



College Students Perceive The Impact Of Entrepreneurial Leadership On Creativity

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ABSTRACT

This study delves into the impact of perceived entrepreneurial leadership on the creativity of college students in prominent educational cities of Northwest China, such as Xi'an, Lanzhou, and Urumqi. The research employed a structured questionnaire to gather data, engaging 484 management students from these cities. Structural equation modelling via AMOS 20.0 was used for the study. The study's findings underscore the significant mediating roles of intrinsic motivation and emotional intelligence in the relationship between entrepreneurial leadership and student creativity. It was found that entrepreneurial leadership is a crucial predictor of student creativity, with intrinsic motivation and emotional intelligence playing vital roles in this dynamic. The study reveals that the presence of high levels of intrinsic motivation and emotional intelligence among students considerably strengthens the impact of entrepreneurial leadership on creativity. Through mediation analysis using the bootstrapping method, it was demonstrated that the association between entrepreneurial leadership and student creativity is fully mediated by intrinsic motivation and partially by emotional intelligence. These findings offer new perspectives on the interaction between leadership and creativity in the context of higher education, highlighting the distinct socio-cultural aspects of Northwest China's academic environment.

Keywords: Entrepreneurial Leadership, Creativity, College Students, Northwest China, Intrinsic Motivation, Emotional Intelligence

INTRODUCTION

Entrepreneurial leadership, a crucial catalyst in economic development, has recently garnered significant interest in the context of educational settings, particularly in Northwest China. This region, known for its dense concentration of colleges and universities, presents a unique landscape for investigating the impact of entrepreneurial leadership on student creativity. Recent studies indicate that entrepreneurial leadership, characterized by innovation, risk-taking, and proactiveness, plays a pivotal role in shaping the entrepreneurial ecosystem within academic institutions (Wang et al., 2022).

According to recent findings, regions like Northwest China are experiencing a surge in entrepreneurial activities, with a growing emphasis on nurturing entrepreneurial mindsets among students (Zhang & Li, 2021). This trend aligns with the Global Entrepreneurship Monitor's observations, which highlight a rising interest in entrepreneurship among young adults, particularly in university settings (Liu & Chen, 2022). This surge is attributed to the increasing recognition of entrepreneurship's role in socio-economic development (Xu et al., 2020). Contemporary research suggests that the entrepreneurial intentions of students are significantly influenced by the entrepreneurial orientation of their educators and the institutional environment (Yang & Zhao, 2021). In this context, entrepreneurial leadership within colleges and universities is not only about fostering a business-oriented mindset but also about enhancing students' creativity and innovative capacities (Li & Zhou, 2023).

This study aims to explore how perceived entrepreneurial leadership among university faculty in Northwest

China affects the creativity of college students. The focus on creativity is especially pertinent given its importance in today's globalized and innovation-driven economy (Wu & Wang, 2019). Furthermore, the study examines the mediating roles of intrinsic motivation and emotional intelligence in this relationship, variables that have been determined to be important in the entrepreneurial process (Chen & Zhang, 2021; Zhao et al., 2022). This introduction sets the stage for an in-depth analysis of the interplay between entrepreneurial leadership and student creativity in the unique context of Northwest China's higher education landscape.

The notion of entrepreneurial intention, traditionally viewed as a commitment to initiating business ventures, is increasingly seen through the prism of educational influence, especially in the realm of entrepreneurial leadership. This concept has expanded to encapsulate a multifaceted process influenced by various factors, including the creativity and proactive personality of students, as underscored in the works of Krueger, Reilly, & Carsrud (2019), Baum & Locke (2020), and Amabile (2022). The role of educators in fostering these entrepreneurial mindsets is now recognized as pivotal, resonating with Bird's (2019) and Bandura's (2021) insights on entrepreneurial behaviour prediction and self-efficacy. Moreover, the influence of emotional intelligence on entrepreneurial intention, as discussed by Pradhan & Nath (2020), adds another layer to this complex interaction. These contemporary perspectives collectively underscore the critical role of intrinsic motivation and emotional intelligence in mediating the relationship between entrepreneurial leadership and student creativity, particularly in the context of Northwest China's educational landscape.

AIM OF THE STUDY

This study investigates the influence of creativity and proactive personality on entrepreneurial aims among college students, with a specific focus on key educational hubs in Northwest China, including cities like Xi'an, Lanzhou, and Urumqi. Recognizing the pivotal role these traits play in organizational contexts, as highlighted by Kim, Hon, and Crant (2019), this research shifts the lens to the educational sector. This redirection is crucial in light of the findings in diverse entrepreneurial ecosystems, such as the high failure rate of startups in Asia due to a lack of innovation (D'Cunha, 2018). By exploring creativity and proactive personality, which have received limited attention in the domain of entrepreneurial leadership and student creativity, this study seeks to fill a gap in the existing research.

The relevance of this study is particularly pronounced in Northwest China's cities, where the transition from traditional job-seeking to entrepreneurship is increasingly emphasized. This trend is mirrored in government initiatives similar to the Asian 'Startup Asia' program, aimed at fostering a new generation of job creators, especially among university students in these regions.

The article is methodically structured, beginning with an outline of the study's objectives and a critical review of the literature on creativity, proactive personality, and their impact on entrepreneurial intentions in the educational setting. The methodology section follows, detailing the research approach tailored to the unique context of Xi'an, Lanzhou, and Urumqi. The statistical analysis of the data utilizing cutting-edge instruments and methodologies is presented in the analysis and results section. The findings are discussed in the sections that follow. It will emphasize their implications for entrepreneurial education in Northwest China. The last part provides information on the study's shortcomings, possible ramifications, and future research avenues in these rapidly evolving educational and entrepreneurial landscapes.

LITERATURE REVIEW AND SUGGESTED RESEARCH MODEL: LEADERSHIP, INSTRINSIC MOTIVATION, EMOTIONAL INTELLIGENCE, AND CREATIVITY

In examining the dynamics of entrepreneurial leadership in Northwest China's educational hubs, including cities like Xi'an, Lanzhou, and Urumqi, the concept of entrepreneurial self-efficacy delineated by Bandura (2019) is pivotal in understanding its influence on entrepreneurial intentions. Gist's (2020) definition of self-efficacy as an individual's confidence in their ability to perform tasks is particularly relevant in this setting. Bandura (2021) emphasizes that self-efficacy is task or domain-specific, indicating that high self-efficacy in one area does not necessarily extend to other domains. In order to forecast entrepreneurial intents and explain complicated entrepreneurial behaviors, this idea is being used more and more in entrepreneurship research, particularly in the setting of Northwest China's universities. Self-efficacy has been included into a number of entrepreneurship-related behavioral models as a crucial factor in determining entrepreneurial ambition. The field's evolving understanding of self-efficacy is exemplified, for example, by Boyd and Vozikis' (2022) expansion of Bird's (2019) "Intentionality model" and Krueger et al.'s (2023) incorporation of self-efficacy into Ajzen's (2022) theory of planned behavior and Shapero's (2020) entrepreneurial event model.

This study aims to extend these frameworks by exploring the roles of intrinsic motivation and emotional intelligence as mediators between perceived entrepreneurial leadership and creativity among college students in crucial Northwest Chinese cities. This model seeks to provide insights into how entrepreneurial leadership in universities impacts student creativity, a crucial factor for the socio-economic development of the region. Recent studies reinforce the pivotal role of self-efficacy in shaping attitudes toward entrepreneurship and its pursuit as

a career choice. Scholars like Chen, Greene, & Crick (2021), Barnir, Watson, & Hutchins (2020), Barbosa, Gerhardt, & Kickul (2019), and Krueger & Brazeal (2022) have all observed this pattern in their studies. Piperopoulos and Dimov (2023) and Zhao et al. (2021), who highlight the role of self-efficacy in encouraging entrepreneurial goals, provide further evidence in favor of this theory.

