Humanities & Social Sciences Communications

ARTICLE

https://doi.org/10.1057/s41599-025-04800-4 OPEN

Role conflicts and coping strategies of academic entrepreneurs in an immature entrepreneurship environment

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Academic entrepreneurs (AEs) often face role conflicts, particularly in immature entrepreneurial environments such as China, where competing role expectations create tensions. This study delves into the role conflicts and coping strategies of AEs at a Chinese university. Responding to the literature's call for a symbolic-interactionist perspective on role theory, the study draws insights from interviews with both AEs and key university stakeholders, highlighting the importance of social interactions in shaping role expectations. The findings reveal that AEs experience both inter-role conflicts (tensions among their roles as researchers, educators, and entrepreneurs) and inter-sender conflicts (arising from disparate expectations of university stakeholders). While AEs employ diverse strategies to manage these conflicts, some approaches may inadvertently exacerbate tensions, fostering distrust within the university community. The study underscores the need for effective strategies to nurture a healthier academic entrepreneurship ecosystem. It makes theoretical contributions as one of the first to examine the interaction between inter-role and inter-sender conflicts in the context of academic entrepreneurship within an immature entrepreneurial environment. Practical suggestions are also provided at individual, institutional, and policy levels. These findings enhance understanding of the unique spatial context of academic entrepreneurship and inform better practices for managing the university faculty engaged in entrepreneurial activities.

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Introduction

Universities are increasingly playing key roles in regional and national innovation and economic development through academic entrepreneurship, which refers to commercialization activities outside of the usual university duties of basic research and teaching (Klofsten & Jones-Evans, 2000). Academic entrepreneurs (AEs) are "academic faculty members who undertake technology commercialization, using formal modes of entrepreneurial engagement, that capitalize on specific market opportunities" (Miller et al., 2018, 12). This emerging group of entrepreneurs shows increasing salience worldwide.

Since most AEs are already socialized in the roles of teacher and researcher before establishing their businesses, they may experience role conflicts when competing expectations for multiple roles (i.e., entrepreneur, educator, and researcher) cannot be met. Role conflicts can lead to a cognitive imbalance, which increases the psychological and physiological costs of role management (Ashforth, 2000) and, in turn, causes role dislocation and role failure. Academics might find it difficult to balance their academic duties and entrepreneurial endeavors, and, consequently, they may perform neither task successfully (Bercovitz & Feldman, 2003).

These challenges might be further intensified in immature entrepreneurial environments, where university stakeholders do not always embrace or support entrepreneurial activities. Schaeffer and Matt (2016) suggest that a mature entrepreneurial ecosystem evolves gradually through the collective efforts of diverse actors and the incremental establishment of innovation intermediaries, which facilitate coordination among local stakeholders involved in the creation of startups. In contrast, a non-mature entrepreneurial ecosystem is characterized by inherent weaknesses, fragmented networks, and limited interactions between actors. For example, a study on middle-income ASEAN (Association of Southeast Asian Nations) economies highlights significant barriers to promoting academic entrepreneurship, including resource constraints, limited funding, and insufficient institutional support (Hara, 2023). Similarly, a study conducted in Africa emphasizes the role of organizational context as a potential impediment to academic entrepreneurship, where academics often encounter weak institutional and organizational frameworks that hinder the processes of commercialization and technological innovation (Urban & Gamata, 2020).

However, both Hara (2023) and Urban and Gamata (2020) underscore the pivotal role of academic entrepreneurship in fostering regional development in emerging economies, such as those in South Asia and Africa, thereby emphasizing the necessity of cultivating AEs. Studies have found that compared to academics without entrepreneurial engagements, AEs have been found to be more productive in teaching and research and more likely to be outstanding scientists (Siegel et al., 2004). Engagement in entrepreneurial endeavors is reportedly conducive to increasing research publications (Lowe & Gonzalez-Brambila, 2007) and producing graduates who are suitable for the industry (Baldini et al., 2006). In this sense, transforming the competitive relationship between academic and entrepreneurial roles into a complementary one requires AEs to strategically cope with various types of role conflict (Shi et al., 2021).

This study explores how entrepreneurial and academic roles conflict with each other and the strategies AEs take to navigate these role conflicts. Role conflict theory is used to frame our analysis, and we focus on two types of conflict, namely inter-role and inter-sender conflicts, whose interaction has rarely been discussed in the literature. Inter-role conflict refers to the conflict between several roles for the same individual that require incompatible behaviors, while inter-sender conflict denotes inconsistent role expectations from multiple "role senders"—those who send their expectations of the role to the role occupant and affect the latter's role behavior, such as stakeholders and organizational demands (Rizzo et al., 1970). The findings will reveal implications for resolving the tensions among the multiple roles of AEs and shifting away from passive strategies (e.g., role retreatism) toward more active approaches.

Literature review

Role theory. Role theory is a collection of conceptual models to describe how people envision, interpret, and act in their daily lives through categories of set behaviors (Biddle, 1986; Koseoglu et al., 2017; Tubre & Collins, 2000). It is a classic theory for understanding how individuals perceive and enact behaviors associated with their social positions, and it has been extensively applied in the literature (Anglin et al., 2022). A frequently cited definition of "role" is "a set of expectations about behavior for a position in a social structure. Expectations define behavioral requirements or limits ascribed to the role by the focal person filling that position, or by others who relate to the role or simply have notions about it" (Rizzo et al., 1970, 155). Role expectations mainly come from norms or habits in the organizational culture, bystanders, and others around the individual (Turner, 2010). The individual who takes up a role in an organization is considered the role occupant, who receives a sent role or a role expectation from the role sender, who could be another community member having anticipation of the role occupant's response to their role expectations (Kahn et al., 1966). In the case of university academic faculty, for example, key role senders are their students, colleagues, and administrators (Kyvik, 2013).

According to a recent review-based article by Anglin et al. (2022) on the evolution and advancement of role theories, research has adopted two distinct perspectives. The more traditional perspective employs a *structural-functional* approach (Merton, 1957), which views roles as "rules" that govern broader social systems or societies (e.g., gender), imposing behavioral expectations on role occupants. This perspective has been criticized for its assumption that roles and corresponding expectations are inherently part of a broader social fabric and relatively fixed, thereby overlooking individuals' personal reactions to their assigned roles (Anglin et al., 2022). In contrast, the contemporary *symbolic-interactionist* perspective emphasizes how individuals interpret their in-role and extra-role experiences, navigate relationships among roles, and treat roles as flexible and negotiable (Ashforth, 2000). This perspective posits that roles are socially constructed through interactions, focusing on how others' expectations within a system shape an individual's role concepts (Wei & Li, 2023). It assumes that roles exist in relational sets (e.g., teacher-student) and are dynamically constructed or deconstructed through social exchanges (Anglin et al., 2022). Further, it examines how individuals transition between roles or adapt their approaches to existing roles (Ashforth, 2000).

Symbolic interactions within organizations enable members to develop mutual understanding, fostering reflection and reinterpretation of identities. These interactions shape perceptions of organizational identity and social roles, influencing how such identities integrate into collective cognitive processes. Within the symbolic interactionism framework, shifts in self-reflection directly affect responses to changes in job roles and organizational identities (Canbul, 2024). This approach is particularly valuable for investigating role conflicts arising from inconsistent demands or stakeholder expectations at a micro-level, as emphasized in this study.

