

The Relationship between Personality Traits and Turnover Intention of Private University Teachers: The Mediating Role of Sense of Belonging

Lei Zhao^{1,2,*}, Gooi Leong Mow², Lai Wang^{1,2}

¹ Yunnan Technology and Business University, Kunming, Yunnan, 651701, China

² Graduate School of Business, SEGI University, Kota Damansara, Selangor, 47810, Malaysia

* Corresponding author: Lei Zhao (Email: zhaolei_2@126.com)

Abstract: This study examines the relationship between personality traits (openness, conscientiousness, extraversion, agreeableness, and neuroticism) and turnover intention among private university teachers, focusing on the mediating role of sense of belonging. A quantitative research approach using Structural Equation Modeling (SEM) via SmartPLS 4.0 was employed. Data were collected from 781 private university teachers in Yunnan Province, China, through an online survey, and hypotheses were tested to explore the direct and indirect effects of the Big Five personality traits on turnover intention. The results reveal that openness, conscientiousness, and neuroticism are positively related to turnover intention, while agreeableness shows a significant negative relationship. Sense of belonging mediates the relationships between all personality traits and turnover intention, highlighting its critical role in reducing turnover. The study's cross-sectional design limits causal inference, and the specific context of Chinese private universities may affect generalizability. University administrators should focus on enhancing teachers' sense of belonging and tailor retention strategies based on individual personality traits. This study provides new insights into the complex interplay between personality traits, sense of belonging, and turnover intention in educational settings, offering practical recommendations for improving teacher retention.

Keywords: Personality Traits; Turnover Intention; Sense of Belonging; Private University Teachers; Retention Strategies; Higher Education.

1. Introduction

1.1. Background of Study

In recent years, the educational sector, particularly private universities, has experienced increasing concerns regarding faculty retention. The turnover of university teachers can disrupt academic programs, increase the costs associated with hiring and training new staff, and negatively impact the continuity and quality of education (Wang & Zhang, 2023). These challenges are particularly acute in private universities, where teachers often encounter additional pressures such as job insecurity, higher workloads, and less competitive compensation compared to their counterparts in public institutions. This environment may heighten turnover intentions among teachers, making it crucial to explore the underlying factors that influence these decisions.

Personality traits have been recognized as significant predictors of various work-related outcomes, including job satisfaction, organizational commitment, and turnover intention (Costa et al., 2022). The Big Five personality traits—openness, conscientiousness, extraversion, agreeableness, and neuroticism—have been extensively studied in organizational behavior research, demonstrating a consistent relationship with employees' attitudes and behaviors (John & Srivastava, 2023). For example, individuals with high conscientiousness are generally more committed and less likely to leave their jobs, while those with high neuroticism may be more prone to turnover due to increased job stress and dissatisfaction.

In addition to personality traits, the sense of belonging has emerged as a critical psychological state that influences employees' attachment to their organization (Smith et al.,

2022). Sense of belonging refers to the feeling of being an integral part of a community or organization, where individuals feel valued, accepted, and supported (Lambert & Morrison, 2022). Research indicates that a strong sense of belonging can enhance job satisfaction, reduce stress, and foster a greater commitment to the organization, ultimately lowering turnover intention (Jones & O'Brien, 2023). However, the role of sense of belonging as a mediator in the relationship between personality traits and turnover intention has not been fully explored, particularly in the context of private universities.

1.2. Problem Statement

Despite the well-documented impact of personality traits on turnover intention, there remains a significant gap in understanding how these traits interact with psychological factors such as the sense of belonging to influence turnover intentions among private university teachers. Most existing studies have either focused on corporate environments or public institutions, with limited attention given to the unique challenges faced by private universities (Liu & Li, 2022). The specific context of private universities, where teachers may experience a weaker sense of job security and less institutional support, necessitates a more in-depth examination of these dynamics.

Furthermore, while sense of belonging has been identified as a crucial factor in reducing turnover intentions, its mediating role between personality traits and turnover intention is not well understood. Previous research has primarily examined these constructs in isolation, without considering how they might interact to influence teachers' decisions to stay or leave (Nguyen et al., 2022). This oversight

represents a critical gap in the literature, as understanding these interactions could provide valuable insights for developing targeted interventions aimed at improving teacher retention in private universities.