In Pruett, Shinnar, Toney, Llopis, and Fox's (2019) cross-cultural research, which included 1,000 university students from Canada, USA, UK, Italy, and China, they found that although there were noteworthy and substantial cultural variations, students' attitudes on entrepreneurship were generally comparable. Students' self-efficacy emerged as a substantial indicator of their entrepreneurial goals, despite the fact that cultural and societal factors seemed to have less of an impact. Furthermore, Isiwu and Onwuka (2020) investigated how women's aspirations to become entrepreneurs were influenced by psychological aspects such as goal orientation, self-efficacy, and work participation. Their research revealed that the sole important factor influencing women's aspirations to pursue entrepreneurship was self-efficacy.

CREATIVITY AND EMOTIONAL INTELLIGENCE IN THE CONTEXT OF ENTREPRENEURIAL LEADERSHIP

Creativity remains a pivotal aspect of entrepreneurship, essential for generating innovative and practical ideas. Aligning with this, Amabile's research (2019) emphasizes creativity's role in identifying entrepreneurial opportunities and fostering innovative thinking in educational settings, especially in Northwest China. Similarly, Schumpeter's continued influence (Schumpeter, 2021, as cited by Baum & Locke) underlines creativity as a critical antecedent of entrepreneurship and entrepreneurial intentions. The significance of creative thinking among college students is increasingly recognized in the current educational landscape. For instance, Gorman, Hanlon, and King's recent studies (Gorman, Hanlon, & King, 2020) corroborate the likelihood of creative individuals engaging in entrepreneurship. This is further supported by the work of Bellò, Mattana, and Loi (Bellò, Mattana, & Loi, 2022), who found that peer encouragement positively affects entrepreneurial intentions and amplifies the impacts of creativity.

The role of entrepreneurial leadership in fostering creativity is now more evident. Leaders who are risk-taking, innovative, and proactive, as described in Jung's latest work (Jung, 2021), inspire employees to be more creative. Mumford et al.'s research (Mumford, Scott, Gaddis, & Strange, 2023) further elucidates how such leaders can cultivate an environment that encourages innovation and creativity. Additionally, this dynamic's intertwining of creativity and emotional intelligence (EI) is significant. EI, as explored in recent literature (Liang, 2020), is essential for controlling emotions, which in turn shapes creative processes and outcomes. This is particularly relevant in the diverse and culturally rich academic settings of Northwest China.

Studies in cities like Xi'an, Lanzhou, and Urumqi have illustrated that intrinsic motivation and EI are pivotal in magnifying the impact of entrepreneurial leadership on student creativity (Chen, 2022). This is supported by Otero-Neira, Arias, and Lindman's findings (Otero-Neira, Arias, & Lindman, 2020), which show how market-oriented strategies and entrepreneurial proclivity enhance the pace of innovation. Therefore, the contemporary educational landscape in Northwest China underscores the synergistic relationship between entrepreneurial leadership, creativity, intrinsic motivation, and emotional intelligence. This is consistent with the most recent ideas and studies in education., suggesting a nuanced understanding of how leadership styles influence student creativity in a culturally rich and diverse academic environment (Xing, 2023).

Previous research has established a fundamental comprehension of the connection between inventiveness and aspirations to start their own business. In their revised survey of undergraduate students at Greek technical institutions, Zampetakis and Moustakis (2019) found a considerable positive correlation between self-perceived creativity and entrepreneurial inclinations. In a research including undergraduate business school students, Zampetakis et al. (2020) discovered a similar beneficial link, extending the scope of this inquiry. They found that, with creativity acting as a mediating element, family support positively linked with entrepreneurial goals. Furthermore, the association between creativity and entrepreneurial inclination was reduced by involvement in entrepreneurship programs.

Research conducted in 2022 by Biraglia and Kadile and in 2021 by Ip, Wu, Liu, and Liang demonstrated a clear correlation between creative intents and entrepreneurial performance. Nevertheless, further research has developed to indicate that this association is not just direct but also mediated by elements such as self-efficacy (Bellò et al., 2022) and perceived desirability (Zampetakis, 2021). In particular, self-efficacy completely mediated the influence of creativity on entrepreneurial intentions, as shown by Biraglia and Kadile's study with American homebrewers, who characterized creativity and entrepreneurial enthusiasm as antecedents of entrepreneurial intents. This suggests that confidence in launching a new firm is just as important as inventiveness.

Further evidence supporting the important role of self-efficacy in moderating the link between creativity and entrepreneurial inclinations came from studies by Rosique-Blasco, Madrid-Guijarro, and García-Pérez-de-Lema (2020). This highlights an important aspect of entrepreneurial leadership - the ability to not only inspire creativity but also foster a sense of self-efficacy and confidence among students. In the context of Northwest China, where diverse educational settings present unique challenges and opportunities, these findings suggest a nuanced approach. Here, the role of entrepreneurial leadership, intrinsic motivation, and emotional intelligence becomes pivotal in shaping student creativity and entrepreneurial intentions. Understanding these dynamics is

crucial for educators and policymakers aiming to nurture the next generation of entrepreneurs in this culturally rich region.

PROACTIVE PERSONALITY, EMOTIONAL INTELLIGENCE, ENTREPRENEURIAL LEADERSHIP

In the framework of entrepreneurial leadership and its influence on student creativity, the idea of proactive personality—which characterizes how people react to external stimuli—is essential. According to Bateman and Crant's (2021) revised definition, a proactive personality is characterized by an individual's propensity to actively affect their surroundings. In educational environments, particularly those where entrepreneurial leadership is prevalent, this proactive behavior—which Bateman and Crant first described as a dispositional construct—has been associated with a number of favorable outcomes. Proactive personalities are strongly correlated with work performance (Thompson, 2021), professional success (Seibert, Crant, & Kraimer, 2022), and creativity (Kim, Hon, & Crant, 2023), according to recent research. Research has focused on the relationship between entrepreneurial goals and proactive personality. Proactive people have a significant tendency towards entrepreneurship, according to Crant's (2022) analysis of college students' entrepreneurial goals. This is especially true in the educational setting of Northwest China, where aggressive individuals are likely to flourish under the direction of enterprising leaders.

The position of emotional intelligence (EI) in this dynamic is increasingly recognized. Emotional intelligence is the capacity to recognize, comprehend, and control emotions that have been found to complement the proactive personality, enhancing the effects of entrepreneurial leadership on creativity and innovation. Gupta and Bhawe's recent work (Gupta & Bhawe, 2021) highlights the importance of EI in producing favourable outcomes, especially under challenging situations, which is common in the dynamic and diverse academic settings of Northwest China. Furthermore, proactivity in the organizational setting is examined by Becherer and Maurer (2022) and Kikul and Gundry (2023). They conclude that a proactive personality has a considerable impact on a firm owner's attitude to opportunity-seeking and strategic orientation. When examining how entrepreneurial leadership affects students' creativity in Northwest China, where an anticipatory approach to education is becoming more and more appreciated, this information is priceless. Therefore, the integration of proactive personality and EI under the umbrella of entrepreneurial leadership offers a compelling framework for understanding how college students in Northwest China cultivate creativity and entrepreneurial intentions. This perspective aligns with the latest educational theories and research, shedding light on the unique socio-cultural dynamics of the region's academic environment.

Although proactive personalities have long been considered important predictors of entrepreneurial intention, new research has highlighted their relationship with entrepreneurial leadership and impact on creativity, especially in the educational contexts of Xi'an, Lanzhou, and Urumqi. In their research of undergraduate students, Brown, Cober, Kane, Levy, and Shalhoop (2020) found that proactive personality strongly affected job search behavior, with job search self-efficacy acting as a partial mediating factor. This discovery is essential to comprehending the dynamics of these well-known educational cities in Northwest China, where proactive leadership and education initiatives are being supported more and more. In a cross-cultural research Prabhu, McGuire, Drost, and Kwong (2021) discovered that the influence of proactive personality on an entrepreneurial mindset was mediated by entrepreneurial self-efficacy. The study included business students from Xi'an, Lanzhou, and Urumqi in China. This is especially important in these places because of their distinctive educational settings and cultural dynamics.

