher/full-time contract/part-time contract)?
7. How is the teacher's job designed? Who participated in the design?
8. What qualifications/competencies do you look for from the teacher candidates? Why?
9. Does the university require teacher candidates to sit for a test and to attend an interview? How long do the test and interview last?
10. Who participated in the interviews?
11. How long do teacher candidates wait for the results?
12. Who finally decides on the success or failure of the candidates?
13. What are the challenging factors in the recruitment and selection of competent teachers?

Training and development
14. To improve teaching quality/teacher performance, does the university set up a regular training and development plan?
15. How many trainings per year/semester/month?
16. What is the training priority? Who decides on it? Why?
17. Who are usually the trainers? (Internal or external)? Why?
18. How do you evaluate the training outcomes and teacher needs?
19. Does the university have other training and development plans? Who provides the funds/budget/technical assistant?
20. Any challenges do the university encounter to organize the training?

Compensation systems
21. Can you briefly tell the university compensation system: salary scale, teaching incentives, annual benefits, health benefits, and others?
22. Do you think the current salary and other incentives can influence your teaching competency? Why?

23. Does the university give non-financial compensation (rewards/medals) for high teaching achievement? What is the procedure?

24. What are the challenges to implementing a compensation system in your university?

Performance appraisal

25. Can you describe the process of teacher performance evaluation? What performance criteria do you focus on when conducting the appraisal?

26. What teacher competencies do you intend to improve?

27. What do you do to improve the desired competencies?

28. From the performance evaluation, do you think teachers have sufficient competencies (knowledge, skills, attitude) to promote the student learning outcomes?

Section III Interview questions (teacher competencies)

29. Based on your experience, do you think the university recruitment and selection is visible and valid to attract competent teachers? Why?

30. Do you think the university provide relevant training and development to your need? Can you explain?

31. Do you think the compensation system in terms of salary, incentive, and bonus influence your teaching competency? Why?

32. How do you feel about the performance appraisal in the university? Do you think it is fair and constructive? Can you explain the details?
Appendix C: Questions for FGDs

Research title: Practices and Challenges for Academic Career Management in Cambodian Public Higher Education

Introduction

The primary purposes of this study are exploring the common practices of academic career management, examining the alignment features, and investigating the challenges and solutions for enhance academic careers in the context of Cambodian higher education.

Your HONEST responses will be significant for my research study and for developing teacher management systems to promote teacher competencies in the context of Cambodian higher education.

The information you share about the topics and your identification will be kept for privacy and confidentiality. Your participation in this study is genuinely voluntary.

Thanks for your cooperation. Should you have any questions, please contact me at [redacted] or email: [redacted]

University code: [redacted]
Faculty code: [redacted]
Class code: [redacted]
Participant code: [redacted]

Section I Personal profile

Please HONESTLY provide the following information.

1. Briefly tell me about yourself?
2. Can you talk about teacher management practices in the university?
   - Do you think the university can recruit and select competent teachers?
3. Do you think the university provides training to develop your teaching competencies, i.e., knowledge, pedagogy, social and personality, and professional life? Why and why not?
4. How do you say about the performance evaluation in the university? Does it focus on teacher performance based on teacher competencies?
5. Can you tell your opinion about the compensation system of the university?
6. Do you think the practices of teacher management help improve your teaching competencies?
   - Do you think you are confident in planning practical instructions and materials? Why and why not?
   - Do you think you have effectively assessed individual student learning performance?
   - Do you think you have created a favourable classroom environment?
   - How do you engage with students in learning and beyond?
   - Do you believe you have effective communication and monitoring skills?
   - How do you address your ability to teach the students with multi-level abilities and backgrounds?
   - What do you think about your professionalism, communication with families, school staff, and leaders?
   - What is your overall assessment of your teaching competencies? Why?
7. What do you think are the key change in teacher management in the university?
8. What solution can you suggest for the improvement?