Although the symbolic-interactionist perspective on role theory has gained prominence in recent decades, its application remains

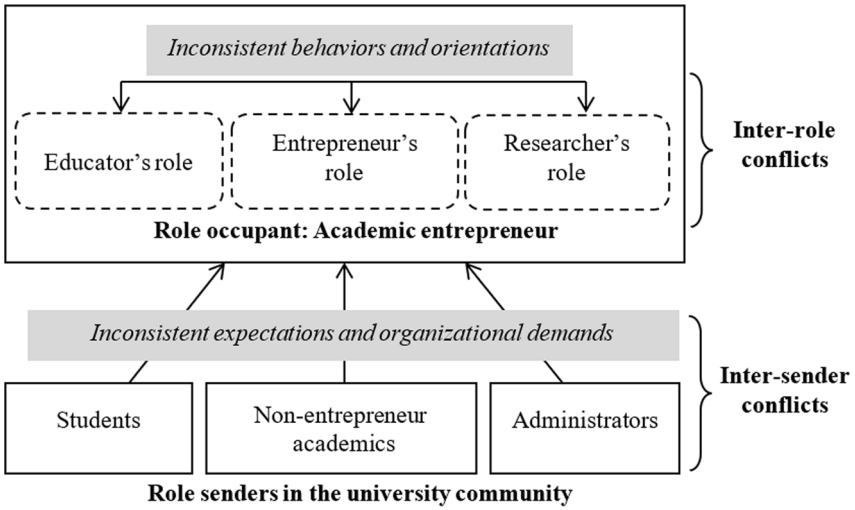

Fig. 1 Inter-role and inter-sender conflicts of AEs. The figure visually presents inter-role conflicts among the roles of educator, entrepreneur, and researcher, as well as inter-sender conflicts arising from inconsistent expectations imposed by students, other academics, and administrators.

prevalent in a limited range of fields (e.g., human resources) while being largely overlooked in others, such as entrepreneurship (Anglin et al., 2022). This omission represents a critical gap that this research seeks to address. Examining the role conflicts of AEs through the symbolic-interactionist lens highlights the importance of social interactions in shaping AEs' subjective interpretations of their multiple roles. This approach provides valuable insights into improving the academic entrepreneurial ecosystem by fostering positive interactions among stakeholders. The subsequent subsections will first review the literature on the role conflicts and coping strategies of AEs, followed by an explanation of how the symbolic-interactionist perspective informs the analytical framework adopted for data analysis.

Role conflicts and coping strategies of AEs. Role conflict arises when individuals are faced with expectations or demands which are unlikely to be met simultaneously (Huang et al., 2024; Nnubia & Eze, 2024). Assuming multiple roles causes individuals to bear more responsibilities. Understanding academic entrepreneurship from the perspective of role conflict can help with formulating interventions and strategies to alleviate role pressure.

Previous studies have suggested that AEs develop researcher-entrepreneurial dual identities, which may lead to identity inconsistency by imposing conflicting behavioral requirements (Guo et al., 2019). Some scholars have argued that researchers who are pursuing a high academic status may be unable to successfully engage simultaneously in business (Grimaldi et al., 2011). Jain et al. (2009) have also noted that the roles of an academic and an entrepreneur are usually regarded as oppositional, and there are significant differences in the norms, processes, and output that are associated with them. For example, entrepreneurship typically requires a short-term focus and efficiency in generating products and profits, whereas academic investigation demands long-term efforts resulting in academic papers, patents, or peer recognition. Quantitative evidence indicates that factors contributing to role conflict among AEs include identification with different roles (Zou et al., 2019) and previous academic and entrepreneurial experiences (Shi et al., 2021; Zhang et al., 2021).

The strategies of AEs in dealing with role conflicts have not been thoroughly investigated. One existing study is Jain et al. (2009), which found that AEs adopted two mechanisms to ensure the primacy of their academic roles: delegating, which entails establishing appropriate interfaces with other actors within and outside the university who have the relevant skills to commercialize their technologies; and buffering, which involves taking measures to protect one's academic role identity from the impact of commercialization-related norms. The findings suggest that university scientists actively attempt to preserve their academic role identity even when participating in technology transfer.

Although the studies reviewed above are insightful, most are based on data collected from AEs, and the perspectives of role senders are largely neglected. There is scarce knowledge of how students, university administrators, and non-entrepreneur academics expect AEs to behave as members of the university community. A holistic approach integrating the data from university stakeholders, as adopted in the present study, is insightful for the symbolic-interactionist perspective on role theory since it foregrounds and triangulates findings related to how AE's interpretation of their roles might be derived from their social interaction (Anglin et al., 2022). A conceptual framework distinguishing between inter-role and inter-sender conflicts, as outlined in the next section, can help clarify this issue.

Inter-role and inter-sender conflicts. The conceptual framework of *inter-role* and *inter-sender* conflicts has the capacity for a holistic examination of the tensions among the multiple role expectations experienced by AEs, capturing the complexity of these dynamics. Rizzo et al. (1970, 155) distinguished between inter-role and inter-sender conflicts as follows:

(1) *Inter-role conflict* refers to the conflict between several roles for the same individual, which require incompatible behaviors.
(2) *Inter-sender conflict* refers to conflicting expectations and organizational demands from multiple role senders in the form of incompatible policies, conflicting requests from others and incompatible standards of evaluation.

Based on this distinction, we visually present the diverse role conflicts experienced by AEs in Fig. 1, which also serves as the framework guiding the collection and interpretation of research data.

In Fig. 1, the big square represents the role occupant in our study, namely the AE. In this context, the AE occupies three primary roles, represented by the three squares with dashed borders—educator, entrepreneur, and researcher (Grimaldi et al., 2011; Jain et al., 2009; Zou et al., 2019)—each often characterized by inconsistent behaviors and orientations. The conflicts among

these roles are classified as "inter-role conflicts,' as indicated on the right side of the figure. The role occupant is connected to three main role senders within the university community—students, other academics, and administrators (Kyvik, 2013)—via arrowed lines. These connections represent "inter-sender conflicts," arising when these role senders impose inconsistent expectations and organizational demands on AEs.

Guided by the symbolic-interactionist perspective on role theory, the analysis of inter-role conflicts examines how AEs interpret the relationships among their various roles and associated experiences. The analysis of inter-sender conflicts explores how these conflicts emerge from AEs' interactions and experiences with university stakeholders. Furthermore, the study emphasizes AEs' agentic negotiation of these roles by analyzing their coping strategies for managing diverse role conflicts.

Research questions

Based on the literature review above, this research proposes the following questions:

Q1. What are the inter-role conflicts of the AEs?

Q2. What are the inter-sender conflicts of the AEs?

Q3. What strategies are adopted by the AEs to deal with these conflicts?

Methodology

Research context: China as an immature environment for academic entrepreneurship. This study is conducted in China, where academic entrepreneurship is a rapidly growing but nevertheless immature field. Since the topic of "Business Start-ups and Innovation" was formally proposed in the 2015 Government Work Report, the Chinese government has introduced a series of measures and policies to encourage university teachers to start their own businesses, which has promoted the legitimacy of university teachers' entrepreneurship. A rising number of teachers at research universities are setting up companies based on their scientific research achievements, and some of them are gradually becoming prominent figures in the business field. However, the academic entrepreneurship of university teachers has also been questioned in China. Scholarly articles have warned of the potentially detrimental effects of entrepreneurial activities on academic duties (e.g. Zhu & Sui, 2018).