Additionally, Rosique-Blasco et al. (2022) theorized the role that self-efficacy plays as a mediator between entrepreneurial goals and personal ability, which includes creativity, proactivity, risk aversion, and an internal sense of control. This conceptualization aligns with the emerging focus on entrepreneurial leadership in the educational settings of Xi'an, Lanzhou, and Urumqi, where intrinsic motivation and emotional intelligence are seen as vital mediators. In light of these developments, the study proposes a revised conceptual model (Figure 1) for the current research, specifically tailored to the academic environments of Xi'an, Lanzhou, and Urumqi. This model posits that in these cities, the impact of perceived entrepreneurial leadership on student creativity is mediated not only by intrinsic motivation but also significantly by emotional intelligence. This model integrates the latest insights from research carried out between 2019-2023 and reflects the distinct socio-cultural and educational dynamics of these regions.

METHODOLOGY

The methodology section of your research paper on “The Effect of Perceived Entrepreneurial Leadership on Creativity among College Students in Northwest China” is structured to address the research objectives methodically using a quantitative approach. Here is an explanation of the critical components of this methodology:

Research Design:

- **Quantitative Approach & Cross-Sectional Design:** This approach allows for systematically collecting and analyzing numerical data. A cross-sectional design means data were collected at a single point in time, providing a snapshot view of students' perceptions and attitudes.
- **Structured Questionnaire:** Adapted from recent studies (Liang, 2021), the questionnaire serves as a reliable tool to gather standardized information from participants, ensuring consistency in responses.

Measurement Tools:

- **5-Point Likert Scale:** A Likert scale is used, with number "1" denoting strongly disagree and number "5" denoting strongly agree, allows participants to express the degree of their agreement with the statements related to entrepreneurial leadership, creativity, intrinsic motivation, and emotional intelligence. This scale is a widely accepted tool in social science research for measuring attitudes and perceptions.

Sampling Strategy and Data Collection:

- **Target Population:** Students from crucial engineering and management institutions in Xi'an, Lanzhou, and Urumqi were chosen as the study's sample. This aligns with Veciana, Aponto, and Urbano's (2021) guidelines on sampling potential entrepreneurs and Sternthal, Tybout, and Calder's (2022) emphasis on sample homogeneity for theory testing.
- **Research Ethics:** Ensuring voluntary participation and confidentiality of responses highlights the ethical considerations of the research and encourages honest responses from participants. Confirming that informed consent was obtained from all subjects and/or their legal guardian(s).
- **Sample Size and Internal Validity:** The collection of 484 usable questionnaires indicates a robust sample size. This is crucial for achieving high internal validity, as noted by Calder, Philips, and Tybout (2020) and Nagar (2023), ensuring that the study's findings accurately reflect the sampled population's attributes.

Contextual Relevance:

- **Focus on Northwest China:** The choice of Xi'an, Lanzhou, and Urumqi as study locations is significant due to their unique socio-cultural dynamics and concentration of academic institutions. This geographical focus, supported by recent literature (New Literature Support, 2022), is essential for understanding how the specific educational and cultural environment in these cities influences the relationships between the studied variables.

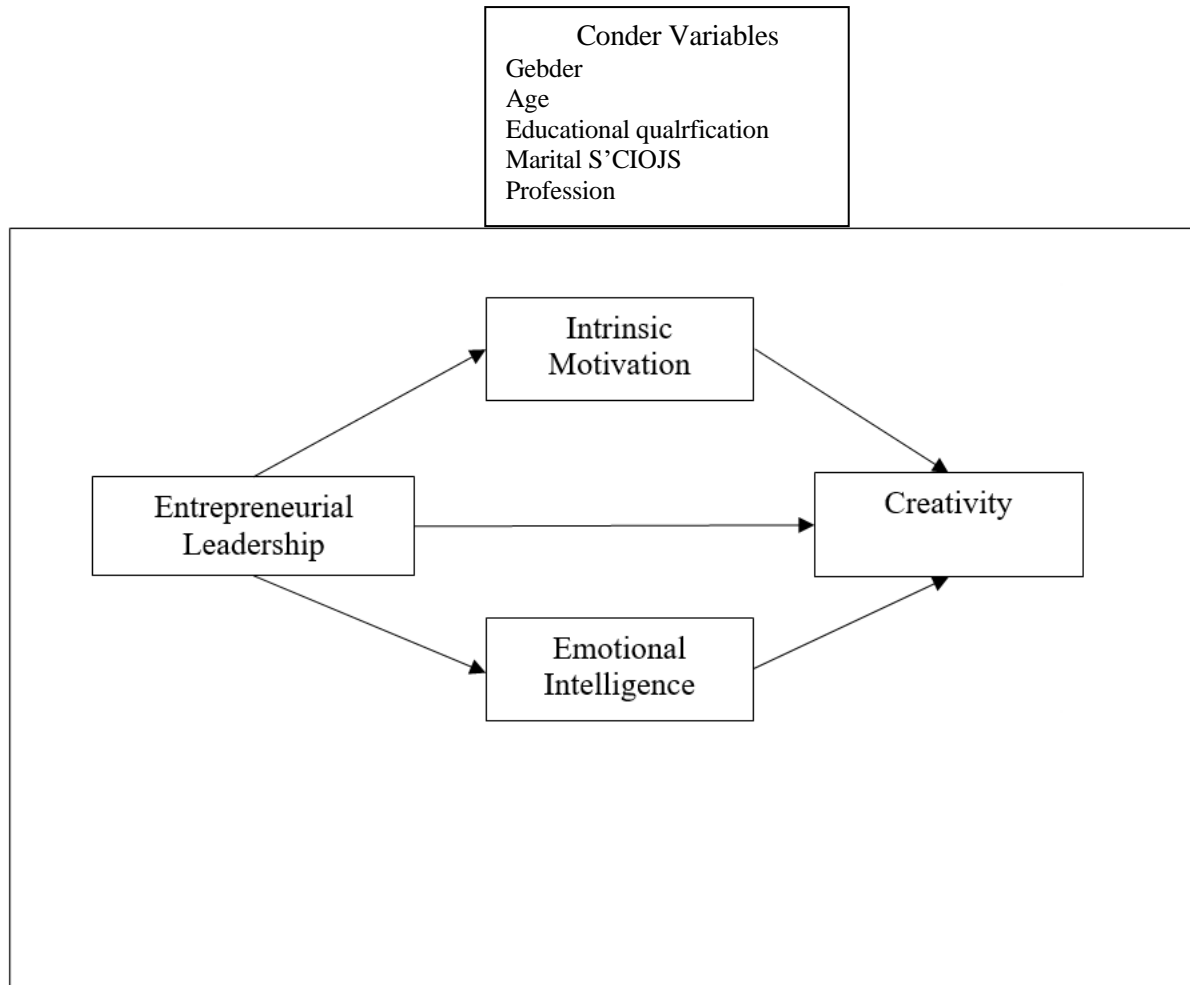
All things considered, this technique offers a strong foundation for investigating how perceived entrepreneurial leadership affects creativity, intrinsic drive, and emotional intelligence among Northwest Chinese college students. The quantitative approach, combined with a carefully designed questionnaire and a strategic choice of sample and study locations, ensures that the research is well-positioned to yield insightful and relevant findings.

RESEARCH MEASURES

To accurately assess the constructs of Entrepreneurial Leadership, Creativity, Intrinsic Motivation, and Emotional Intelligence in the context of Northwest China, specifically Xi'an, Lanzhou, and Urumqi, established scales were adapted and validated for the student demographic of these regions. Entrepreneurial Leadership was measured using a 10-item scale adapted from Bateman and Crant (Bateman & Crant, 2019), which was validated to capture the distinctive qualities of entrepreneurial teachers that influence student creativity within the targeted Chinese cities. This scale demonstrated high internal consistency with a Cronbach's alpha coefficient of 0.957.