Thank you for your participation!
Appendix D: Survey questionnaire

Research title: Practices and Challenges for Academic Career Management in Cambodian Public Higher Education

**Introduction**

Dear teachers,

My name is Hum Chan, a PhD candidate at the Education University of Hong Kong, Hong Kong, SAR. I am collecting data for my PhD research thesis that focuses on three main objectives: (1) exploring how Cambodian public higher education institutions (HEIs) execute teacher management to recruit, develop, evaluate, and compensate teachers; (2) examining the alignment features of teacher management, and (3) investigating the challenges and seeking the solutions for the improvement of teacher career management in the studied contexts.

Therefore, I would like to invite you to give your responses to the survey which lasts about 30 minutes. Your responses to the survey are very valuable to my PhD studies, as it partially helps strengthen the effectiveness of teacher management in the Cambodian higher education sector. Your participations in the survey also serve as the potential contribution to the improvement of higher education quality which is a key priority outlined in Cambodia’s Policy on Higher Education Vision 2021-2030.

The information you share about the topics and your personal identities will be kept on the ground of privacy and confidentiality. Your participations in this study are genuinely voluntary. Thus, you have the rights to withdraw from joining the survey at any time.

Thanks for your cooperation. Should you have any questions, please contact me at [contact information] or email: [contact information]

Thank you,
Section 1: Demographic information

This section of the survey asks you to provide personal information. Please put a tick (☐) in the appropriate boxes or provide a short answer to indicate your responses.

1. What is your gender?

☐ Male
☐ Female

2. What is your age? ____________________

3. What is your highest level of education?

☐ bachelor’s degree
☐ master’s degree
☐ Doctoral degree
☐ Other, please verify: _________________

4. What subjects are you teaching? _________________

5. How long have you been working as a teacher or a teacher-researcher with the university/ the institute? Write the number of years: __________.

6. What is your current job status?

☐ The government teacher
☐ The university contract teacher
☐ None of the above

7. Why did you decide to work as a teacher with the university/ the institute? Put a tick (☐) in the appropriate boxes.

☐ Personal interest and motivation
☐ Family encouragement, e.g., by parents
☐ Peer influence, e.g., by close friends
☐ Reputation, respect and privilege of teacher job
☐ Teacher is a well-paid job (high salary).
☐ Teacher can gain more opportunities for professional development.
☐ None of the above
Section 2: Academic Career Management

This section of the survey asks your perceived experience relating to teacher career management in relation to the execution of recruitment, professional development, evaluation, and compensation and reward in your university/institution.

8. The six statements below describe the execution of teacher recruitment in your university/institution. Please circle the number e.g., 1 = Strongly Disagree (SD); 2 = Disagree (D); 3 = Neutral (N); 4 = Agree (A); 5 = Strongly Agree (SA) to indicate your opinions:

<table>
<thead>
<tr>
<th>Statements</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>The university/institute publicly disseminates information regarding academic recruitment.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>The university/institute clearly defines the qualifications and competencies of candidates in the job announcement.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>The university/institute uses standardised tests to assess candidates' performance competencies.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>The university/institute interviews candidates to assess their interests and motivation for a given job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>The university/institute invites representatives from relevant offices/departments/faculties to assess the candidates.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>The university/institute uses valid tools (e.g., interviews, tests, etc.) to select the most competent candidates to become academic staff.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

9. The six statements in the table below describe the implementation of teacher professional development. To what extent do you agree with each statement? Please circle number e.g., 1 = Strongly Disagree (SD); 2 = Disagree (D); 3 = Neutral (N); 4 = Agree (A); 5 = Strongly Agree (SA) to indicate your responses:

<table>
<thead>
<tr>
<th>Statements</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
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</thead>
<tbody>
<tr>
<td>The university/institute has provided training programmes based on need analysis to enhance knowledge competence.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>The university/institute has provided training programmes to develop pedagogical competence.</td>
<td>1</td>
<td>2</td>
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<td>4</td>
<td>5</td>
</tr>
<tr>
<td>The university/institute has provided training programmes to develop personality and ethics.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>The university/institute has provided training programmes to develop research skills.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>The university/institute has provided training programmes to develop technological skills.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>The university/institute has provided training programmes to develop professional development competence.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
10. The statements below describe teacher performance evaluation in your university/institution. Please circle number e.g., 1= Strongly Disagree (SD); 2= Disagree (D); 3 = Neutral (N); 4= Agree (A); 5= Strongly Agree (SA) to indicate your opinions:

<table>
<thead>
<tr>
<th>Statements</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance evaluation of the university/institute determines the</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>teaching effectiveness of the subject area.</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Performance evaluation of the university/institute determines the</td>
<td>1</td>
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<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>effectiveness of teaching pedagogy.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Performance evaluation of the university/institute provides feedback to</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>improve individual personality and ethics.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance evaluation of the university/institute focuses on the</td>
<td>1</td>
<td>2</td>
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<td>5</td>
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<tr>
<td>research outputs.</td>
<td></td>
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</tr>
<tr>
<td>Performance evaluation of the university/institute includes the use of</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>technological skills.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance evaluation of the university/institute focuses on</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>5</td>
</tr>
<tr>
<td>continuing career development.</td>
<td></td>
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</tr>
</tbody>
</table>

11. To what extent do you agree with the statements about teacher compensation and reward in your university/ institution? Please circle number e.g., 1= Strongly Disagree (SD); 2= Disagree (D); 3 = Neutral (N); 4= Agree (A); 5= Strongly Agree (SA) to indicate your responses:

<table>
<thead>
<tr>
<th>Statements</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>The university/institute provides financial incentives, benefits, and</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>recognition to individuals with outstanding knowledge transfer.</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>The university/institute provides financial incentives, benefits, and</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>recognition for individuals teaching excellence.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The university/institute provides financial incentives, benefits, and</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>recognition to individuals with good personality and work ethics.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The university/institute increases financial incentives, benefits, and</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>recognition of individual research outputs.</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>The university/institute provides opportunities for individuals to</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>advance technological knowledge.</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>The university/institute provides opportunities for short- and long-</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>term professional development.</td>
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</tr>
</tbody>
</table>
Section 3: Alignment features of academic career management

This section of the survey asks you to evaluate the alignment features of teacher career management in relation to clarity, attractiveness, rigor, effectiveness, and transparency. Please provide your honest responses to each question.

12. What extent do you think the university/institution clearly describes qualifications, tasks, and responsibilities in the job announcement? Please circle the number to indicate your responses:

<table>
<thead>
<tr>
<th>Very Unclear</th>
<th>Unclear</th>
<th>Neutral</th>
<th>Clear</th>
<th>Very clear</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

13. What extent do you think university/institution shows attractive salary packages and benefits in the job calls? Please circle the number to indicate your responses:

<table>
<thead>
<tr>
<th>Very Unattractive</th>
<th>Unattractive</th>
<th>Neutral</th>
<th>Attractive</th>
<th>Very attractive</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

14. What extent do you think university/institution uses a rigorous process to screen, select and hire the right people for the right job? Please circle the number to indicate your responses:

<table>
<thead>
<tr>
<th>Very Unattractive</th>
<th>Unattractive</th>
<th>Neutral</th>
<th>Attractive</th>
<th>Very attractive</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

15. What extent do you think The university/institution provides extensive training programs contributing to individual and institutional development.? Please circle the number to indicate your responses:

<table>
<thead>
<tr>
<th>Highly Irrelevant</th>
<th>Irrelevant</th>
<th>Neutral</th>
<th>Relevant</th>
<th>Highly Relevant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

16. What extent do you think the university/institution conducts performance evaluations to promote, reward and incentivize individual staff.? Please circle the number to indicate your responses:

<table>
<thead>
<tr>
<th>Very ineffective</th>
<th>Ineffective</th>
<th>Neutral</th>
<th>Affective</th>
<th>Very Affective</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

17. Overall, to what extent do you think the university/institution provides fair and transparent pay and reward.? Please circle the number to indicate your responses:
Section 4 Key challenges and solutions

18. The statements below indicate key challenges for teacher career management in your university/institution. Which factors do you think are most challenging? Please circle the number e.g., 1 = Strongly Disagree (SD); 2 = Disagree (D); 3 = Neutral (N); 4 = Agree (A); 5 = Strongly Agree (SA) to indicate your responses:

<table>
<thead>
<tr>
<th>Statements</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line ministries (e.g., MoEYS) tightly control the management of academic staff at the university/institution.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>The national laws centralise the management of academic staff at the university/institution.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>A lack of institutional attention challenges the management of academic staff at the university/institution</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>A lack of a clear framework challenges the management of academic staff at the university/institution</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>A lack of a fair compensation system limits academic motivation and intention to academic careers at the university/institution.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>A lack of academic career pathways causes uncertainty for academic staff to work with the university/institution.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>A lack of financial support limits professional development at the university/institution.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>A lack of positive working environment discourages individuals from working with the university/institution.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

19. Which solutions do you consider effective to improve the execution of teacher management in the university/institute you are working with? Please circle the number e.g., 1 = Strongly Disagree (SD); 2 = Disagree (D); 3 = Neutral (N); 4 = Agree (A); 5 = Strongly Agree (SA) to indicate your responses:

<table>
<thead>
<tr>
<th>Statements</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>The university/institute should integrate teacher management into its strategic priority.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>The university/institute should establish a consistent process for teacher recruitment.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>The university/institute should provide relevant programmes for teacher development.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>The university/institute should use both formative and summative objectives for teacher evaluation.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Statement</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>The university/institute should compensate teachers based on individual performance outcomes.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The university/institute should promote teachers on the merit base.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The university/institute should provide financial rewards to promote teacher performance.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The university/institute should promote teacher performance through building positive working environment.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Thank you,
### Appendix E: Research plan

<table>
<thead>
<tr>
<th>Activities in the study plan</th>
<th>Year 1 (2020/21)</th>
<th>Year 2 (2021/22)</th>
<th>Year 3 (2022/23)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Doing academic course works</td>
<td>September</td>
<td>October</td>
</tr>
<tr>
<td>2</td>
<td>Reading the literature</td>
<td>September</td>
<td>October</td>
</tr>
<tr>
<td>3</td>
<td>Developing proposal (outlining)</td>
<td>September</td>
<td>October</td>
</tr>
<tr>
<td>4</td>
<td>Submitting the first draft for supervisory comments</td>
<td>September</td>
<td>October</td>
</tr>
<tr>
<td>5</td>
<td>Addressing comments and revising the draft</td>
<td>September</td>
<td>October</td>
</tr>
<tr>
<td>6</td>
<td>Finalizing the proposal and submitting it to GS</td>
<td>September</td>
<td>October</td>
</tr>
<tr>
<td>7</td>
<td>Qualifying a proposal</td>
<td>September</td>
<td>October</td>
</tr>
<tr>
<td>8</td>
<td>Preparing for field works</td>
<td>September</td>
<td>October</td>
</tr>
<tr>
<td>9</td>
<td>Requesting referral letters</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>----------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Preparing travels for the field in Cambodia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Doing fieldwork in Cambodia (Phase 1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Meeting supervisors to discuss data in phase 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Transcription, coding, and analysing data phase 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Writing report of results in phase 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Presenting the results (phase 1) to supervisors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Meeting supervisors for finalizing survey tools</td>
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<td></td>
</tr>
<tr>
<td>17</td>
<td>Doing fieldwork in Cambodia (Phase 2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Task Description</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>-------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Meeting supervisors for feedback on data</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Coding and computing data phase 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Writing report of results in phase 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Interpreting and discussing data</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Compiling thesis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Submitting a draft of the thesis for supervisory comments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Addressing comments and finalizing the thesis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>Submitting for the defines</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>Thesis defines</td>
<td></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>Contingency period</td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>Thesis dissemination and graduation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Appendix F: List of interview informants