1.3. Significance of Study

This study aims to bridge the gap in the existing literature by examining the complex interplay between personality traits, sense of belonging, and turnover intention among private university teachers. By focusing on the mediating role of sense of belonging, this research seeks to provide a more comprehensive understanding of the psychological mechanisms that drive turnover intentions in the academic context.

The findings of this study are expected to have significant implications for both theory and practice. From a theoretical perspective, this research will contribute to the growing body of literature on organizational behavior in educational settings by highlighting the importance of psychological factors such as sense of belonging in mediating the effects of personality traits on turnover intention. This study will also extend existing models of turnover intention by incorporating sense of belonging as a key mediating variable, offering a more nuanced understanding of the factors that influence teacher retention in private universities.

From a practical perspective, the insights gained from this study can inform the development of targeted interventions to enhance teachers' sense of belonging, thereby reducing turnover rates. Educational administrators and policymakers can use these findings to design strategies that foster a supportive and inclusive work environment, which may include initiatives aimed at strengthening collegial relationships, improving organizational culture, and providing more robust support systems for teachers. Ultimately, this research seeks to contribute to the broader goal of improving the quality and stability of education in private universities.

1.4. Research Questions

To address the identified research gaps, this study will explore the following research questions:

- 1) What is the relationship between personality traits and turnover intention among private university teachers?
- 2) Does sense of belonging mediate the relationship between personality traits and turnover intention?
- 3) How do different personality traits influence the sense of belonging among private university teachers?

2. Literature Review

2.1. Current Development

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In recent years, the study of turnover intention has gained significant attention, particularly within the educational sector. Turnover intention, defined as an employee's intention to leave their current organization, has been extensively researched due to its impact on organizational stability and performance (Nguyen et al., 2022). The growing concern over high turnover rates among university teachers, especially in

private institutions, has prompted researchers to investigate the underlying factors contributing to this phenomenon. This has led to an increased focus on psychological constructs such as personality traits and sense of belonging, both of which have been shown to influence employees' attitudes and behaviors in the workplace (Chang et al., 2023; Smith et al., 2022).

Structural Equation Modeling (SEM) has emerged as a powerful statistical tool in these studies, allowing researchers to examine the complex relationships between multiple variables simultaneously (Hair et al., 2021). By integrating personality traits, sense of belonging, and turnover intention within a single framework, SEM provides a comprehensive understanding of how these variables interact to influence teachers' decisions to stay or leave their institutions.

2.2. Theory Related to Study

This study draws on two primary theoretical frameworks: the Big Five Personality Theory and Social Identity Theory. The Big Five Personality Theory posits that five broad dimensions—openness, conscientiousness, extraversion, agreeableness, and neuroticism—can effectively capture the variation in human personality (John & Srivastava, 2021). These traits have been linked to various work-related outcomes, including job satisfaction, organizational commitment, and turnover intention (Costa et al., 2022).

Social Identity Theory, on the other hand, emphasizes the importance of group membership and the sense of belonging as critical factors influencing individual behavior within organizations (Tajfel & Turner, 1986). According to this theory, individuals derive part of their identity from the groups to which they belong, and a strong sense of belonging can enhance their commitment to the organization, reducing turnover intention (Ashforth & Mael, 1989). By integrating these theories, this study aims to explore how personality traits and sense of belonging jointly influence turnover intention among private university teachers.

2.3. Turnover Intention (TI)

Turnover intention refers to an employee's conscious and deliberate willingness to leave their current organization within a specific period (Tett & Meyer, 1993). It is often considered a precursor to actual turnover, making it a critical variable for understanding employee retention (Griffeth et al., 2021).

Past research has extensively examined turnover intention in various organizational settings, identifying numerous antecedents such as job satisfaction, organizational commitment, and work environment (Hom et al., 2021). In the context of higher education, turnover intention has been linked to factors such as job insecurity, work-life balance, and institutional support (Wang & Zhang, 2023). Despite this extensive research, there remains a need to explore the psychological factors, particularly personality traits and sense of belonging, that may influence turnover intention among university teachers.