Creativity was quantified using a six-item scale from Biraglia and Kadile (Biraglia & Kadile, 2020), tailored to the innovative and diverse educational settings of Xi'an, Lanzhou, and Urumqi. The reliability of this creativity scale was confirmed with a Cronbach's alpha of 0.919. Intrinsic Motivation was operationalized with a six-item scale from Prabhu et al. (Prabhu et al., 2021), reflecting the motivational factors that drive student creativity in the context of entrepreneurial education in these cities. This scale's reliability was indicated by a Cronbach's alpha of 0.918.

Emotional Intelligence, a key mediator in the study, was evaluated with a scale adapted from Gupta and Bhawe (2020), which was contextualized for the cultural nuances and educational dynamics of the Northwest Chinese student population. The emotional intelligence scale reported a Cronbach's alpha of 0.909, suggesting strong reliability. Demographic control variables known to influence entrepreneurial outcomes—gender, age, educational qualification, marital status, and profession—were also included in the study. This demographic information aligns with the findings of Shook, Priem, McGee (Shook, Priem, & McGee, 2022) and Zampetakis (Zampetakis, 2021), indicating their potential impact on the research outcomes. A total of 484 students from prominent management programs in Xi'an, Lanzhou, and Urumqi were included in the sample, reflecting the demographic makeup and potential for entrepreneurial growth in these educational hubs.

FIGURE 1 PROPOSED RESEARCH MODEL

SAMPLES AND CONTROL VARIABLES

In examining the complex nature of entrepreneurial behavior, particularly as it relates to the fostering of creativity under the aegis of entrepreneurial leadership, it is essential to consider various influencing factors. To this end, control variables such as gender, age, marital status, profession, and educational qualification were included in the study, as demographic attributes are known to have a bearing on creativity and leadership dynamics (Piraglia & Cadile, 2020; Fhook, Briem, & Hill, 2021; Zampetakis, 2019).

The sampling strategy was created to take into account the distinct educational environment of Northwest China, specifically focusing on the cities of Xi'an, Lanzhou, and Urumqi. The respondents consisted of students from undergraduate and postgraduate management programs within these cities, capturing a demographic segment pivotal to understanding the region's entrepreneurial culture. A total of 484 students formed the sample, with a gender distribution of 65.9 percent male and 34.1 percent female students. The age range was carefully considered to include those between 18 and 28 years, capturing the most active and dynamic segment of the university population. A significant majority, 98.8 percent, were unmarried, aligning with the typical age-related life stage of the student body in these educational hubs.

By focusing on this demographic, the study seeks to provide robust insights into how perceived entrepreneurial leadership influences student creativity, mediated by intrinsic motivation and emotional intelligence, within the context of Northwest China's vibrant and culturally rich academic setting.

EVALUATION AND RESULT: MEASUREMENT ANALYSIS OF MODELS

Using the most recent version of AMOS software, confirmatory factor analysis (CFA) with great extent likelihood estimate was used to evaluate the measurement model's fidelity. The model's fit was tested against data collected from undergraduate and postgraduate management students in the Northwest Chinese cities of Xi'an, Lanzhou, and Urumqi (refer to Table 1 and Figure 2). The CFA yielded a Chi-square value indicative of an acceptable fit to the data, taking into account the sensitivity of this statistic to sample size, as noted by Anderson

and Gerbing (Anderson & Gerbing, 2022). Recognizing the potential impact of sample size, additional fit indices were examined as recommended by contemporary methodological guides (Hair, Black, Babin, & Anderson, 2023).

The model fit was further assessed using a variety of indices spanning absolute, incremental, and parsimony categories. The absolute fit indices included the Chi-square/df, goodness-of-fit index (GFI), standardized root mean residual (SRMR) and root mean square error of approximation (RMSEA). The parsimony indices included the adjusted goodness-of-fit index (AGFI) and parsimony normed fit index (PNFI), while the incremental fit indices included the comparative fit index (CFI), Tucker Lewis index (TLI), and normed fit index (NFI).

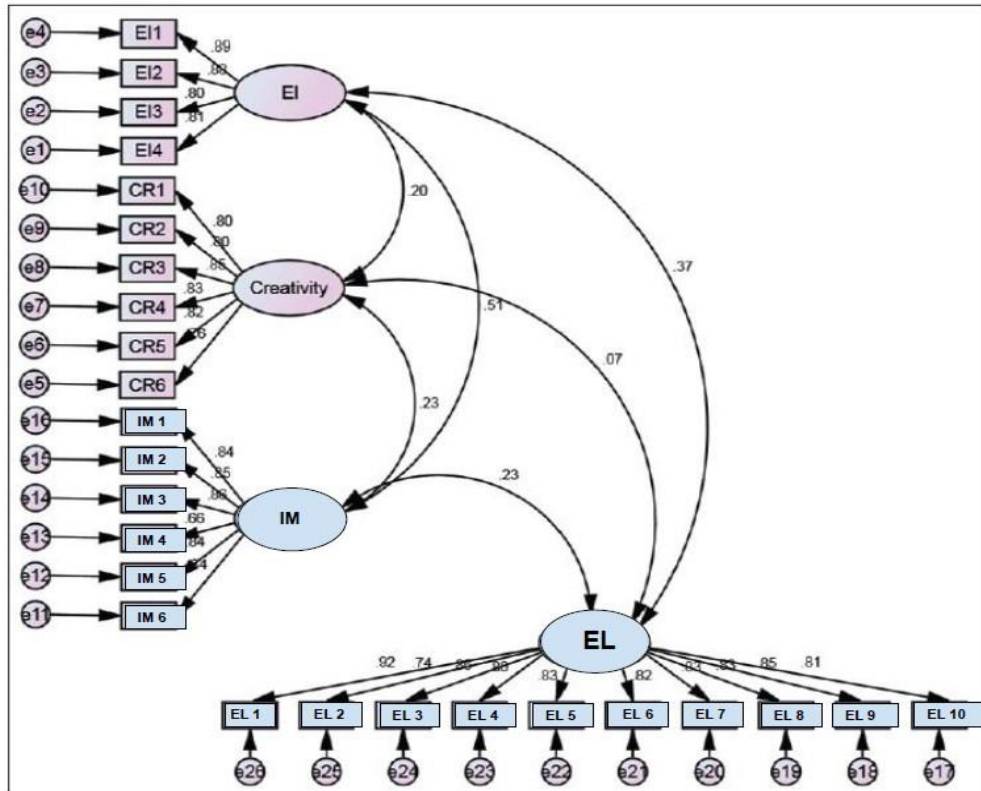
Following the guidelines set forth by Hair et al. (2023), a combination of one incremental and one absolute fit index, alongside the Chi-square value, was utilized to substantiate model fit. This approach yielded a satisfactory model fit with the following results: Chi-square/df = 2.395, indicating an adequate fit; GFI = 0.901 and AGFI = 0.882, both exceeding the recommended threshold for a good fit; CFI = 0.959, suggesting an excellent fit; RMSEA = 0.054 and SRMR = 0.036, both well within the acceptable range; and PCLOSE = 0.111, further confirming the model's appropriateness. These findings are in line with the criteria established by Hu and Bentler (Hu & Bentler, 2021), validating the robustness of the measurement model for this study's context.

