Navigating the Field: Exploring the Influence of Professional Identity on Employability in Chinese College Athletes with Time Management as a Mediator

Jin, Hongyin¹, Tu, Chiaching²

Abstract

The study investigated employability dynamics among Chinese collegiate athletes, with a focus on professional identity (PI) and an analysis of time management (TM) as a mediating factor. Understanding the relationship between PT, TM, and EMT is essential for Chinese college athletes as they navigate demanding academic and athletic environments. Data was gathered from five universities involving a sample of 224 student-athletes, consisting of 142 males and 82 females. Analysed using the Statistical Package for Social Sciences (SPSS). This study examines the influence of PI on EMT results, both directly and indirectly, by analysing its impact on TM practices using the Partial Least Squares – Structural Equation Modelling (PLS-SEM) statistical package for the social sciences. The study revealed complex connections and routes, providing insight into the impact of PI on athletes' preparedness for the workforce. The study highlights the importance of developing mental toughness and improving technical skills to improve career opportunities for Chinese college athletes. The study presents a framework to help athletes effectively manage the challenges of professional travel. The article provides valuable insights into college athletes, higher education, and career development.

Keywords: Professional Identity (PI), Time Management (TM), Employability (EMT), Structural Equation Modelling (SEM), Chinese Athletes.

Introduction

Individuals dedicate their lives to forming their professional identity (PI), engaging in this journey related to a specific job influenced by various factors, even prior to entering that profession or job, as part of the career development process (Lönn et al., 2023). The university stage is crucial for the personal identity development of individuals (Gardiner-Shires & Kloepfer, 2023). The training and distinctive qualities of a person in a work environment have an impact on their PI. PI develops as professionals interact with others, acquire knowledge about professional norms, and refine specialised skills and beliefs in the field. Individuals with robust personalities effectively convey their professional perspectives, stances, and approaches to a wide audience, spanning across different spheres. Research has shown a strong connection between developing a PI and achieving success in one's career (Navarro et al., 2020).

The concept of PI is intertwined with a profession's methods, ideas, beliefs, ethics, and the conditions required for success in the field. Cultural contexts are crucial in the examination and exploration of athletic career development and transitions. Research has identified various factors related to career decision-making and

planning. However, limited empirical studies have explored these traits in college student-athletes from non-Western countries (Yukhymenko-Lescroart, 2021). Chinese college students face difficulties changing their majors compared to students in Western higher education. Significant changes are permitted upon enrollment in Chinese institutions and universities. Students who frequently change their majors lack knowledge about them and do not have a defined career path (Li, Pu, & Phakdeephirot, 2022).

Students may feel frustrated, dissatisfied, and lose motivation for their studies due to their behaviour. Enhancing learning strategies, self-confidence, and motivation rely on PI. In today's dynamic landscape of professional sports and higher education, the employability of collegiate players has gained significance (Zhang & Tu, 2023). College athletes contribute skills, backgrounds, and challenges to their pursuits in both academia and sports, which can benefit them in their future careers postathletics (Yu, Chen, & Hou, 2021). Understanding and enhancing college athletes' employment is crucial for their success and to optimise the advantages of their academic and athletic endeavours. College student employability has become a significant focus of research in various academic fields such as psychology, sociology, educational

 $^{^{\}rm I}$ International College, Krirk University, Thailand, 10220. Email: <u>2505262068@qq.com</u> ORCID iD: <u>https://orcid.org/0000-0003-4221-1159</u>

² International College, Krirk University, Thailand, 10220. Email: tulisa0929@gmail.com ORCID iD: https://orcid.org/0000-0001-9090-1598

management, and human resource management in recent years (Chen et al., 2023).

In addition, universities are incorporating employability development programmes into their curricula to ensure that college students are equipped with the necessary knowledge, skills, qualities, and conduct to thrive in the professional world (Bonnard, 2020). Employability extends beyond mere job placement. It encompasses job readiness and continuous education. College athletes are encouraged to develop a growth mindset, adaptability, and continuous skill enhancement to excel in a dynamic job market (Bonnard, 2020). TM skills are essential for maintaining overall well-being, decreasing stress levels, and enhancing achievement in academic and professional settings (Stevens et al., 2019). Within collegiate athletics, TM involves strategically allocating resources and time to achieve personal growth, athletic success, and academic excellence (Hensley et al., 2018).