Compared to more developed countries with mature academic entrepreneurship environments, China's social system, policy background, and developmental stage (Yin et al., 2022) pose challenges to academic entrepreneurship. Specifically, China has a socialist market economy in which the government applies a "top-down" approach to uniformly allocate funds for entrepreneurship. In contrast, universities in Western countries actively seek funding to create entrepreneurship programs according to their own needs. Moreover, in Chinese culture, people are more conservative and risk-averse than their counterparts in some Western cultures, which may discourage sustainable entrepreneurial activities (Yin et al., 2022). Considering the case of China can enrich our understanding of the types, causes, and coping strategies of role conflicts among AEs and provide a reference for similar contexts.

Data collection and analysis. Qualitative data were collected through semi-structured interviews with 26 participants, including 10 AEs, six of their graduate students, six non-entrepreneur academics, and four university administrators from the university's functional departments related to academic entrepreneurship at a research-focused university in China (see details in Tables A1–A4 in Appendices). Although the sample size in each category is relatively small, the emphasis is on the depth and richness of data rather than quantity, aligning with qualitative research practices (Vasileiou et al., 2018). Collecting data from diverse university stakeholders also contributes to a higher level of data adequacy through the variety in kinds of evidence (Erickson, 1986).

The ten AEs interviewed represent disciplines including engineering, science, and social sciences. Eighty percent of these AEs lead companies employing over 50 individuals. Half of the participants had prior managerial experience before founding their ventures; for instance, A3 and A7 previously served as technical directors in private-sector companies. Due to privacy considerations, only a subset of AEs disclosed their startup funding sources. Among those willing to share this information, A3 and A9 reported launching their ventures through research project involvement, with initial funding sourced from research grants.

Participants were recruited using a combination of purposive and snowball sampling methods. Initially, we identified potential participants from a pool of AEs who were actively engaged in academic entrepreneurial activities. Participant selection criteria ensured diversity in the sample across disciplines and entrepreneurial ventures. These participants were then asked to refer other potential candidates within their networks. Data collection continued until thematic saturation was reached. For AEs, saturation occurred after the 10th interview, as no new codes emerged in the final two interviews. Perspectives from graduate students and non-entrepreneur academics consistently reflected recurring tensions around role conflicts and legitimacy. The administrator sample was constrained by the limited number of relevant functional roles within the institution. However, these participants represented key institutional stakeholders. Iterative team discussions confirmed that additional data would not meaningfully expand thematic understanding.

While saturation was achieved for core themes, we acknowledge the limitations resulting from practical considerations such as the voluntary nature of participant recruitment, a factor frequently cited in small-scale qualitative studies (Vasileiou et al., 2018). For instance, the underrepresentation of humanities AEs and early-stage ventures may limit the transferability of findings.

Each interview lasted between 30 and 90 minutes. The interview questions for AEs focused on their experiences with entrepreneurship, teaching, scientific research, and primary stressors. Questions for other university stakeholders centered on their opinions regarding academic entrepreneurship. Institutional approval was obtained from the Academic Committee of the first author's School, and participants provided informed consent. Interviews were conducted in Chinese and translated into English by the researchers. To ensure translation accuracy, we employed a systematic approach during the translation process (Smith et al., 2008). This included an initial translation by a bilingual researcher on the team, followed by back-translation by a translator. The results were then reviewed by the other two researchers to verify consistency and accuracy. This process aimed at minimizing potential biases and preserving the original meaning of participants' responses.

The data were analyzed thematically (Braun & Clarke, 2008) to address the three research questions. The thematic approach is used because it allows for both inductive and deductive approaches, enabling us to systematically identify and interpret patterns within the data to explore specific research questions (Delve & Limpaecher, 2024). We employed a hybrid method, integrating both inductive and deductive coding strategies. Initially, we utilized a deductive approach to organize data into domains related to inter-role conflicts, inter-sender conflicts (i.e., perspectives of graduate students, other academics, and university administrators, respectively), and coping strategies, based on our

research questions and the framework in Fig. 1. Subsequently, we applied an inductive approach, allowing patterns and themes in each domain to emerge from the data. For inter-role conflicts, we considered the data from AEs regarding their perceptions of how the three roles of teacher, researcher, and entrepreneur may conflict with each other, and we categorized those conflicts into recurring patterns. For inter-sender conflicts, we first assigned different themes to the statements made by each type of role sender, and we contrasted those views. Finally, to investigate AEs' coping strategies, we identified themes in their responses in the interview data. The coding process was facilitated by a schematic diagram (Yin, 2016, 198–199). A coding sample is included in Table A5 in Appendices.

To ensure intercoder reliability, two researchers independently coded the data, followed by consensus-building discussions to resolve discrepancies so that the codebook was iteratively refined. A third researcher adjudicated unresolved cases. This process continued until an agreement was achieved for the full dataset. To enhance credibility, we practiced reflexivity through team debriefs documenting how our backgrounds shaped coding decisions. As researchers uninvolved in academic entrepreneurship, we acknowledge our limited firsthand understanding of role conflicts. To mitigate this, we rigorously engaged in iterative dialog with participants to ground interpretations in their realities. While our team lacked direct experience in academic entrepreneurship, this outsider status encouraged a critical, minimally biased lens.

An advantage of this research is its use of data triangulation. This technique, as defined by Cohen et al. (2017), seeks to comprehensively map and elucidate the richness and complexity of human behavior by examining it from multiple perspectives, particularly when applied to qualitative research. In this research, the data was collected from not only AEs but also other university stakeholders. At appropriate points in the data analysis sections, we reference the voices of different stakeholders to complement one another, thus generating a fuller picture of the issue under investigation. For instance, findings regarding inter-sender conflicts are based on interviews with university stakeholders but triangulated with the views of AEs to illustrate how contradictory expectations from other people introduced conflicts in their identity and behaviors. In this way, we were able to gain a more balanced understanding of how various roles of AEs may conflict with each other.

Findings

Inter-role conflicts of AEs. This study reveals that simultaneously performing the roles of educator, researcher, and entrepreneur demanded inconsistent behaviors and orientations of AEs regarding time management, risk-taking, skill building, and goal setting, which jointly hindered their accommodation of the new role of the entrepreneur in addition to their traditional academic roles.

Time management. Most AEs perceived time-related conflicts as one of the greatest challenges—not only because entrepreneurship involves extra work but also because it requires a different routine compared to that of academic roles. Most interviewees expressed that the schedules of entrepreneurs necessitated extensive attention to time management in the absence of fixed working hours. One interviewee explained,

A6: There are so many things I must make a final decision and approve … if you want to get it all done, you're going to burn yourself out.

By comparison, the working time of researchers and teachers is more routine:

A5: Although doing research is exploratory and requires much time and energy, it is more focused and persistent…Since the course contents I teach are fixed, I am familiar with them, so I do not have to spend much time preparing the lessons.