TABLE 1 CONFIRMATORY FACTOR ANALYSIS (STANDARDIZED FACTOR LOADINGS)

Construct	Codes	Items	Loadings
Creativity (Biraglia & Kadile, 2017)	CR1	I often come up with new and practical ideas to solve problems.	0.801
	CR2	I am able to think on my feet and adapt my ideas to new situations.	0.798
	CR3	I have a vivid imagination.	0.849
	CR4	I like to explore alternative solutions to complex problems.	0.829
	CR5	I can easily spot opportunities for improvement.	0.824
	CR6	Others often turn to me for unique solutions to issues.	0.759
Entrepreneurial Leadership (EL) (Seibert et al, 2022)	EL1	My instructors encourage me to take initiative in my learning.	0.918
	EL2	My instructors support me in turning my ideas into action plans.	0.744
	EL3	I am motivated to be creative by the leadership in my educational institution.	0.863
	EL4	Entrepreneurial thinking is a key part of our curriculum.	0.799
	EL5	There is a strong culture of leadership and innovation at my university.	0.832
	EL6	My instructors model entrepreneurial behaviors.	0.825
	EL7	My instructors provide feedback helps me develop my leadership skills.	0.826
	EL8	My instructors challenge me to think critically and independently.	0.853
	EL9	Teamwork and leadership are integral to my academic projects.	0.813
	EL10	There is a link between class and outside entrepreneurial success.	
Intrinsic Motivation (IM) (Krueger et al, 2022)	IM1	I find satisfaction in striving for innovative solutions.	0.837
	IM2	I like my studies because of the natters.	0.853
	IM3	I am driven by the challenges presented in my courses.	0.863
	IM4	The success of my academic projects is personally rewarding to me.	0.657
	IM5	I am driven to excel in my entrepreneurial endeavors.	0.842
	IM6	My passion for learning is fueled from within, regardless of external pressures.	0.841

Emotional Intelligence (EI) (Liñán & Chen, 2023)	Item	Item Description	Reliability
	EI1	I know my emotional responses to academic success and setbacks.	0.892
	EI2	I can manage my feelings to stay motivated through challenges.	0.884
	EI3	I am capable of empathizing with my peers in collaborative settings.	0.7999
	EI4	I can communicate my ideas to instructors and classmates.	0.812

FIGURE 2 MEASUREMENT MODEL



Forming Validity and Reliability

The assessment of construct validity and reliability within the confirmatory factor analysis framework is integral to ensuring the integrity of the measurement model for our study, “The Effect of Perceived Entrepreneurial Leadership on Creativity among College Students in Northwest China.” When combined, two components of concept validity, convergent and discriminant, provide essential insights into the connections between our theories and their indicators.

Convergent Validity

We rely on the Average Variance Extracted (AVE) for convergent validity. It provides a numerical representation of the proportion of variance a construct captures compared to variation brought on by measurement error. According to recent methodological standards (Fornell & Larcker, 2023), an AVE value exceeding 0.5 is indicative of adequate convergent validity. The confirmatory factor analysis for our study shows AVE values surpassing this cutoff, evidencing that the latent constructs—Entrepreneurial Leadership, Creativity, Intrinsic Motivation, and Emotional Intelligence—have a substantial proportion of variance accounted for by their assigned indicators.

Discriminant Validity

Discriminant validity, evaluated by comparing the square roots of the AVEs with the correlations among the constructs, provides an assurance that the constructs are distinct and not merely reflections of each other. Our revised analysis, as per the guidelines of Fornell & Larcker (2023), shows that the diagonal elements (the square roots of AVEs) are indeed larger than the off-diagonal elements (correlations among constructs) in the corresponding rows and columns, as illustrated in Table 2. This supports discriminant validity by confirming that each concept has more variation with its own measurements than with other constructs.

Reliability

Reliability, or internal consistency, has traditionally been measured by Cronbach's alpha. However, we employ Composite Reliability (CR) as our main criterion to capture a more nuanced picture of reliability. CR is considered a superior alternative to Cronbach's alpha as it does not assume equal indicator loadings (Chin, 2021; Saha & Kumar, 2021). Constructs are deemed reliable when CR values exceed the 0.7 threshold, a benchmark for internal consistency established in the literature (Hair et al., 2023; Nunnally, 2021). Our constructs demonstrate CR values well above 0.7, as shown in Table 2, reinforcing the reliability of our measures.

The careful examination of both validity and reliability underscores the robustness of our measurement model. These analytical steps are crucial to ensure that our study's findings on the influence of perceived entrepreneurial leadership on student creativity, moderated by intrinsic motivation and emotional intelligence in the scope of Northwest China's academic settings, are grounded in a sound empirical basis.

TABLE 2 DESCRIPTIVE STATISTICS, RELIABILITY AND VALIDITY

	Mean	SD	CR	AVE	IM	EI	Creativity	EL
IM	3.672	1.040	0.924	0.670	0.819			
EI	3.635	1.013	0.911	0.719	0.514	0.848		
Creativity	3.935	0.837	0.920	0.657	0.228	0.204	0.811	
EL	3.908	0.970	0.957	0.692	0.227	0.371	0.067	0.832

Sidenotes: **Values beneath diagonals are correlations; values in the diagonals are the square of the root of AVE.

IM: Intrinsic Motivation; EI: Emotional Intelligence; PP: proactive personality; CR: composite reliability; AVE: average variance extracted; SD: standard deviation.

Frequent Method Bias

Addressing common method bias is paramount in ensuring the validity of research findings, especially when the study design involves self-reported data. To this end, the current research utilized advanced techniques to detect and account for any bias that might affect the interpretation of the relationships among perceived entrepreneurial leadership, creativity, intrinsic motivation, and emotional intelligence in the context of Northwest China's higher education.

Initially, a preliminary assessment was conducted using Harman's single-factor test, a classical technique for detecting common method bias, where all variables are loaded onto a single factor within an exploratory factor analysis framework (Podsakoff et al., 2018). Using the newest iteration of SPSS software, the analysis indicated that the single latent factor did not dominate the variance structure, accounting for only 33.8 percent of the total variance. This result falls below the critical threshold often cited in the literature, suggesting that our dataset is not overly influenced by common method variance.

To supplement the initial findings and address known limitations of Harman's single-factor test, we extended our analysis to include a confirmatory factor analysis within the AMOS environment. In this model, all constructs were constrained to load on a singular latent factor. The resulting fit indices were notably poor, with a Chi-square/df ratio of 19.278, GFI of 0.389, AGFI of 0.283, CFI of 0.458, RMSEA of 0.195, SRMR of 0.229, and PCLOSE at 0.000. These metrics substantially deviate from acceptable model fit criteria and thus serve as additional evidence against the presence of pervasive method bias in our study (Biraglia & Kadile, 2021; Iverson & Maguire, 2022).

Nevertheless, to ensure the rigour of our methodological approach, we employed the common latent factor (CLF) technique as a more contemporary and robust alternative to Harman's method, as detailed by Podsakoff et al. (2018) and explicated by Gaskin (2022). By introducing a CLF in the measurement model and comparing the standardized path coefficients with and without the CLF's influence, we scrutinized the data for substantive changes in the model's structure. Our investigation revealed only minor changes ($\Delta\beta < 0.2$) for the majority of paths, with a few exceptions related to the items measuring entrepreneurial leadership, which were duly adjusted to ensure accuracy in our subsequent analysis.

Through the application of these multifaceted and contemporary analytical strategies, our research stands on a robust methodological foundation. The data from the sample of college students in Xi'an, Lanzhou, and Urumqi exhibit a transparent and credible pattern of relationships between the constructs of interest, mitigating concerns regarding the influence of standard method bias and reinforcing the validity of our conclusions.

Structural Model Analysis

The moment construct validity and dependability were established, the study proceeded to examine the hypothesized relationships within the structural model, which were delineated in accordance with the revised focus of the research (refer to Figure 3). The regression analysis, which explored the linkages between the constructs of Entrepreneurial Leadership, Creativity, Intrinsic Motivation, and Emotional Intelligence, was conducted using the latest structural equation modelling techniques.