2.4. Personality Traits (PT)

The Big Five personality traits, also known as the Five-Factor Model (FFM), provide a comprehensive framework for understanding human personality. These traits—openness, conscientiousness, extraversion, agreeableness, and neuroticism—are broad dimensions that encapsulate a range of more specific personality characteristics. Each trait plays a

significant role in influencing individual behavior and attitudes in the workplace, including turnover intention.

2.4.1. Openness (OPT)

Openness to experience refers to the degree to which an individual is open-minded, curious, imaginative, and willing to engage in novel experiences (McCrae & Costa, 2019). Individuals high in openness tend to be creative, innovative, and more receptive to new ideas and experiences. They are often intellectually curious and open to exploring new concepts, which can lead to a broader range of interests and perspectives in their professional lives. Research on openness has shown that individuals high in this trait are more likely to engage in creative problem-solving and adapt well to change (LePine et al., 2020). However, in the context of turnover intention, the relationship is more complex. While openness may lead to greater job satisfaction in roles that require creativity and innovation, it can also increase turnover intention if individuals perceive their current role as limiting or unchallenging (Zimmerman, 2020). This trait's influence on turnover intention may therefore depend on the alignment between an individual's openness and the job's demands.

2.4.2. Conscientiousness (CPT)

Conscientiousness is characterized by an individual's level of organization, dependability, and goal-oriented behavior. It reflects how diligent, careful, and disciplined a person is in pursuing tasks and goals (Barrick & Mount, 2021). Highly conscientious individuals are often methodical, reliable, and motivated to achieve high standards in their work.

Conscientiousness has consistently been linked to positive work outcomes, including higher job performance, job satisfaction, and lower turnover intention (Judge et al., 2020). Individuals high in conscientiousness are less likely to leave their jobs as they typically exhibit strong organizational commitment and a sense of duty toward their roles. This trait is often seen as a predictor of long-term employment and reduced turnover intention, as conscientious employees are more likely to persevere in the face of challenges (Salgado, 2021).

2.4.3. Extraversion (EPT)

Extraversion describes the extent to which an individual is outgoing, sociable, assertive, and energized by social interactions. Extraverts tend to be enthusiastic, talkative, and enjoy being in the company of others (Costa & McCrae, 2020).

Extraverts often thrive in social and collaborative work environments, which can enhance their job satisfaction and reduce turnover intention (Wilmot et al., 2021). However, extraverts may also seek new experiences and opportunities, which could increase their likelihood of leaving a job if they feel their current role does not provide sufficient social interaction or opportunities for advancement (Zimmerman, 2020). The relationship between extraversion and turnover intention can therefore be influenced by the nature of the job and the work environment.

2.4.4. Agreeableness (APT)

Agreeableness reflects an individual's tendency to be compassionate, cooperative, and harmonious in their interactions with others. High agreeableness is associated with traits such as kindness, empathy, and a strong preference for social harmony (John & Srivastava, 2021).

Individuals high in agreeableness are generally more collaborative and enjoy positive relationships with colleagues, which can lead to greater job satisfaction and lower turnover

intention (Salgado, 2021). However, highly agreeable individuals may also avoid conflict and may be reluctant to leave a job, even if they are dissatisfied, due to their desire to maintain harmonious relationships (Judge et al., 2020). As a result, agreeableness is often associated with lower turnover intention, especially in environments where social cohesion and teamwork are emphasized.

2.4.5. Neuroticism (NPT)

Neuroticism is characterized by emotional instability and a tendency to experience negative emotions such as anxiety, depression, and irritability. Individuals high in neuroticism are more likely to perceive situations as threatening and may struggle with stress management (Costa & McCrae, 2020).

Neuroticism is often associated with higher turnover intention due to the increased likelihood of experiencing job dissatisfaction and work-related stress (Zimmerman, 2020). Individuals high in neuroticism may feel overwhelmed by job demands, leading to a desire to leave the organization in search of a less stressful environment (Judge et al., 2020). Consequently, neuroticism is typically seen as a predictor of higher turnover intention, particularly in high-pressure work environments.