This study investigated the impact of Chinese college athletes' professional identities on their employability, with time management as a mediating factor. This study significantly contributes to understanding EMT dynamics among Chinese collegiate athletes by focusing on the correlation between PI, TM, and EMT. Analysed data from 224 chosen student-athletes using PLS-SEM. This study explored the mediating role of Time Management (TM) in the relationship between PI and EMT. The study is structured as follows: the literature review, theory, and hypothesis are outlined. The methodology, results, and discussion are all provided. Ultimately, the study concludes by discussing the paper's limitations in the final section.

Literature Review

Professional Identity in College Athletes

Jackson and Tomlinson (2019) examined the occurrence of emergent PI in different groups of college students and the factors impacting PI development. The study emphasises the significance of identity development in connecting post-secondary education with the workforce, influenced by crucial resources such as social and cultural capital that students acquire prior to entering the workforce. Students' perceptions of familiarity, closeness, and confidence in particular job sectors may be shaped by the varying strengths of their identity forms. Hanna et al. (2020) created and validated the Teacher Identity Measurement Scale (TIMS) to assess the performance of elementary school teachers' PI. The teacher's identity was categorised into four main sections: inspiration, self-worth, selfconfidence, and task perceptions. The analysis was conducted by evaluating quantitative tools used to assess

teacher identity, based on the identity theory. As a result, a measurement scale was developed consisting of 46 components. The factorial design was examined by administering it to primary student teachers during their first and second years.

Haghighat, Borhani, and Ranjbar (2020) conducted a study focused on descriptive correlations. The study included nursing students who were enrolled in nursing programmes at the time of the research. The Moral Development Scale for Professionals (MDSP) The study materials comprised the Professional Identity Scale for Nursing Students (PISNS) and a demographic questionnaire. In a study by Lönn et al. (2023), the authors investigated the impact of challenging work-based learning conditions on the PI development of medical students. According to the investigation, students' main concern during emotionally challenging events in their work-based learning was maintaining a professional attitude.

In a study conducted by Jackson (2017), the focus was on work placements and the impact of work-integrated learning (WIL) on students' preprofessional identity development. Pre-PI encompasses understanding one's professional identity, including self-awareness of abilities, traits, behaviours, values, and regulations related to the chosen profession. In their study, Wang et al. (2020) investigated the conservation of resources theory as a foundation and explored the relationships among professional identity, employee engagement, work satisfaction, and turnover intention among Chinese hotel employees. This study examines professional identity in the hotel industry and its impact on various work performance indicators. In a study by Boo, Wang, and Kim (2021), professional flexibility was examined in relation to future time perspective (FTP), career anxiety, and other variables. The study presents empirical evidence on the correlation between career adaptability and career anxiety by analysing data collected from undergraduate students in colleges in the US and China. Furthermore, it indicates that career anxiety has a negative correlation with FTP.

Employability in College Athletes

In a study conducted by López de Subijana et al. (2020), the job integration of top athletes' post-retirement was analysed to compare the work integration of men and women, as well as non-Olympic and Olympic athletes. The study aimed to determine the factors affecting their choice of occupation and current monthly earnings. Previous top athletes exhibited a lower unemployment rate compared to the general population. An inequality in wages between male and female employees was noted in the gender analysis. When comparing athletes from the Olympics and non-Olympic games, differences were observed in the

correlation between their initial occupations. In their study, Van Lunen et al. (2021) investigated the Doctorate in Athletic Training (DAT) as a recent addition to higher education programmes. Limited literature exists regarding the role of individuals with this degree as faculty members in athletic training. We sought the department chairs' perspectives on the DAT degree and its potential impact on recruiting new professors for a post-baccalaureate professional athletic training programme. External factors influence the demands of the sports labour market.

The COVID-19 pandemic has greatly affected the evolving regulations concerning employment and education. Sato et al. (2021) sought to understand graduate EMTs and the potential role of higher education institutions in human resource development, while identifying differences in these characteristics before and after the COVID-19 pandemic. de Schepper, Sotiriadou, and Hill (2021) investigated discrepancies in stakeholder opinions regarding students' engagement with social and individual aspects of critical reflection and their alignment with the sports management sector's requirements. investigation was conducted on students' views regarding the three personal and societal components of critical reflection through MANOVA and independent ANOVA tests.