Evidently, for academics who are more accustomed to research and teaching routines, the hectic and dynamic schedule of an entrepreneur can pose challenges for time management.

Risk-taking behavior. Compared to university academics, who have permanent positions or are employed for fixed terms, entrepreneurs face certain risks in the rapidly changing market. This point is illustrated by the following responses:

A2: The market is highly unstable, and any mistake may lead to entrepreneurial failure.

A1: The cost of making a wrong decision [as an entrepreneur] is huge, as it is the loss of real money. I must bear all the consequences myself, no matter what. By contrast, decision-making at university is much simpler.

Many interviewees reported encountering uncertainties in their entrepreneurial endeavors, such as unanticipated changes in clients' needs or the withdrawal of an investor. University academics may find it difficult to adapt to a new risk-taking pattern because they are accustomed to a routine and stable work environment.

Skill building. Another common theme was that academics often lack the skills that are typically essential for entrepreneurship, including marketing and management skills. They may harbor reservations toward marketing tactics prevalent in the business sector, as one interviewee admitted:

A6: I don't pay much attention to hyping or publicizing…In my opinion, a good product does not need excessive packaging and publicity.

Another interviewee similarly complained about the extra managerial labor in addition to his technical work:

A8: We need to spend much time on solving non-technical problems such as management and operation…That's why many academics fall into two extremes when they start a business: either they will be abandoned by capital, or they will sacrifice their technical skills.

Here, the final sentence implies that the conflicting skill requirements of academics and entrepreneurs are incompatible to such a degree that one must inevitably choose between the two extremes.

Goal orientation. The three roles of AEs also differ significantly in their goal orientations: While entrepreneurs strive to survive in the market, educators need to be responsible for students and researchers aim to make breakthroughs in scientific fields. These discrete goal orientations may cause AEs to have conflicting experiences in the academic and business fields. Some may even compromise their academic and research ambitions to satisfy the requirements of investors and sustain their business:

A7: My purpose of establishing a company was to gather people together to do something meaningful…But later on, [we were] "kidnaped" by the capital. Investors constantly put forward additional requirements that were not our original pursuits.

As such, scientific breakthroughs with long-term value or scholarly contributions might not translate immediately to meeting the short-term goals of entrepreneurship, which prioritize efficiency and profits (Yin & Shen, 2006).

Inter-sender conflicts from university stakeholders. Inter-sender conflicts arise from incompatible policies, evaluation standards, and conflicting demands from different parties. Our

study reveals an intricate relationship between AEs and other university stakeholders in China. The conflicting perspectives of stakeholders coalesced into three overarching themes: graduate students' *developmental (mis)alignment* with entrepreneurial activities, non-entrepreneur academics' *legitimacy debates* about the role of commercialization in academia, and administrators' *policy ambiguity* in balancing institutional goals. These divergent perspectives led to uncertainty in AEs' role expectations.

Graduate students. Graduate students' conflicting perspectives on academic entrepreneurship centered on *developmental (mis) alignment*—their views diverged depending on whether they saw entrepreneurship as advancing or hindering their academic growth and career goals. Students who were in favor of their supervisors' entrepreneurship shared beliefs such as the following:

S2: I think it's important for us to accumulate more practical experience, and I hope our supervisor can give us some practical opportunities.

However, there were negative opinions as well:

S1: Undertaking entrepreneurship will do harm to teaching and research… I hope AEs to take more responsibilities as educators and focus on teaching and student supervision.

Notably, some students opposed their supervisors' entrepreneurship because they felt they were being used as "cheap labor," which hindered their personal development:

S5: [In my supervisor's company,] my work is trivial and repetitive, which is a waste of time and energy. I have my own study plans, but now time is not free and sufficient.

S6: My supervisor's company is a small one, and the subsidy does not meet my expectations… but I'm too embarrassed to tell my supervisor what I really think.

The fact that S6 felt too embarrassed to give honest feedback to his supervisor illustrates the apparent lack of mutual understanding between AEs and graduate students.

On the other hand, from the perspective of the AE interviewees, students were not sufficiently capable of accomplishing more advanced tasks in their company. Therefore, they preferred to ask their students to complete more simple and basic work.

A2: The students may expect more because they tend to think highly of themselves. However, they may not be able to handle the more complicated tasks.

Another interviewee recalled having to redo the work done by his students because of its low quality:

A7: [There was a project which] I asked a student to do it at the early stage, but he made a lot of bugs. I checked them one by one and finally solved all the bugs myself.

The data indicate that AE's face a dual-bind ethical dilemma in managing their role conflicts. On the one hand, in their role as educators, they are committed to fostering students' professional development by providing hands-on learning opportunities through entrepreneurial activities. On the other hand, their entrepreneur role demands risk mitigation, leading to reluctance to delegate critical tasks to students. This tension manifests in a paradox: AEs withhold meaningful tasks to protect their ventures, inadvertently reducing students to peripheral roles that feel exploitative ("trivial work") rather than educational. The resulting frustration among students—who perceive unmet promises of skill building—erodes trust and exacerbates AEs' cognitive dissonance, as their actions contradict their educator ethos. This conflict underscores how immature entrepreneurial ecosystems lack institutional safeguards to reconcile pedagogical obligations with business pragmatism.

Non-entrepreneur academics. Non-entrepreneur academics' conflicting perspectives stemmed from *legitimacy debates*—disagreements about whether academic entrepreneurship aligns with the mission of research universities and the roles of faculty. For example, one interviewee expressed a positive attitude:

T1: Engaging in entrepreneurship proves beneficial for enhancing academics' knowledge in the field.

However, other interviewees were not in favor of academic entrepreneurship because they perceived it as incompatible with the mission of a research university:

T2: If some academics regard entrepreneurship as their major work and teaching and research as their sidelines, it is not conducive to the long-term development of research universities.

Some non-entrepreneur academics held more neutral views, positing that "academic entrepreneurship is a personal pursuit" (T3) and that the institutional atmosphere for academics was becoming more inclusive and accepting in China.

The data above indicate that non-entrepreneur academics had inconsistent perspectives on whether "entrepreneur" is a legitimate role of an academic. Some AEs remarked that other academics did not always applaud their entrepreneurial activities, which created an unsupportive environment for their entrepreneurial activities:

A9: It's almost impossible to gain resources through personal connections in the university community…They are not willing to share any resources with you—of course, they express it very implicitly.

This finding is in stark contrast with De Silva's (2016) research, in which entrepreneurial and other academics complemented each other's roles for the common good of their institution. The AEs in our study seldom cooperated with other academics or sought help from them. As the role receiver, the AEs received the role expectation that their entrepreneurial activities would not be fully supported by their university colleagues.

The divergent stances of non-entrepreneur academics reflect a broader ideological struggle over the legitimacy of market-driven logic within academia. Those viewing entrepreneurship as legitimate often tie it to institutional modernity and national innovation agendas. Conversely, critics framing it as illegitimate perceive entrepreneurship as a corrosive force that commodifies knowledge. This polarization creates a cultural schism that intensifies AEs' role conflicts. Even colleagues with neutral attitudes, by refusing to engage, indirectly sustain institutional ambivalence, forcing AEs to navigate unspoken judgments and fragmented support networks. The resulting identity strain is exacerbated in immature ecosystems lacking consensus, further fragmenting AE's professional identity.