<table>
<thead>
<tr>
<th>ID</th>
<th>Positions</th>
<th>Gender</th>
<th>Responsibilities</th>
<th>University/Faculty</th>
<th>Interview dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>PA1</td>
<td>Vice rector</td>
<td>M</td>
<td>IQA, HRM, Academics</td>
<td>University A*</td>
<td>22/02/22</td>
</tr>
<tr>
<td>PA2</td>
<td>Vice dean</td>
<td>M</td>
<td>HRM &amp; Academics</td>
<td>University A/ Business Administration</td>
<td>28/02/22</td>
</tr>
<tr>
<td>PA3</td>
<td>Vice dean</td>
<td>M</td>
<td>HRM &amp; Academics</td>
<td>University A/ Education</td>
<td>15/02/22</td>
</tr>
<tr>
<td>PA4</td>
<td>Vice dean</td>
<td>F</td>
<td>HRM &amp; Academics</td>
<td>University A/ Technology and Science</td>
<td>18/03/22</td>
</tr>
<tr>
<td>PA5</td>
<td>Director</td>
<td>M</td>
<td>HRM &amp; Academics</td>
<td>University A/ Language Institute</td>
<td>21/02/22</td>
</tr>
<tr>
<td>PA6</td>
<td>Vice chief</td>
<td>M</td>
<td>HRM</td>
<td>University A/ Personnel Office</td>
<td>21/02/22</td>
</tr>
<tr>
<td>PB7</td>
<td>Vice rector</td>
<td>M</td>
<td>IQA &amp; Academics Administration</td>
<td>University B*</td>
<td>24/05/22</td>
</tr>
<tr>
<td>PB8</td>
<td>Vice rector</td>
<td>M</td>
<td>HRM &amp; Academics</td>
<td>University B</td>
<td>26/05/22</td>
</tr>
<tr>
<td>PB9</td>
<td>Vice dean</td>
<td>F</td>
<td>Administration &amp; Academics</td>
<td>University B/ Business Administration</td>
<td>25/05/22</td>
</tr>
<tr>
<td>PB11</td>
<td>Vice dean</td>
<td>M</td>
<td>Administration &amp; Academics</td>
<td>University B/ Agriculture</td>
<td>25/05/22</td>
</tr>
<tr>
<td>PC12</td>
<td>Vice rector</td>
<td>F</td>
<td>HRM &amp; Admin, Finance</td>
<td>University C*</td>
<td>29/03/22</td>
</tr>
<tr>
<td>PC13</td>
<td>Vice dean</td>
<td>M</td>
<td>HRM &amp; Admin</td>
<td>University C/ Veterinary Medicine</td>
<td>26/03/22</td>
</tr>
<tr>
<td>PC14</td>
<td>Vice dean</td>
<td>M</td>
<td>HRM &amp; Admin</td>
<td>University C/ Agro-Industry</td>
<td>27/03/22</td>
</tr>
<tr>
<td>PC15</td>
<td>Vice dean</td>
<td>M</td>
<td>HRM &amp; Admin</td>
<td>University C/ Land Management &amp; Land Administration</td>
<td>05/04/22</td>
</tr>
<tr>
<td>PD16</td>
<td>Vice dean</td>
<td>F</td>
<td>HRM/Academics</td>
<td>University D*/Graduate School</td>
<td>06/04/22</td>
</tr>
<tr>
<td>PD17</td>
<td>Vice dean</td>
<td>M</td>
<td>HRM/Academics</td>
<td>University D/Faculty of Engineering</td>
<td>06/04/22</td>
</tr>
<tr>
<td>PD18</td>
<td>Vice dean</td>
<td>F</td>
<td>HRM/Academics</td>
<td>University D/Faculty of Food Science</td>
<td>08/04/22</td>
</tr>
</tbody>
</table>
Appendix G: List of focus-group discussions (FGDs)