Wendling and Sagas (2020) created a career self-management (CSM) model using social cognitive career theory (SCCT) to explore the theoretical mechanisms and key determinants of college athletes' career planning for post-athletic life. Professionals utilise a model and its validated measures to gain insight into the factors that impact career planning processes. In a study conducted by Russell (2021), the correlation between perceived social support and athletic identity in collegiate female athletes was examined in relation to feelings of burnout. The results suggest that focusing solely on athletic identity may not necessarily lead to burnout. Further research on athlete burnout should consider both athletic identity and the type and origin of athlete social support.

Time Management as a Catalyst for Employability in College Athletes

In his study, Jackson (2019) delved into the idea that a strong conceptual foundation of self-regulated learning could influence research on the correlation between TM and academic achievement in college students. Four primary elements were utilised to achieve this overarching objective. They start with an overview of research that shows TM's significance in post-secondary environments. In their study, Wolters and Brady (2021) sought to explore the relationship between Chinese athlete students majoring in physical education and academic procrastination, self-

efficacy for self-regulated learning, and TM dispositions. They investigated the relationship between academic procrastination, mobile phone reliance, self-efficacy in TM tendencies, and self-regulated learning. An efficient TM can greatly impact an individual's overall performance and achievements.

Moreover, the university context's flexibility and independence could pose challenges for individuals lacking TM skills. In a study conducted by Chen, Li, and Kim (2021), the focus was on examining students' ability to demonstrate characteristics associated with professional identity, which is essential for their future employability. Razali et al. (2018) investigated the correlation between students' TM techniques and academic performance. Efficient time management and reduced student anxiety are linked to academic success, yet students struggle to balance their studies with daily life (Hensley et al., 2018). In a study conducted by Adams and Blair (2019), the TM Behaviour Scale was utilised to investigate self-reported TM behaviour among undergraduate engineering students. In a study by Chan (2023), college athletes' professional activities were analysed by establishing targets within an online cognitive professional self-management model to investigate the influencing variables. The findings are valuable for developing career counselling strategies for college athletes. Lu (2020) established the career-building model of adaptation as the foundation for the regulated mediation of professional behaviours among studentathletes.

Background Theory and Hypotheses

College athletes often prioritise their time based on the demands of their sports training, academic coursework, and other responsibilities. They have a strong connection to their sports and professional goals (Wang et al., 2020; Wolters & Brady, 2021). Feelings of purpose, drive, and dedication can be influenced by the PI, who can motivate individuals to manage their time efficiently, set clear objectives, and prioritise tasks (Tomlinson & Jackson, 2021). Having a strong sense of self-worth can assist athletes in improving control, discipline, and self-efficacy in their sport, allowing them to make informed decisions and adapt to varying circumstances (Greco & Kraimer, 2020; Hanna et al., 2020).

HI: Professional identity positively influences time management.

Efficient TM involves effectively distributing resources, prioritising work, and complying with deadlines (Wang et al., 2020). According to Sheng et al. (2020), efficient TM and organisation positively impact the outcomes of Chinese college athletes in EMT. A study suggests that

college athletes who effectively balance their time may develop valuable skills like goal setting, discipline, and prioritisation (Yang, Shu, & Yin, 2022). Athletes can enhance their career prospects and attract employers from different sectors by effectively managing their academic, athletic, and personal responsibilities (Sun et al., 2020).

H2: Improved time management positively influences employability outcomes among Chinese college athletes.

Employers in the sports sector or similar industries are more likely to appreciate the qualities and talents of Chinese collegiate athletes if they clearly define their PI (Aldhahi et al., 2022). Developing a strong sense of professionalism can enhance an athlete's attractiveness to potential employers by increasing their ambition, motivation, and confidence during job searches (Richter, Brunner, & Richter, 2021). Based on this concept, an athlete's likelihood of securing satisfying and enduring job opportunities in their field or related sectors rises in correlation with the excellence of their PI (Compton et al., 2020; Skinner, Leavey, & Rothi, 2021).