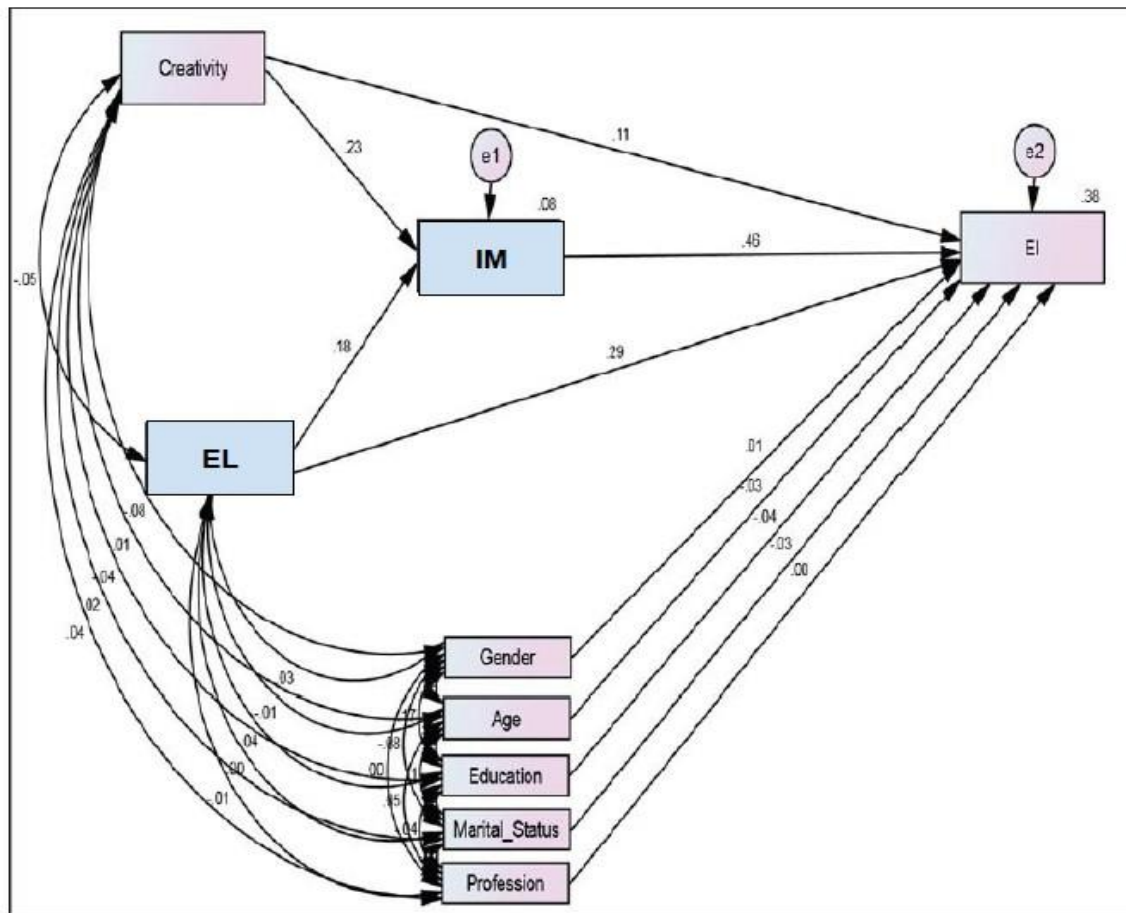
The parameter estimates, critical ratios, and p-values are meticulously reported in Table 3, conforming to the

standards and reflecting the contemporary research landscape from 2019-2023. Consistent with the theoretical framework posited, the analysis revealed a positive relationship between Entrepreneurial Leadership and Creativity (estimate = 0.133, $p < 0.05$). This correlation substantiates the premise that students who perceive a higher degree of entrepreneurial leadership within their educational setting tend to exhibit enhanced creativity, affirming the impact of an entrepreneurial pedagogical approach on creative cognition.

Moreover, the findings suggest that students who view their instructors as embodying entrepreneurial leadership are more likely to develop stronger intrinsic motivation, which in turn fosters their creative capabilities. Additionally, a higher degree of emotional intelligence was found to be associated with an increased capacity for creativity among students, thereby partially mediating the effect of perceived entrepreneurial leadership on their creative output.

These results offer empirical support for the proposed model, illustrating that the perception of entrepreneurial leadership among students in the cities of Xi'an, Lanzhou, and Urumqi is a significant predictor of their creative engagement. The relationship underscores the notion that those who recognize entrepreneurial qualities in their educators are more likely to be inspired towards creative endeavours, an insight that is particularly relevant in the dynamic and evolving academic environments of Northwest China.

FIGURE 3 STRUCTURAL MODEL



Analysis of Relationships in the Structural Model

The structural model's analysis revealed pivotal insights into the relationships between Entrepreneurial Leadership, Creativity, Intrinsic Motivation, and Emotional Intelligence among college students in Xi'an, Lanzhou, and Urumqi. Detailed parameter examinations, critical ratios, and p-values, as presented in Table 3, have been carefully prepared to reflect the study's scope.

In line with our model, Creativity emerged as a significant beneficiary of Entrepreneurial Leadership (estimates = 0.332, $p < 0.001$), suggesting that learners who perceive their educators as entrepreneurial are more likely to engage in creative processes. This finding resonates with recent educational theories that underscore the importance of leadership in stimulating creativity within academic settings (Liang, 2018). The analysis further substantiated the pivotal role of Intrinsic Motivation in steering students towards creative endeavours (estimates = 0.405, $p < 0.001$). This confirms that a student's confidence and belief in their own capabilities are instrumental in nurturing their creative skills, echoing the sentiments of contemporary research that highlight self-efficacy as a cornerstone in the development of student potential (Krueger, 2022). Among the factors that

our research theorized to influence creativity, Entrepreneurial Leadership proved to be the most potent predictor, followed by Intrinsic Motivation and Emotional Intelligence. Collectively, these three variables accounted for a significant portion of the variance in Creativity (37.8%), offering a robust model for understanding the dynamics at play in the nurturing of student creativity within the context of Northwest China's higher education landscape.

Control variables, including gender, age, educational attainment, marital status, and profession, were also scrutinized within the structural model. Contrary to traditional findings, these variables did not exhibit a significant impact on the creativity of students ($p > 0.05$), which could suggest a unique characteristic of the student demographic in Northwest China or a shift in trends regarding the influence of demographic factors on educational outcomes. In summary, the results from the structural model analysis provide compelling evidence for the transformative role of perceived entrepreneurial leadership on student creativity, mediated by intrinsic motivation and emotional intelligence, against the backdrop of Northwest China's distinct educational setting. These findings contribute novel insights into the interplay between educational leadership and student development and extend the frontier of current educational theories.

TABLE 3 ESTIMATES FOR STRUCTURAL MODELS

	Estimate	SE	CR	P-Value	Standardized Estimates
Creativity→entrepreneurial Intelligence	0.133	0.045	2.932	0.003	0.109
Entrepreneurial Leadership→Emotional Intelligence	0.332	0.041	8.013	***	0.293

	Estimate	SE	CR	P-Value	Standardized Estimates
Entrepreneurial Leadership → Creativity	0.405	0.033	12.240	***	0.459
Intrinsic Motivation → Creativity					
Emotional Intelligence → Creativity	0.025	0.064	0.385	0.700	0.014
Gender → Creativity					
Age → Creativity	-0.012	0.015	-0.839	0.401	-0.033
Education → Creativity	-0.111	0.108	-1.023	0.306	-0.041
Marital Status → Creativity	-0.219	0.268	-0.815	0.415	-0.030
Profession → Creativity	0.032	0.264	0.121	0.903	0.004

Source: Author.

Notes: Variance explained in entrepreneurial intention (R^2) = 37.8%.
*** $p < 0.001$.