University administrators. University administrators' conflicting perspectives highlighted *policy ambiguity*: despite skepticism toward AEs, they acknowledged the potential for entrepreneurial ventures to add institutional value. On the one hand, the administrators felt that academics engaging in entrepreneurship do not assume corresponding responsibilities for their universities:

AM1: I suspect that academics start their own businesses probably because of their interest in financial gains—who doesn't want to make a lot of money?

AM3: [AEs] are still paid by their university when they start a business, but they don't take the responsibility they should.

AM4: Although at the national level, academic entrepreneurship is being promoted, starting a business disperses the energy of academic staff, many of whom take permanent positions. Universities are not market institutions.

The marketisation of universities is a controversial topic in China. Because the country has a socialist market economy, profit-oriented entrepreneurial activities are considered discordant with the public affairs of higher education, wherein most

academic staff have permanent positions and are paid by the state. Such conflict will intensify if an AE ignores their duties at the university:

AM4: The university checked if the academics involved in entrepreneurial activities were paid without completing their university duties and found that some of them did not have enough workload.

As a result, university administrators were cautious about the entrepreneurial activities of academics. Nevertheless, they paradoxically anticipated that the successes of AEs would amplify the institutional recognition of the university:

AM2: Frankly speaking, we hope they [AEs] will succeed in their business wholeheartedly, and then they may bring donations to the university.

AM3: The university values patent application and transformation since they are advocated for by the country.

As a consequence of the ambivalence in attitudes, AEs may feel that their universities offer them little support in their entrepreneurial role:

A5: The university certainly does not encourage academics to start their own businesses because it has to meet certain measurements as a Double First-Class University.[1]

A1: It is understandable that the university leaders still want me to focus on teaching and research; after all, the university also has a mission.

The AEs also referenced a lack of policy support for entrepreneurship in universities. They referred to a policy that proposes support and encouragement of technical personnel to engage in entrepreneurial activities on a part-time basis or to temporarily leave their post to start a business. However, they noted that "some supporting measures have not been fully implemented" (A3) and that "it is one thing to make a policy but another to implement it" (A1). Another interviewee, A10, used the term "inertia" in describing how universities still evaluate AEs according to their academic publications and ignore their entrepreneurial contributions due to the pressure to create world-class universities and secure national funding.

Competing institutional demands and ambiguous expectations led one interviewee to doubt the legitimacy of introducing entrepreneurial information in his lectures:

A2: Chinese teachers have huge responsibilities…So, university teachers shouldn't talk about entrepreneurship in class. I think it's very important in China…But now, a strange thing is that the university encourages students to start their own businesses…

The interviewee's account implies that there was still uncertainty regarding whether the university genuinely promoted academic entrepreneurship. For AEs, this creates a challenging dilemma: they are incentivized to innovate for institutional glory but receive little structural support.

Coping strategies of AEs. Based on the data, we can identify five coping strategies: role affirmation, role integration, role compartmentalization, role delegation, and role retreatism. While positive role affirmation, integration, compartmentalization, and delegation may help resolve the role conflicts that AEs experienced, negative role compartmentalization, delegation, and retreatism may intensify these conflicts.

Role affirmation. Some AEs employed self-affirmation strategies to justify their role as entrepreneur and to achieve cognitive coherence, framing their entrepreneurial activities as aligned with broader societal and institutional values. For instance, A7 emphasized the societal urgency of addressing China's technological challenges:

A7: There are a lot of technology problems in China… But…in fact, not many papers directly help the revitalization of the country. This is one of the reasons why I started my own business… "Everyone has a duty to their country."[2]

Another AE conceptualized academic entrepreneurship as an extension of their institutional responsibilities:

A10: Academic entrepreneurship is the transformation of research results, which is also part of a university teacher's responsibility… For example, we have a chance to provide students with practical chances (in our companies). It's also a form of talent training.

This self-affirmation process allowed AEs to reconcile their dual roles, reducing psychological dissonance, and mitigating the perceived conflict between academic duties and entrepreneurial pursuits.

Role integration. Some AEs integrated teaching, research, and entrepreneurship to reconcile conflicting role mandates by establishing a reciprocal relationship between these roles. The following two quotations exemplify how the entrepreneur role can be complementary to the educator role and the researcher role, respectively:

A2: I was exposed to a variety of projects in my entrepreneurial activities, and I would integrate some practical cases into my class.

A6: After starting a company, I gained a deeper insight into science and technology.

Some interviewees mentioned the advantages of their academic roles for their entrepreneurial activities as well, for example:

A5: The university experience laid a good foundation for me to start my company… We attend many conferences to understand the domestic and foreign trends. The university experience helps me grasp the development direction of my enterprise.

Evidently, the resources and benefits afforded by the academic and entrepreneurial roles can be integrated to complement each other.

Role compartmentalization. Through role compartmentalization (Quah, 2020), a person can separate multiple roles—both in time and space—to manage the unique and often contradictory demands of each role more effectively. This strategy was observed in our study in the separation of academic and entrepreneurial duties through spatial and time arrangements. For instance, A3 noted, "I currently work at university two days a week and at my company the rest of the time." Such strategy allowed AEs to sort out the priorities of their work:

A2: When you are at university, you are fully engaged in research and teaching and trying not to take company-related calls, and when you are at the company, you are seriously managing the company's affairs.

Role compartmentalization can reduce role pressure. It eliminates the need to perform multiple roles simultaneously, thereby reducing role conflict and ambiguity.

However, we also identified a type of role compartmentalization that might be unique to the Chinese context. Specifically, some AEs kept their entrepreneurial role inconspicuous while at the university:

A6: Although entrepreneurship is supported by national policies, it is a bit sensitive because I also have a post at university. There are some controversies around academic entrepreneurship, so we try to keep a low profile. I don't usually talk about our company with university colleagues, and they won't visit our company either.

To triangulate the perspectives of the AEs, we used data from the university administrators and students, who were in a better

position to talk explicitly about the controversies surrounding academic entrepreneurship:

AM: The university collects statistics [of faculty starting businesses] every year, and the faculty declare voluntarily. Some have, some haven't. Many faculty have companies, but if you ask to pay a visit, they won't let you… There are several reasons. First, they are afraid that others will think they have no right to work in the university during the assessment process…Another reason is that they don't want anyone to know about their business in case of failure…Besides, when your company gets better, the university will ask for donations, and your colleagues and peers will ask you for favors. So, Chinese people traditionally do things with a low profile.

One of the students commented on this matter as follows:

S1: It seems to me that it is mainly a cultural factor. Teachers do not take the amount of money they earn as their pride. In contrast, being poor and selflessly dedicated to their work is regarded as the honorary spirit of teachers. Therefore, they can't explicitly talk about their entrepreneurial activities.

While remaining subtle about entrepreneurship might avoid surface-level role conflicts, this strategy could escalate external role expectation conflicts in the long term by prohibiting effective communication among university stakeholders. Furthermore, it is at odds with the national policy of encouraging academic entrepreneurship. The entrepreneurial role of AEs is marginalized by acquiescence to the permeating university discourse.