H3: Professional identity directly predicts greater employability among Chinese college athletes.

Based on this hypothesis, TM is seen as a key factor in connecting PI and EMT (Tomlinson & Jackson, 2021). Individuals with strong skills in TM can translate their career aspirations into tangible achievements. Athletes can juggle the requirements of training, competition, academics, and professional development through effective time management (Khan et al., 2023). Aside from enhancing efficiency and productivity, this equilibrium showcases a strong level of organisational, disciplinary, and adaptable traits that potential employers highly appreciate (Huang et al., 2021). Athletes establish a solid base for professional advancement and achievement by adopting a proactive approach to achieving their career goals while improving their TM skills (Okolie, 2022; Wang et al., 2020). **H4:** *Professional Identity indirectly influences employability* through the mediation of time management.

The model of this study is presented in Figure 1.

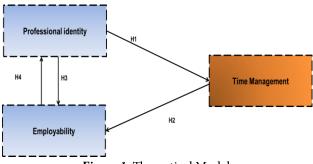


Figure 1: Theoretical Model.

Methodology

This section discusses the use of TM as a mediating factor and the influence of PI on EMT in Chinese college athletes.

Data Collection

Through purposive sampling, a total of 224 student-athletes (142 males and 84 females) were chosen for the study. Focusing on how the dual identities of being students and athletes affect athletes' careers, the study included college athletes who competed in interschool or higher-level competition and majored in physical education and sports. The individuals engaged in various sports including gymnastics, golf, tennis, table tennis, archery, track and field, volleyball, basketball, baseball and Kabaddi.

Measurement

The PI consists of an 18-item questionnaire divided into four subscales: role values, occupational values, feelings of occupational belonging, and propensity for professional conduct. The Likert scale utilised consists of five points, with one representing (very strongly disagree) and five indicating (very strongly agree). The TM is a questionnaire with five items. A seven-point scale was utilised to evaluate the questionnaire, with a range from 1 indicating strong disagreement to 7 indicating strong agreement. The EMT applies a seven-point LS ranging from 1 (strongly disagree) to 7 (very strongly agree).

Data analysis Technique

Data analysis was conducted using SPSS. Exploring the connections among PI, EMT, and TM began with an analysis of Pearson's correlations. Furthermore, the relationship between PI and EMT was analysed using PLS-SEM to explore the mediating impacts of TM. Finally, the impact of moderating on the relationship between EMT and PI was tested using moderate latent structural equations. The following metrics were used to measure the structural model: Root Mean Square Error of Approximation (RMSEA), chi-square statistics (χ^2 /df), Tucker-Lewis's index (TLI), Comparative Fit Index (CFI), and Standardised Root-Mean-Square Residual (SRMR). All statistical tests were two-tailed and were assessed at a significance threshold of p < .05. Furthermore, PLS-SEM employs item-to-construct balances for item parcelling.

Results and Discussion

In this section, we analyse the mediation and moderating effects of the PI on MTT in Chinese College Athletes with TM.

Reliability Analysis

The study ensured the constructs' validity and reliability by assessing indicator reliability, discriminant validity, convergent validity, and internal consistency reliability. The table displays Cronbach's alpha values for the variables. Values above 0.70 for Cronbach's alpha are considered acceptable (Cronbach, 1946, 1949; Hayes & Coutts, 2020; Tavakol & Dennick, 2011).

Table 1
The Variables' Cronbach Alpha Values

Variables	Items	Values of Cronbach's Alpha
Professional identity (PI)	5 (PI1-PI5)	0.87
Employability (EMT)	5 (EMT1-EMT5)	0.81
Time management (TM)	4 (TM1-TM4)	0.85

Descriptive Statistics and Correlations

By employing descriptive statistics, researchers can gain a deeper understanding of the distribution of scores within each variable, along with its central tendency and variability. Studying correlations involves examining the relationship between variables in terms of direction and strength. During this study, researchers analysed EMT, TM, and PI connections. Tables 2 and 3 display the relationships among the variables and the summary of the data. The values is $^*p < .05$, $^{**p} < .01$.