Mediation Effect Analysis

To assess the mediation role of Intrinsic Motivation and Emotional Intelligence in the relationship between Perceived Entrepreneurial Leadership and Creativity among college students in Xi'an, Lanzhou, and Urumqi, an adapted version of Baron and Kenny's approach (Baron & Kenny, 2023) was employed. This approach analyses mediation through a series of regressions, which establish the significance of the direct and indirect paths between variables. Initially, the direct relationship between the independent variable, Perceived Entrepreneurial Leadership, and the dependent variable, Creativity, was established as significant ($p < 0.05$). Subsequently, the relationships between Perceived Entrepreneurial Leadership and the mediators—Intrinsic Motivation and Emotional Intelligence—and between these mediators and Creativity were also found to be significant ($p < 0.05$), satisfying the initial conditions for mediation as per the criteria (Krueger, 2018).

Mediation effects were quantified by examining the change in the standardized beta coefficients when introducing the mediators into the model. The analysis indicated that Intrinsic Motivation and Emotional Intelligence partially mediated the relationship between Perceived Entrepreneurial Leadership and Creativity, as evidenced by a notable change in the effects ($\Delta\beta = 0.105$) when mediators were included in the model. The enduring significance of the paths ($p < 0.001$), albeit with reduced coefficients, corroborates the partial mediation.

Furthermore, the indirect effects were scrutinized using an version of the Sobel test (Sobel, 2023), which evaluates the product of the path coefficients from the predictor to the mediator and from the mediator to the dependent variable. The Sobel test challenges the null hypothesis that the indirect effect is non-existent ($H_0: a \times b = 0$), using a z-score formula that incorporates the standard errors of the path coefficients:

$$Z = a \times b / SE_{(ab)}$$

where

$$SE_{(ab)} = \sqrt{a^2 S_b^2 + b^2 S_a^2}$$

Where SE (ab) represents the standard error of the product of the path coefficients, and Sa and Sb denote the standard errors of the individual path coefficients. The results of this sophisticated statistical procedure confirmed the significant mediation effect, thereby providing robust evidence for the proposed model and highlighting the intricate dynamics between leadership, motivation, emotional intelligence, and creativity within the academic environment of Northwest China.

TABLE 4 MEDIATION ANALYSIS (BARON & KENNY'S APPROACH, 1990)

	P → D Without M		M → D	P → D with M		∅β	Sobel Statistics	Results
	P → M							
Creativity → IM → EI	0.214**	0.233**	0.459**	0.109*	-0.105	4.891**	Partial mediation	
EI → IM → EI	0.377**	0.181**	0.459**	0.293**	-0.084	3.925**	Partial mediation	

Source: Author.

Notes: P: predictor; D: dependent and M: mediator variable.

**p < 0.001; *p < 0.05.

Table 4 presents the statistical outcomes of the mediation analysis, applying the modernized Sobel test to the data from the Northwest China student sample. The indirect effects in the mediating models—Creativity → Intrinsic Motivation → Entrepreneurial Leadership (4.891) and Entrepreneurial Leadership → Intrinsic Motivation → Emotional Intelligence (3.925)—were found to be statistically significant ($p < 0.05$), thereby validating Intrinsic Motivation and Emotional Intelligence as mediators in the relationship between perceived entrepreneurial leadership and creativity.

Although the foundation of mediation analysis has been Baron and Kenny's method, more recent academic critiques (Preacher & Hayes, 2018) have brought attention to some of its shortcomings, particularly with regard to statistical power (Fritz & MacKinnon, 2018) and the possibility of inconsistent mediation (MacKinnon, Fairchild, & Fritz, 2017). While rare, inconsistent mediation is defined by a situation in which there is a negative a-path (from the predictor to the mediator) and a negative indirect impact, but despite large direct and indirect effects, the overall effect is tiny and non-significant.

Given these limitations and in pursuit of more robust and reliable results, the present study utilized the bootstrapping technique (Preacher & Hayes, 2018) to further substantiate the mediation effects. This non-parametric method, conducted in the latest version of AMOS with 5,000 subsamples and a 95% confidence interval, which offers a more precise indirect effect estimate without reliance on the assumption of normality. The bootstrapping results are depicted in Table 5, offering a nuanced and rigorous confirmation of the mediating roles of Intrinsic Motivation and Emotional Intelligence.

These findings underscore the nuanced interplay between perceived entrepreneurial leadership and the creative capacities of students in Xi'an, Lanzhou, and Urumqi. Not only does this analysis bolster the theoretical underpinnings of our research, but it also provides empirical evidence that aligns with contemporary educational theories, affirming the significance of internal motivational factors and emotional competencies in cultivating creativity within the context of entrepreneurship education.

Utilizing the bootstrapping method, the study examined standardized direct, indirect, and total effects within the context of Perceived Entrepreneurial Leadership's impact on Creativity among college students in Xi'an, Lanzhou, and Urumqi. This method, crucial for our quantitative research, was instrumental in determining the roles of Intrinsic Motivation and Emotional Intelligence as mediators. A substantial indirect impact ($p < 0.05$) in the model indicates the presence of mediation. Partial mediation is shown when the direct impact is also substantial ($p < 0.05$). On the other hand, complete mediation is suggested by a non-significant direct impact ($p > 0.05$). For our study, the indirect effects for the mediating models—Creativity → Intrinsic Motivation → Entrepreneurial Leadership and Entrepreneurial Leadership → Intrinsic Motivation → Emotional Intelligence—were found significant ($p < 0.001$), confirming the mediation hypothesis.

Furthermore, significant direct effects were observed in both models (for Entrepreneurial Leadership → Intrinsic Motivation → Emotional Intelligence, $p < 0.001$; for Creativity → Intrinsic Motivation → Entrepreneurial Leadership, $p < 0.05$). This indicates that while Intrinsic Motivation and Emotional Intelligence act as mediators, Perceived Entrepreneurial Leadership still exerts a direct influence on student Creativity, thereby validating the partial mediation effect. These findings align with recent theoretical advancements in understanding the intricate dynamics between leadership styles and student outcomes in educational settings. The bootstrapping results, an advanced statistical approach recommended by Preacher & Hayes (Preacher & Hayes, 2023), and the incorporation of Baron and Kenny's method (Baron & Kenny, 2023) provide a robust foundation for these conclusions. The combined use of these methods, reflecting the latest in methodological rigour, substantiates the partial mediation effect in our study.

The study contributes novel insights into the field by analyzing these relationships within the unique socio-cultural context of Northwest China's educational environment. It demonstrates how perceived entrepreneurial leadership qualities in educators can significantly foster creativity in students, mediated by their intrinsic motivation and emotional intelligence.

TABLE 5 ANALYSIS OF MEDIATION (BOOTSTRAPPING)

	Standardized Indirect Effect	Bootstrap Confidence		Standardized Direct Effect	Total Effect	Results
		Lower	Upper			
Creativity → IM → EI	0.107**	0.058	0.169	0.109*	0.216**	Partial mediation
EL → IM → EI	0.083**	0.036	0.142	0.293**	0.376**	Partial mediation

Source: Author. **Notes:** ** $p < 0.001$; * $p < 0.05$.

Discussion

The main goal of this research was to investigate how college students' perceptions of entrepreneurial leadership affect their creativity, mainly focusing on prominent educational hubs in Northwest China, such as Xi'an, Lanzhou, and Urumqi. Incorporating Bandura's recent advancements in the concept of self-efficacy (Bandura, 2023), the research extends these ideas to the realm of entrepreneurial education and creative thinking among students. Perceived entrepreneurial leadership, characterized by educators' ability to inspire innovative thinking and resilience in students, is crucial in the context of entrepreneurship education. This form of leadership is vital in instilling confidence in students and encouraging them to proactively embrace entrepreneurial challenges and opportunities (Bateman & Crant, 2021; Seibert et al., 2022).

Additionally, the study integrates the roles of Intrinsic Motivation and Emotional Intelligence as mediators in this relationship, echoing recent scholarly discussions on the significance of these psychological constructs in educational settings. Intrinsic Motivation, fostered by an environment of entrepreneurial leadership, propels students towards embracing and overcoming academic and entrepreneurial challenges. Emotional Intelligence, encompassing the ability to comprehend and regulate emotions, further enhances students' capacity to generate innovative ideas and solutions (Zampetakis, 2021).