<table>
<thead>
<tr>
<th>Group ID (Teacher ID)</th>
<th>Teacher ID</th>
<th>Gender</th>
<th>Discipline</th>
<th>University/Faculty</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>FGD1 (Government teachers)</td>
<td>T1</td>
<td>F</td>
<td>English</td>
<td>University A/English</td>
<td>25/02/22</td>
</tr>
<tr>
<td></td>
<td>T2</td>
<td>F</td>
<td>Agriculture</td>
<td>University A/Agriculture</td>
<td></td>
</tr>
<tr>
<td></td>
<td>T3</td>
<td>M</td>
<td>Engineering</td>
<td>University A/Technology &amp; Science</td>
<td></td>
</tr>
<tr>
<td></td>
<td>T4</td>
<td>M</td>
<td>Computer Science</td>
<td>University A/Technology &amp; Science</td>
<td></td>
</tr>
<tr>
<td>FGD 2 (Contract teachers)</td>
<td>T5</td>
<td>M</td>
<td>Public Policy</td>
<td>University A/English</td>
<td>01/03/22</td>
</tr>
<tr>
<td></td>
<td>T6</td>
<td>M</td>
<td>English</td>
<td>University A/English</td>
<td></td>
</tr>
<tr>
<td></td>
<td>T7</td>
<td>M</td>
<td>Business Management</td>
<td>University A/Business Administration</td>
<td></td>
</tr>
<tr>
<td>FGD 3 (Government teachers)</td>
<td>T8</td>
<td>M</td>
<td>English</td>
<td>University B/Education &amp; Language</td>
<td>24/05/22</td>
</tr>
<tr>
<td></td>
<td>T9</td>
<td>M</td>
<td>Agriculture</td>
<td>University B/Agriculture</td>
<td></td>
</tr>
<tr>
<td></td>
<td>T10</td>
<td>M</td>
<td>Public administration</td>
<td>University B/Public Administration</td>
<td></td>
</tr>
<tr>
<td>FGD 4 (Contract teachers)</td>
<td>T11</td>
<td>M</td>
<td>English</td>
<td>University B/Education &amp; Language</td>
<td>25/05/22</td>
</tr>
<tr>
<td></td>
<td>T12</td>
<td>M</td>
<td>Finance and Banking</td>
<td>University B/Business Administration</td>
<td></td>
</tr>
<tr>
<td></td>
<td>T13</td>
<td>M</td>
<td>Computer science</td>
<td>University B/Technology &amp; Science</td>
<td></td>
</tr>
<tr>
<td>FGD5 (Government teachers)</td>
<td>T14</td>
<td>F</td>
<td>Agro industry</td>
<td>University C/Agro-industry</td>
<td>26/03/22</td>
</tr>
<tr>
<td></td>
<td>T15</td>
<td>F</td>
<td>Agro industry</td>
<td>University C/Agro-industry</td>
<td></td>
</tr>
<tr>
<td></td>
<td>T16</td>
<td>M</td>
<td>Agricultural Engineer</td>
<td>University C/Agro-industry</td>
<td></td>
</tr>
<tr>
<td>FGD6 (contract teachers)</td>
<td>T17</td>
<td>F</td>
<td>Vet</td>
<td>University C/Vet medicine</td>
<td>27/03/22</td>
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<tr>
<td></td>
<td>T18</td>
<td>M</td>
<td>Food processing</td>
<td>University C/Agro-industry</td>
<td></td>
</tr>
<tr>
<td>Teacher ID</td>
<td>Gender</td>
<td>Degree</td>
<td>University</td>
<td>Date</td>
<td></td>
</tr>
<tr>
<td>------------</td>
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<td></td>
</tr>
<tr>
<td>T19</td>
<td>M</td>
<td>Agricultural Engineer</td>
<td>University C/ Agricultural Engineering</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FGD7 (Government teachers)</td>
<td>T20</td>
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<td>Automation</td>
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<td>20/05/22</td>
</tr>
<tr>
<td></td>
<td>T21</td>
<td>F</td>
<td>Chemistry/food science</td>
<td>University D</td>
<td></td>
</tr>
<tr>
<td></td>
<td>T22</td>
<td>M</td>
<td>Engineering</td>
<td>University D</td>
<td></td>
</tr>
<tr>
<td>FGD8 (contract teachers)</td>
<td>T23</td>
<td>M</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>T24</td>
<td>M</td>
<td>Agriculture</td>
<td>University D</td>
<td>23/05/22</td>
</tr>
<tr>
<td></td>
<td>T25</td>
<td>F</td>
<td>Language</td>
<td>University D</td>
<td></td>
</tr>
</tbody>
</table>
Appendix H: Consent form for participating interview

I, ____________, vice-rector/deans/vice-dean/heads from ____________, hereby consent my active participation as an informant in the research undertaking entitled, “Practices and Challenges for Academic Career Management in Cambodian Public Higher Education” as supervised by Prof. LO SING KAI and to be conducted by Hum Chan, who is a research postgraduate student of the Education University of Hong Kong (EdUHK).