 Table 2

 The Variables' Descriptive Statistics

1		
Variables	Standard deviation (SD)	Mean
Professional identity (PI)	8.73	67.74
Employability (EMT)	5.62	25.65
Time Management (TM)	1.50	52.31

Table 3 *Correlation Coefficient of The Variables*

Variables	PI	EMT	TM
Professional (PI)	1.00	-	-
Employability (EMT)	0.45**	1.00	-
Time Management (TM)	0.35**	0.28**	1.00

Time Management as A Mediator Between Professional Identity and Employability

We tested the proposed structural connections between the TM, PI, and EMT through a structural equation model (SEM). Based on the results, the fit indices met the

psychometric standards and were considered satisfactory ($\chi 2$ /df = 3.438, TLI = 0.908, CFI = 0.932, RMSEA = 0.078, SRMR = 0.062). Furthermore, p < .01 indicated the significance of both indirect and direct routes. These findings imply that TM mediates the interaction between PI and EMT. The standardised route coefficients of the PLS-SEM model are shown in Figure 2.

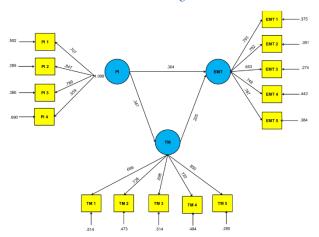


Figure 2: Mediating of the PLS-SEM Model.

Moderation of Time Management on Professional Identity and Employability

After conducting tests with latent moderate structural equations, Figure 3 illustrates the moderating effect of TM on the PI and EMT relationship. Without a moderator, the direct route coefficients from the predictor to the criteria resulted in a satisfactory fit for the data (CFI = 0.932, $\chi 2$ /df = 3.439, SRMR = 0.062, RMSEA = 0.078, TLI = 0.908). The model was expanded to incorporate a path connecting PI, TM, and EMT, which was found to be significant and provided support for a latent moderate structural model.

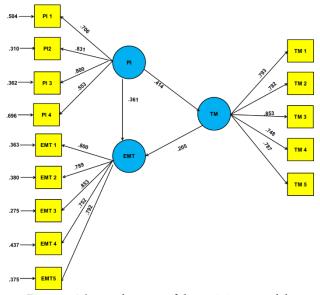


Figure 3: The Moderating of the PLS-SEM Model.

Considering the impact of a third variable on the connection between predictor and outcome variables. On the other hand, mediating effects entail the function of an intermediate variable in elucidating the connection between predictor and outcome variables. Based on the findings, Figure 3 demonstrated superior performance compared to Figure 2, suggesting that TM significantly alters the relationship between PI and EMT.

Mediating Effect Test

All the factors are statistically significant as there were no zeros in the confidence interval estimations for the combined impact, indirect effect, and individual direct effect of PI on EMT. The direct influence of PI on EMT was 0.304, with an additional indirect impact of 0.361, leading to a total effect of 0.765 on EMT. It is possible that TM played a role in mediating the connection between professional identity and employability, as shown by PI's overall, indirect, and direct effects on EMT. Table 4 clearly shows that study hypotheses three and four were confirmed.

Table 4 *Effect Test*

Effects	Path	Path coefficient
Direct effect	PI→EMT	.304**
Indirect effect	$PI \rightarrow EMT \rightarrow TM$.361**
Total effect	PI→EMT	.765**

Discussion

This study analysed the PI, EMT, and TM in a group of student-athletes. The study focused on improving studentathletes' awareness, supporting their career development, and enhancing their EMT. We will cover the chosen variables in the upcoming sections. Initially, the principal investigator has a substantial impact on the development of college student athletes. It is a fundamental aspect of the teaching profession, mirroring the needs of society and individuals. Personal identity impacts a person's core work beliefs, ideas, and feelings about their job from a sociocultural perspective. As per research findings, an individual's professional identity undergoes significant development in the initial phases of their career. Students' education in colleges and universities has started to shape their personal identities. Having positive transition experiences can enhance organisational dedication and team morale, while negative experiences can lead to decreased employee morale and turnover. Based on prior research, this period was crucial for numerous individuals in terms of their potential for employment and in shaping their attitudes and behaviours related to the professional environment (Aleks, Saksida, & Wolf, 2021; Cebola, dos Santos, & Dionísio, 2023; van Beukering et al., 2022). New PIs have greatly benefited from a strong foundation in education before entering the field.