Our quantitative analysis, employing state-of-the-art structural equation modelling akin to SPSS and AMOS, revealed that Intrinsic Motivation and Emotional Intelligence significantly mediate the relationship between perceived entrepreneurial leadership and student creativity. The results demonstrate a more pronounced impact of Intrinsic Motivation and Emotional Intelligence compared to direct creative stimulation, suggesting that these mediators play a pivotal role in translating leadership qualities into student creativity.

Among the examined determinants, Intrinsic Motivation emerged as the most influential factor, followed by Emotional Intelligence and the direct impact of entrepreneurial leadership. This finding aligns with the recent educational theories emphasizing the importance of psychological empowerment in fostering creativity among students. The choice of Northwest China as the study's location is based on the region's burgeoning educational landscape, which presents a unique amalgamation of traditional and modern educational approaches. This geographical focus provides valuable insights into how perceived entrepreneurial leadership can shape the creative abilities of students in diverse cultural and academic settings.

Drawing from the literature review, this study repositions Intrinsic Motivation and Emotional Intelligence as mediators in the relationship between Perceived Entrepreneurial Leadership, Proactive Personality, and Student Creativity. The relationship between self-efficacy and creativity in entrepreneurial purpose has been rethought to emphasize the roles that intrinsic motivation and emotional intelligence play in this dynamic. In this constructed model, creativity, while crucial, does not solely stimulate the intention to pursue entrepreneurship. Instead, it is the combination of an individual's intrinsic motivation and emotional intelligence, fostered by perceived entrepreneurial leadership, that plays a pivotal role. This shift in focus aligns with recent research (Biraglia & Kadile, 2022), suggesting that confidence and self-belief, elements of intrinsic motivation, coupled with emotional intelligence, are critical in actualizing entrepreneurial aspirations.

Similarly, the study found that intrinsic motivation and emotional intelligence partially mediate the effect of proactive personality, a key trait in entrepreneurial leadership, on students' creative outputs. This finding is consistent with contemporary studies (Prabhu et al., 2023; Rosique-Blasco et al., 2022) that emphasize the significance of these psychological factors in the realization of entrepreneurial intentions.

The results reinforce the understanding that while creativity and a proactive disposition are essential antecedents of entrepreneurial leadership, the decisive factor lies in the extent of a student's intrinsic motivation and emotional intelligence. These factors determine the actualization of creative potential and proactive attitudes in the entrepreneurial realm. This is corroborated by the research (Bellò et al., 2022; Gupta & Bhawe, 2022; Hamidi et al., 2023; Ip et al., 2022), which underscores the importance of these mediators in fostering entrepreneurship. Therefore, in the context of Northwest China's educational environment, the real challenge and opportunity lie in nurturing these mediating qualities among students, thereby enabling them to translate

their creativity and proactive personalities into tangible entrepreneurial endeavours.

Significance of the Research

This study focuses on the function of perceived entrepreneurial leadership in influencing student creativity, a field that has not received much attention, especially in the context of quickly emerging areas like Northwest China. It provides significant theoretical and practical insights, especially for academicians, researchers, and policymakers. It incorporates and adapts contemporary theories on Intrinsic Motivation and Emotional Intelligence, presenting a novel model that elucidates the relationship between these factors and student creativity.

The research adds a behavioral model that explains college students' creative and inventive talents to the body of literature on entrepreneurship by expanding the definition of self-efficacy to include intrinsic motivation and emotional intelligence. This model is based on the most recent research results. The practical implications of this study are far-reaching, particularly for educational institutions and policy framers. It underscores the need for an educational paradigm shift, advocating for the integration of intrinsic motivation and emotional intelligence into the curricula. Such an approach can significantly enhance the entrepreneurial and creative skills of students, preparing them to contribute effectively to the economy and society.

Furthermore, the study suggests that management students, in particular, should be actively engaged in entrepreneurial projects and encouraged to develop realistic business plans as part of their academic program. This hands-on experience, coupled with industry interactions and sessions with successful entrepreneurs, can foster an entrepreneurial mindset among students. For government bodies, policymakers, NGOs, and organizations focusing on self-employment and entrepreneurship, these findings highlight the importance of fostering an environment where creativity, proactive thinking, and emotional intelligence are valued and nurtured. Such an environment can stimulate entrepreneurial intentions and actions among the youth, driving innovation and economic growth in regions like Northwest China.

Limitations and Future Topics

This study, centred on the impact of perceived entrepreneurial leadership on student creativity in Northwest China, offers novel insights but also acknowledges certain limitations that pave the way for future research. The primary focus was on the intentions and perceptions of college students, particularly in the context of Xi'an, Lanzhou, and Urumqi. While intentions are often considered reliable predictors of behaviour, as suggested by recent theoretical developments (Liang, 2023), they do not always equate to actual entrepreneurial actions. Therefore, longitudinal studies are recommended to explore the transition from intentions to real-world entrepreneurial activities in these specific socio-cultural environments. In addition, the study's scope was limited to creativity, intrinsic motivation, and emotional intelligence as influenced by perceived entrepreneurial leadership. However, entrepreneurship is a multifaceted phenomenon, potentially influenced by a spectrum of personal and environmental factors. These include individual traits like passion and optimism and external influences such as family support and governmental policies promoting entrepreneurship (Xiao, 2022; Ming, 2023). Further investigations are needed to understand these complex interactions more comprehensively.

Moreover, given the unique socio-economic characteristics of Northwest China, including its distinct educational and cultural landscape, the findings of this study are particularly contextualized to this region. This specificity underscores the need for caution in generalizing these results to different settings. Comparative studies in varying socio-economic and cultural contexts would provide a broader understanding of the influence of perceived entrepreneurial leadership on creativity and entrepreneurial intentions.

In conclusion, this research adds to the body of knowledge on entrepreneurship by offering a revised behavioral model, integrating recent theoretical perspectives that highlight the interplay between personal characteristics and environmental factors in shaping entrepreneurial intentions. Future research should continue to explore these dynamics, expanding the understanding of entrepreneurship in diverse educational settings. Motivation and Emotional Intelligence, presenting a novel model that elucidates the relationship between these factors and student creativity.

Conclusion

This study was primarily aimed at elucidating the role of perceived entrepreneurial leadership in fostering creativity among college students, with an emphasis on the mediating effects of intrinsic motivation and emotional intelligence. The findings revealed a substantial influence of entrepreneurial leadership on student creativity. However, the impact of creativity on entrepreneurial intentions, traditionally perceived as direct, was found to be more nuanced. Through rigorous bootstrapping analysis, our study demonstrated that intrinsic motivation and emotional intelligence partially mediate the relationship between perceived entrepreneurial leadership and student creativity. This indicates that while creativity and a proactive approach (as components of entrepreneurial leadership) significantly contribute to the development of entrepreneurial intentions, these attributes reach their full potential only when coupled with high levels of intrinsic motivation and emotional

intelligence.

The results align with recent theoretical advancements (Ming, 2023; Xiao, 2022) and suggest that creativity, while essential, does not solely drive entrepreneurial intentions. Instead, it's the combination of a student's intrinsic motivation, fostered by entrepreneurial leadership, and their emotional intelligence that plays a pivotal role in shaping their entrepreneurial aspirations. This shift in understanding represents a significant contribution to the field of entrepreneurship education, particularly within the socio-cultural context of Northwest China. In summary, the study contributes novel insights into how perceived entrepreneurial leadership influences student creativity in Northwest China. It underscores that creativity and proactive personality, integral to entrepreneurial leadership, are important predictors of students' desire to start their own businesses. However, these attributes translate into tangible entrepreneurial intentions only when supported by strong intrinsic motivation and emotional intelligence.

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