Role delegation. The role delegation mechanism described by Jain et al. (2009) refers to the establishment of appropriate interfaces with other actors within and outside of the university who have the relevant skills to commercialize their technologies for the purpose of protecting the primacy of the academic role. However, the present research reveals that AEs not only delegated their entrepreneurial work to others to commercialize their technologies but also delegated their academic duties to their graduate students to relieve time pressures. While the former is reasonable, the latter may intensify the conflict between AEs and their students. One example of positive delegation is as follows:

A7: I rarely participate in business negotiations of our company—not only because it does not fit with my academic identity but also because I'm not good at it.

In this case, A7 delegated some company-related work to other people who had the relevant business negotiation skills.

Meanwhile, in some negative instances, AEs delegated their work to graduate students, which was detrimental to the student-supervisor relationship. Although no AE admitted to employing such a strategy, A9 recalled observing other AEs using it:

A9: … [some AEs] are instilling in students the idea that "you have to work for me and help me with my projects." Most students resist it because they become a cheap labor force. I should say this is the norm.

This perspective is triangulated by the data from a student interviewee:

S6: My supervisor had many projects and then asked students to do chores, which occupied a lot of our study and research time, but we could not refuse it. I think this is really a big headache.

Negative role delegation is related to role retreatism, which is analyzed in the next section.

Role retreatism. The AEs confessed that they would often temporarily retreat from the obligations of one role to alleviate multiple role conflicts. In an overlap with the role delegation strategy, some AEs asked their students to fulfill some of their academic obligations for them. A2 mentioned, "I still have a research project, but basically, my students are doing it." A consequence of role retreatism is an imbalance in work performance between roles. For instance, both A2 and A4 reported that they had filed more patents for their companies but published fewer research papers.

Another common scenario was sacrificing teaching time for the sake of research and entrepreneurship, as the following example illustrates:

A5: It's true that after starting a business, there's definitely less time for student supervision and lesson preparation. Research and entrepreneurship have taken up all the time from me.

Positive strategies can alleviate inter-role conflict by reconciling goal divergency, offsetting risk, and improving time management. However, passive strategies may exacerbate role expectation conflicts, aggravate the suspicions of other members of the university community, and ultimately be detrimental to the creation of a supportive ecosystem for academic entrepreneurship.

Summary of findings

The findings of this study are summarized in Fig. 2, a conceptual model that builds on Fig. 1 by incorporating key themes identified through data analysis. This study identifies two central tensions shaping AEs experiences: inter-role conflicts and inter-sender conflicts. Inter-role conflicts stem from incompatible demands between academic and entrepreneurial roles, manifesting as struggles in time management, risk-taking behaviors, skill-building priorities, and goal orientation. Inter-sender conflicts arise from divergent stakeholder expectations: graduate students' perceptions of developmental (mis)alignment with entrepreneurial activities, non-entrepreneur academics' legitimacy debates over commercialization in academia, and administrators' policy ambiguity in providing institutional support.

AEs adopt diverse coping strategies to navigate these tensions, including role affirmation (justifying entrepreneurship as scholarly duty), role integration (blending academic and venture tasks), role compartmentalization (segmenting roles temporally or spatially), role delegation (outsourcing tasks), and role retreatism (withdrawing from academic duties). However, if misused, strategies like compartmentalization (e.g., hiding ventures from peers), delegation (e.g., over-relying on students for trivial tasks), and retreatism often exacerbate inter-sender conflicts, leading to identity fragmentation and institutional distrust. These findings underscore the systemic challenges AEs face in reconciling dual roles within underdeveloped entrepreneurial ecosystems.

Discussions

This study examines role conflicts and coping strategies among AEs at a Chinese university through the lens of symbolic-interactionist role theory, which emphasizes how role identities and their meanings are socially constructed through interactions. While scholars have long used symbolic interactionism to explore identity development, this framework remains underutilized in academic entrepreneurship (Anglin et al., 2022). Drawing on interviews with AEs and key stakeholders, the study advances theoretical understanding by exploring both inter-role conflicts and inter-sender conflicts. Specifically, it reveals how AEs negotiate complex identities in response to dynamic social expectations, shedding light on the interplay between symbolic meanings and organizational behavior. For example, legitimacy debates and policy ambiguity may shape AEs' adoption of adversarial strategies such as role compartmentalization or retreatism. This perspective offers practical insights for fostering supportive entrepreneurial ecosystems. By prioritizing positive stakeholder interactions (e.g., transparent dialog between AEs, students, and administrators) and identity reconstruction (e.g.,

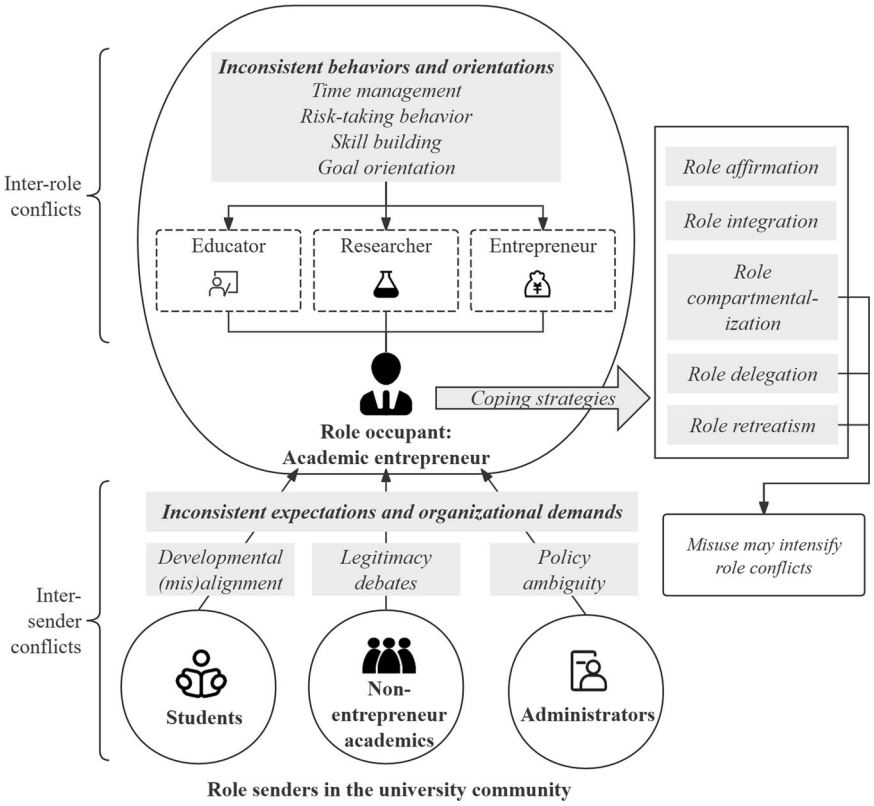

Fig. 2 Conceptual model of key findings (created with ProcessOn). The figure presents a conceptual model summarizing key research findings, including the inter-role conflicts and inter-sender conflicts faced by academic entrepreneurs, as well as the coping strategies AEs adopted.

framing entrepreneurship as aligned with academic missions), universities can mitigate conflicts and encourage adaptive coping strategies. Such interventions are particularly vital in immature ecosystems like China's, where institutional consensus and support structures remain underdeveloped (Urban & Gamata, 2020).