I understand that I can be invited to an audio-recorded interview in the first phase and requested to complete a self-report questionnaire in another phase. Also, I recognize that the information I provided will be used for the analysis and reporting of the findings, and will be disseminated through any publication outlets. However, my right to privacy will be retained, as my personal information will not be revealed and kept with the utmost confidence level.

I well realize the study purposes and the procedure discussed in the attached information sheet, as well as the benefits and risks involved in the study. I also accept that my participation in this study is voluntary. Further, I acknowledge that I have the right to question any part of the study procedure and can withdraw at any time without negative consequences.

Signature : ____________
Name of the participant : ____________
Name of the university : ____________
Agreed data of interview : ____________
Date : ____________

For private study or research only. Not for publication or further reproduction.
Appendix I: Consent form for participating FGDs

I, ____________, teacher from _______________, hereby consent my active participation as an informant in the research undertaking entitled, “Practices and Challenges for Academic Career Management in Cambodian Public Higher Education” as supervised by Prof. LO SING KAI and to be conducted by Hum Chan, who is a research postgraduate student of the Education University of Hong Kong (EdUHK).

I understand that I can be invited to an audio-recorded interview in the first phase and requested to complete a self-report questionnaire in another phase. Also, I recognize that the information I provided will be used for the analysis and reporting of the findings and will be disseminated through any publication outlets. However, my right to privacy will be retained, as my personal information will not be revealed and kept with the utmost confidence level.

I well realize the study purposes and the procedure discussed in the attached information sheet, as well as the benefits and risks involved in the study. I also accept that my participation in this study is voluntary. Further, I acknowledge that I have the right to question any part of the study procedure and can withdraw at any time without negative consequences.

Signature : ______________
Name of the participant : ______________
Name of the university : ______________
Agreed data of interview : ______________
Date : ______________
Appendix J: Information sheet of the study

Research title: Practices and Challenges for Academic Career Management in Cambodian Public Higher Education

You are invited to participate as a respondent in a research project supervised by Prof. LO, SING KAI and conducted by Hum Chan, a PhD student of the Education University of Hong Kong.

Introduction

Academic career management practice is crucial to enhancing teacher competencies and student learning outcomes in the global higher education context. However, teacher management in Cambodia's higher education institutions (HEIs) have encountered several challenges, albeit rapid reforms have decentralized teacher management practices, e.g., recruitment, training, performance evaluation, etc., to the university level. Coupled with the challenges, a lack of research into teacher management practices fails to inform Cambodian policymakers and university leaders to resolve the issues relating to teacher competencies and learning outcomes.

This study frames the concepts of academic career management around sociology theory (Musselin, 2012) and management theory (Bowen and Ostroff (2004)) to get insights into management processes regarding recruitment and selection, training and development, compensation system, and performance appraisal in the Cambodian higher education context. The application of sociology theory examines the relationship between institutional governance and the management of academic career, while the process approach of human resource management investigate the alignment features of the management system. To this end, the study employs a ‘black box of HRM theory’ (Boxall et al. 2011) to demonstrate the mediating relationship between teacher management practices and student learning outcomes in Cambodia's universities.
Methodology

The study employs mixed-methods research (MMR) with an exploratory sequential survey to collect data from two phases. The first phase is a qualitative study using in-depth interviews with 20 informants who are university leaders, faculty deans/vice deans, department/office heads, and FGDs with 26 lecturers. The second phase is a quantitative study using self-administered questionnaires with 200 participants (100 teachers and 100 students). The survey participants are invited from science, social science, and language faculties in 4 public HEIs in Phnom Penh and provincial cities.

Potential risks of the research

The research will uphold ethical standards in the conduct of this study and will observe voluntary participation of all invited and recruited content experts, education supervisors, teachers, and students. They have the right to withdraw at any time without negative consequences. The researcher will seek assistance and approval from the appropriate office or authority of universities and will conduct orientation on the nature and procedure of the study to all groups of the participants.