Second, we need to raise student EMT levels to reduce TM, as TM plays a role in regulating and mediating the connection between PI and EMT. TM has become a vital intervention method in education and occupational psychology due to its significant impact on students' professional development. Comprehending and embracing one's professional position, competencies, and goals are crucial for developing a strong PI. Being able to effectively manage one's time enables them to translate their PI into tangible outcomes. Individuals who possess a strong sense of self can enhance their EMT by efficiently utilising their time to work towards goals, build connections, explore career opportunities, and develop new skills. Here, TM allows for transforming an individual's personal interests into concrete achievements that enhance the overall outcome. For instance, individuals with strong abilities in a particular field can effectively utilise their PIs by seizing opportunities, surmounting challenges, and adapting to changing job demands. This can enhance EMT more in individuals with limited TM skills. The conversation was further backed by previous research (Anjum, 2020; Primandiri & Santoso, 2022; Zhurakovskaya et al., 2020). Finally, PI, shaped by beliefs, goals, and competencies, influences individuals' career trajectories and impacts their employment prospects. People who establish a clear PI that is in line with their career objectives and driven by a sense of purpose are more likely to concentrate on tasks and obligations that support their professional aspirations. This alignment fosters the advancement of efficient techniques for TM, enabling individuals to strategically allocate their resources and energy towards career progression. TM plays a role as a mediator in the indirect influence of PI on EMT, emphasising the interconnected relationship among

Conclusion

This study provides a thorough analysis of the impact of PI and TM on EMT in Chinese student-athletes. The transmembrane protein serves as an intermediary in the connection between epithelial-mesenchymal transition and primary immunodeficiency. Chinese college athletes strategically plan their career paths by aligning their goals, values, and abilities within their desired fields through a PI

temporal organisation, self-perception, and career

advancement. Previous studies have emphasised the

importance of students focusing on time management to

achieve their goals effectively (Barrot, Llenares, & Del

Rosario, 2021; Landrum, 2020; Pelikan et al., 2021).

framework. Athletes prioritise activities and commitments that align with their work goals due to their strong sense of purpose and goal alignment. Moreover, these hypotheses suggest that PI impacts EMT both indirectly through TM and directly by predicting increased EMT. This study seeks to address the existing research gap by providing valuable insights into the essential requirements for success among Chinese college athletes. This data will contribute to the development of interventions and support systems aimed at enhancing the employment prospects of these athletes. Future research may provide a deeper understanding of how cultural influences impact collegiate athletes' PI construction, TM techniques, and EMT results through comparative studies in different cultural settings.

Theoretical and Practical Implications

This study added valuable insights to the existing literature on the correlation among PI, TM, and ETM. The statistical evidence aligns with the findings of this study. This research framework is significant in the literature due to the absence of this discussion in previous studies. The study found a correlation between PI, TM, and ETM. Students at various universities need to develop their professional identity, which is linked to their employability and time management. The study emphasised in the literature that time management is linked to employability. In addition, the research emphasised the mediating function of ETM between PI and TM, representing a novel contribution to existing literature.

The study offers practical suggestions for enhancing the English language proficiency of Chinese students. It is recommended that Chinese students should be strongly motivated to improve their comprehension of TM. It would be beneficial for students to strategically develop their personalities. Advancing students and their learning is crucial for achieving EMT's objectives. Hence, it is essential for universities and college administration in China to prioritise student development in ETM. Teaching students to practise essential skills can enhance their training effectively. The study showed that policymakers should prioritise long-term focus to enhance student understanding and improve learning to develop their PI, ultimately strengthening their ETM.

Future Directions

The latest research offers a structure for helping athletes effectively manage the demands of professional travel. This study provided valuable insights into college athletes, higher education, and career advancement. Nevertheless, certain constraints of this study need to be resolved in future research. The research should gather data from a varied population across over twenty universities and colleges in China. Scholars should consider including generalisations in their findings. Additionally, SPSS was utilised for data analysis in this study. Scholars aim to utilise modern tools like R Studio in upcoming research to assess findings through measurement and structural model evaluations.

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