The findings regarding inter-role conflicts in time management, risk-taking, skill building, and goal orientation align with and contribute to existing literature. Bartunek and Rynes (2014) noted a significant time dimension difference between researchers and entrepreneurs, with entrepreneurs requiring intense, focused efforts in a short time, while researchers engage in long-term, cumulative research. Lumpkin et al. (2009) also reported role conflicts among AEs, particularly in time management and specific behaviors. While previous academic entrepreneurship research seldom addressed conflicts related to risk-taking, our study identifies themes in this domain, particularly in the socio-cultural context of China. One possible explanation is that academic entrepreneurship in China is still evolving, and academic positions offer stability and security, akin to "iron rice bowls," a Chinese term for lifelong job security (Yin et al., 2022). This starkly contrasts with the risks associated with the entrepreneur's role, amplifying the conflict in risk-taking behaviors.

The existing literature has largely neglected role-sender perspectives and inter-sender conflicts. The present study mitigates this deficiency and challenges De Silva's (2016) finding of a symbiotic relationship between AEs and other academics, wherein the two parties work as a team to balance traditional academic duties and entrepreneurial engagement in a resource-constrained environment. However, their study acknowledges that this result is based only on AEs' perspectives and may be biased. The present study, which triangulates the data with other sources, addresses this issue and argues that the relationship between AEs and other university stakeholders is much more complex in China. The findings reflect that university members, such as other academics and administrators, held inconsistent views and sometimes ambivalent attitudes about academic entrepreneurship. These contrasting perspectives caused confusion in the role expectations of AEs, resulting in role ambiguity—a concept in role theory that refers to unclear role expectations or poorly defined job roles (Anglin et al., 2022). Role ambiguity is widely recognized as a factor that increases the likelihood of role conflict (Ebbers & Wijnberg, 2017). By exploring the dynamic interactions between the individual and the external environment, aligning with the symbolic-interactionist perspective, this research highlights the role expectations that other figures impose on the focal person. Gaining more knowledge of these inter-sender conflicts can help stakeholders develop strategies to improve the environment for academic entrepreneurship.

An issue that deserves special attention is the dynamics between AEs and their graduate students, particularly when students perceive themselves as "cheap labor". It raises significant ethical concerns within academic institutions. Such exploitative practices can erode trust and hinder the educational development of students, having detrimental effects on students' academic experiences (Liang et al., 2021). The supervisor-student relationship in China has been described as hierarchical, with supervisors often viewed as "bosses" and students as "workers," reflecting an "employee-style" mentorship (Jin & Cai, 2024). This dynamic can exacerbate conflicts of interest, especially when supervisors involve students in entrepreneurial ventures without clear boundaries or mutual understanding. Therefore, it is imperative for academic institutions to establish clear ethical guidelines and provide training for supervisors engaged in entrepreneurial activities to ensure that the educational and developmental needs of students are not compromised in pursuit of entrepreneurial success.

Finally, this study identified five coping strategies employed by AEs: role affirmation, role integration, role compartmentalization, role delegation, and role retreatism. These strategies share conceptual overlaps with key ideas in role theory as outlined in Anglin et al.'s (2022) review. For example, role affirmation aligns with the concepts of role consensus and conformity (Biddle, 1979), as it involves aligning one's roles with commonly agreed-upon expectations and reinforcing them to resolve conflicts. Role integration reflects role accumulation and enrichment (Sieber, 1974; Greenhaus & Powell, 2006), focusing on the beneficial outcomes of managing multiple roles, such as skill acquisition and resource expansion. Role compartmentalization (Quah, 2020) overlaps with role transitions, which involve the psychological and sometimes physical process of disengaging from one role and engaging in another (Ashforth, 2000). Similarly, role retreatism relates to role salience and role centrality (Greer & Egan, 2012), as withdrawing from a role often signifies that the individual does not view it as central or important relative to other roles. While these concepts intersect, the coping strategies identified in this study emphasize the active behaviors of AEs in managing role conflicts, whereas the concepts in Anglin et al. primarily describe the structural and psychological status of roles.

Our findings on the coping strategies of AEs enrich Jain et al.'s (2009) insights on delegation and buffering. It is found that the AEs in our study failed to strategically use these approaches. Some of them delegated their research work and company chores to their students, which may conflict with students' expectations and receive little understanding from them. In terms of buffering (i.e. taking measures to protect academic role identity from the impact of commercialization-related norms), the AEs in this study rarely mentioned this strategy in their interviews, which implies that they were unaware of it or could not competently apply it.

This study found that the interviewees frequently employed negative role compartmentalization, delegation, and retreatism strategies, and often prioritized their entrepreneurial role over their traditional academic duties, which reflects an opposition to the buffering mechanism. This finding is inconsistent with Balven et al.'s (2018) study, which reported that university professors assigned low priority to academic entrepreneurship when balancing their time and energy. This discrepancy may be explained by the status of academic and business careers in China. Previous research in China has suggested that an academic career is less attractive than running a business because it affords a lower economic status (Fu, 2021). Accordingly, Chinese university academics may develop a fixation on becoming the "boss" of a company (Yin & Li, 2017). This mindset is harmful to building a healthy ecosystem for academic entrepreneurship, as it risks minimizing the importance of academic roles.

These findings contrast with those from more mature entrepreneurial ecosystems, where institutionalized support helps mitigate role conflicts. For instance, Schaeffer and Matt (2016) suggest that successful U.S. universities such as Stanford or MIT are characterized by the government's extensive participation in shaping an entrepreneurial culture. These institutions also employ robust technology transfer offices that provide legal, financial, and mentorship support, enabling AEs to balance academic and entrepreneurial duties seamlessly. On the contrary, role conflicts are exacerbated in immature environments such as in this study. For example, the lack of efficient technology transfer offices resulted in AEs' difficulties in balancing academic and non-academic duties. Administrators' policy ambiguity—praising patents while penalizing entrepreneurial time—reflects fragmented institutional logic common in underdeveloped regions (Hara, 2023). Similarly, non-entrepreneur academics' legitimacy debates suggest that consensus among internal stakeholders is elusive. While mature ecosystems thrive on coordinated networks and cultural acceptance (Schaeffer & Matt, 2016), this study highlights the need for context-specific interventions in immature settings. Practical suggestions are provided in the next section.

Implications

Based on the findings above, we propose the following suggestions for alleviating the role conflicts of AEs at research universities. First, at the individual level, AEs should develop further coping strategies for navigating various role conflicts. We recommend implementing mentoring and coaching programs for AEs to raise awareness about the diversity of available strategies—such as role affirmation and integration, positive role compartmentalization and delegation, and buffering—as well as to highlight the potential harm of role retreatism and the misuse of compartmentalization and delegation. Passive strategies may have short-term benefits for immediate entrepreneurial activities but are detrimental to the sustainable development of academic entrepreneurship. AEs should also re-examine their relationships with their students and respect their students' needs, interests, and long-term development instead of treating them as "cheap labor".