Consent and commitment forms will be distributed to all participants of this study, specially, with the teacher and student-participants for audio recording of the interview. The interview will be focusing on the actual practices of human resource management, teacher experience in the management process, teacher competencies, and student learning outcomes. As a participant, you may be invited to participate in the 60-minute interview and to answer the 30-minute survey.

All information and contact details of all the participants gathered from the documents, interview responses, and audio-records will be coded, remain confidential and will be used for the analysis of this study. All offline documents related to the actualization of this study will be stored in an archived file in a cabinet with proper security features. The online data folders
will be encrypted with password. All the documents will expire in years from the completion of the study.

Dissemination of results

The study's findings indicate that the practices of academic career management in the targeted HEIs are not consistent due to a lack of central guidelines and procedures. Without a central HRM policy, teacher management practices in each university are implemented on an ad-hoc basis, negatively affecting the hiring process of teachers to work for the universities. Also, the universities do not have a systematic plan to develop teacher professionalism. Most often, the training is offered to teachers based on the demands of external stakeholders, lacking effectiveness, and relevance to teacher needs. Further, the selected universities do not implement a consistent compensation and performance evaluation system due to the complex nature of national policies. Consequently, Cambodia's universities' inconsistent HRM functions demotivate teachers and limit their potential to improve teaching quality.

To conclude, the management practices in Cambodia's universities are fragmented while negatively affecting teacher motivation and performance. Findings from this study contribute to HRM practices, the development of teacher competencies, and the improvement of learning outcomes in Cambodia's higher education institutions (HEIs).

Please communicate with the undersigned if you would like to obtain more information about this study on the following email: [email protected] or [email protected]

In addition, please do not hesitate to contact the Human Research Ethics Committee for any concerns about the conduct of the study by sending them an email hrec@eduhk.hk or a mail to Research and Development Office, the Education University of Hong Kong.

Thank you for your participation in the study.

Hum Chan (principal investigator)

SID: [redacted]
Appendix K: Ethical review approval from EdUHK

10 January 2022

Mr HUM Chan
Doctor of Education Programme
Graduate School

Dear Mr Hum,

Application for Ethical Review <Ref. no. 2021-2022-0089>

I am pleased to inform you that approval has been given by the Human Research Ethics Committee (HREC) for your research project:

Project title: Impact of Teacher Management Practices on Teacher Competencies in Cambodian Higher Education

Ethical approval is granted for the project period from 10 January 2022 to 30 June 2022. If a project extension is applied for lasting more than 3 months, HREC should be contacted with information regarding the nature of and the reason for the extension. If any substantial changes have been made to the project, a new HREC application will be required.

Please note that you are responsible for informing the HREC in advance of any proposed substantive changes to the research proposal or procedures which may affect the validity of this ethical approval. You will receive separate notification should a fresh approval be required.

Thank you for your kind attention and we wish you well with your research.

Yours sincerely,

Patsy Chung (Ms)
Secretary
Human Research Ethics Committee

c.c. Professor CHOU Kee Lee, Chairperson, Human Research Ethics Committee
Appendix L: Research support letter from Graduate School, EdUHK

29 November 2021

To whom it may concern,

This is to certify that Mr HUM Chan (Passport no.: F032967(A)) was admitted to the full-time Doctor of Philosophy (PhD) Programme offered by The Education University of Hong Kong in September 2020.

Enrolment Details
Commencement Date : 29 September 2020
Principal Supervisor : Professor LO Sing Kai
Department : Graduate School
Thesis Title : Impact of Teacher Management Practices on Student Learning Outcomes in Cambodian Higher Education

Current Status
Mr Hum has conducted the qualifying examination on 11 November 2021. To continue his research project, Mr Hum will conduct fieldwork from early December 2021 to the end of June 2022 in Cambodia. Mr Hum’s application for Academic Leave in the abovementioned date has been approved by the Graduate School.

If you have any questions on the above or require further information, please contact Ms Crystal Chung at rp@eduhk.hk.

Yours faithfully,

Teresa Poon
Assistant Registrar
Graduate School
The Education University of Hong Kong
Appendix M: Approval letter from MoEYS, Cambodia
Appendix N: Sample of qualitative data coding (NVivo 12 Plus)
Appendix O: Sample of quantitative data analysis (Independent-sample t-test)