Second, at the institutional level, strategic management in universities is needed to improve the process of academic entrepreneurship (Grimaldi et al., 2011) and the cultivation of AEs' hybrid identity (Majoor-Kozlinska et al., 2024). To address inter-role conflicts, universities should develop detailed guidelines for AEs that clearly define their responsibilities, working hours, and expected norms (Li et al., 2020). This clarity enables AEs to allocate their time and energy more effectively across their various roles. To resolve the issue of AE's retreatism from traditional teaching and researching roles, the university should establish a robust incentive mechanism and recognition framework that can encourage balanced engagement in both domains (Huang et al., 2024). Additionally, universities could implement formal role negotiation systems, where AEs engage in structured dialogs with department heads and administrators to clarify expectations and align responsibilities across their dual roles. Such systems would help mitigate role overload and conflicting demands by ensuring workloads reflect negotiated agreements.

Moreover, to alleviate inter-sender conflicts, it would be useful to strengthen communication and mutual understanding between AEs and role senders in their university community, creating a supportive academic entrepreneurial ecosystem. The broader university strategy should promote awareness of how AEs and non-entrepreneur academics can reciprocally benefit from the endeavor of academic entrepreneurship (Schaeffer & Matt, 2016; Siegel & Wright, 2015). For example, Belitski and Sikorski (2024) document how a university in the United Kingdom has facilitated a symbiotic relationship between entrepreneurial and non-entrepreneurial academics, enhancing the university's overall entrepreneurial ecosystem. The establishment of an entrepreneurship center played a critical role, as it neither competes with other centers and institutions nor relies on them for knowledge or finance. This center encourages collaboration and knowledge exchange between both parties and addresses the marketing demands of university administrators, promoting a cohesive environment that benefits all stakeholders.

A key ethical consideration arising from this study is safeguarding students in contexts where academic entrepreneurship intersects with their academic experiences. It is imperative to establish ethical guidelines and enforce clear boundaries regarding their involvement in supervisors' entrepreneurial activities. Some concrete approaches may include:

a. Develop transparent task delegation agreements: Clarifying the scope, risks, and learning objectives of student involvement in written agreements. For example, students assigned to venture

tasks must receive a mentorship plan outlining skill development goals and risk disclosures.
b. Structure tasks along a risk-informed continuum. For example, progress students from low-risk and repetitive tasks (e.g., data entry) paired with explicit skill explanations (e.g., "This teaches supply-chain documentation"), and gradually introduce complex and high-value tasks under close supervision.
c. Independent oversight committees: Establish third-party review boards to audit task delegation practices, ensuring students are neither overburdened with "grunt work" nor excluded from growth opportunities.
d. Student feedback channels: Implement anonymous reporting systems for students to voice concerns about task relevance or exploitation without fear of academic retaliation.

These ethical frameworks can help institutions and AEs balance educational and entrepreneurial priorities.

Finally, with respect to policymaking, the case of China illustrates some possible realistic problems with immature academic entrepreneurship. The implementation of relevant policies (e.g. to reform the evaluation system for university faculty) has been lagging (Yin et al., 2022). Our investigation indicates that the university did not recognize the business achievements of academic entrepreneurship. Therefore, the government and universities should refine relevant policies, such as promotion criteria that value commercialization efforts alongside traditional scholarly achievements and those specifying the work hours, rights, and responsibilities of AEs. It is also helpful to establish institutional policies to regulate faculty involvement in entrepreneurial activities. For instance, Ji and Luo (2024) suggest that restrictions on faculty's executive roles in affiliated companies in some U.S. universities can prevent conflicts of interest and safeguard the institutional priorities of teaching and research.

Conclusion

This study investigates the role conflicts experienced by AEs at a Chinese university, particularly in the context of an immature entrepreneurial landscape. The research delves into both inter-role conflicts involving tensions among AEs' roles as researchers, educators, and entrepreneurs and inter-sender conflicts arising from diverse expectations of university stakeholders. To foster trust within the university community and promote a healthier academic entrepreneurship ecosystem, it is essential to develop strategies addressing these conflicts.

Expanding upon previous research and adopting an emerging symbolic-interactionist perspective in role theory (Anglin et al., 2022), this study incorporates perspectives from role senders who closely interact with AEs, including graduate students, non-entrepreneur academics, and university administrators. This approach aligns with calls in the literature (Zhang et al., 2021) for data collection from multiple stakeholders on AEs' role conflicts. However, it is worth noting that this research does not explore perspectives from role-senders outside the university (e.g., family members, government departments, company employees), which could be a focus for future research. Furthermore, investigating role conflicts through longitudinal studies or cross-national comparisons could further enhance the generalizability of the findings.

Despite these limitations, the study contributes to a comprehensive understanding of role conflicts and coping strategies in academic entrepreneurship, potentially leading to enhanced practices in managing university faculty engaged in entrepreneurial activities. It also provides theoretical contributions by presenting empirical support for two categories of role conflicts—inter-role and inter-sender conflicts—whose intricate interplay is infrequently examined in the entrepreneurship literature. The findings can enhance our comprehension of the unique spatial context of academic entrepreneurship within the realm of higher education, particularly in immature entrepreneurial environments characterized by fragmented networks, limited resources, and inadequate institutional support (Schaeffer & Matt, 2016). Practical implications, such as providing mentoring programs and ethical guidelines, developing and substantiating clear policies and incentives, strategic planning, and establishing dedicated entrepreneurship centers, offer valuable insights for other institutions facing similar challenges.

Data availability

The data analyzed in this study are not publicly available due to privacy concerns but are available from the corresponding author upon reasonable request.

Received: 23 May 2024; Accepted: 25 March 2025;
Published online: 12 April 2025

Notes

1 The designation of a Double First-Class University is largely based on research productivity and discipline construction and pays little attention to academic entrepreneurship.
2 This common saying in China was first proposed by Yanwu Gu (1613–1682), a Chinese philologist of the Ming Dynasty. Although the original saying is "Everybody is responsible for the fate of the world," a modern variation is "Everyone has a duty to their country." The interviewee used the latter.

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Acknowledgements

This study is supported by the Humanities and Social Sciences Fund of the Ministry of Education: Study on the Organizational Structure and Pattern Innovation of Interdisciplinary Organizations in China's Double First-Class Universities (Grant No. 23YJA880070); Hubei Provincial Teaching Research Project for Higher Education Institutions: Study on the Training Mechanism for Postgraduates in Interdisciplinary Disciplines at Hubei Higher Education Institutions (No. 2024077); China's National Office for Education Sciences Planning: Constructing an Indicator System for a High-Quality-Oriented Graduate Classroom Ecology (No. EIA220528).

Author contributions

ZY: conceptualization, methodology, data collection, data analysis, results interpretation, supervision. XJ: data collection, data analysis, results interpretation, draft write-up. PT: data analysis, results interpretation, draft write-up, illustration, and proofreading and editing. All authors contributed to the article and approved the submitted version.

Competing interests

The authors report that there are no competing interests to declare.

Ethical approval

This research follows the 1964 Helsinki Declaration and its later amendments and was approved on 5 January 2023, by the Academic Committee of the School of Political Science & Public Administration, Wuhan University.

Informed consent

Informed consent was obtained from all participants during 8–31 March 2023. Before the interviews, the researchers explicitly told participants the purpose of this study and the voluntary nature of their participation. They were also made aware that they had the freedom to withdraw from the study at any stage, without facing any negative consequences. The study respected the principles of anonymity and confidentiality.

Additional information

Supplementary information The online version contains supplementary material available at https://doi.org/10.1057/s41599-025-04800-4.

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