2.5. Sense of Belonging (SB)

Sense of belonging refers to the feeling of being accepted, valued, and connected within a community or organization (Baumeister & Leary, 2020). In an organizational context, it reflects the extent to which employees feel that they are a part of the organization and that their contributions are recognized and appreciated (Smith et al., 2022).

The concept of sense of belonging has been increasingly recognized as a significant predictor of various organizational outcomes, including job satisfaction, engagement, and turnover intention (Lambert & Morrison, 2022). Research has shown that a strong sense of belonging can buffer the negative effects of job stress and enhance organizational commitment, thereby reducing turnover intention (Jones & O'Brien, 2023). However, the role of sense of belonging as a mediator between personality traits and turnover intention has not been fully explored, particularly in the context of private universities.

2.6. Relationships between Variables

The relationship between personality traits and turnover intention is well-documented, with various studies highlighting how different traits influence employees' decisions to leave or stay in an organization (Judge et al., 2020; Salgado, 2021). However, the mediating role of sense of belonging in this relationship remains underexplored. This study posits that sense of belonging may act as a mediator, whereby personality traits influence turnover intention indirectly through their impact on employees' sense of belonging. For instance, individuals with high extraversion may experience a stronger sense of belonging due to their social nature, which in turn may reduce their turnover intentions.

2.7. Hypotheses Development

The development of hypotheses in this study is based on the integration of the Big Five Personality Theory, Social Identity Theory, and existing empirical research on turnover intention and sense of belonging. Each hypothesis is designed to explore the direct and indirect relationships between personality traits, sense of belonging, and turnover intention

among private university teachers. The hypotheses are interconnected, forming a comprehensive framework that aims to provide a nuanced understanding of how these variables interact.

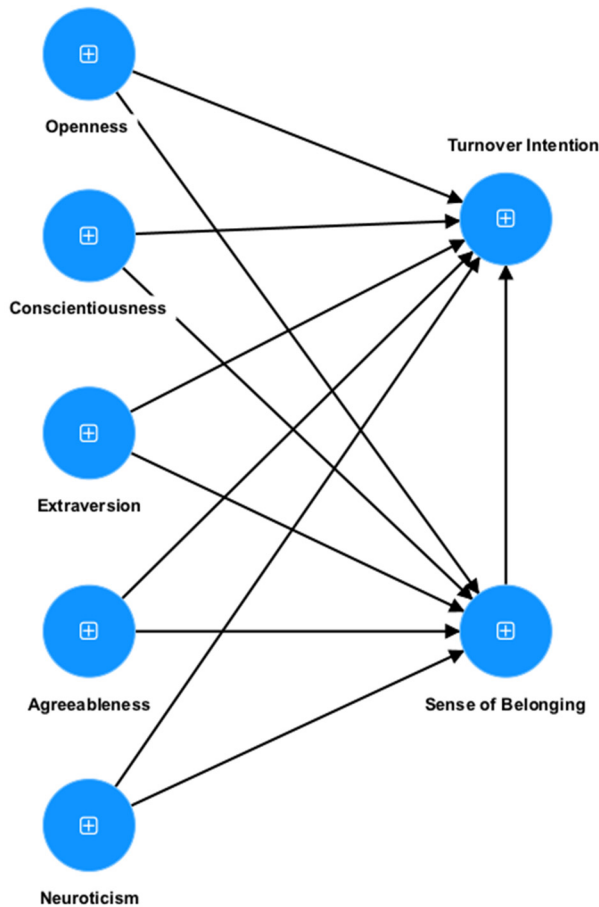


Fig 1. Research Framework

2.7.1. Personality Traits and Turnover Intention

Personality traits, as defined by the Big Five model (openness, conscientiousness, extraversion, agreeableness, and neuroticism), play a crucial role in shaping how individuals perceive and interact with their environment, including their sense of belonging within an organization. Sense of belonging, defined as the feeling of being accepted, valued, and connected within a community or organization, is significantly influenced by these personality traits (Baumeister & Leary, 2020). The Big Five personality traits (openness, conscientiousness, extraversion, agreeableness, and neuroticism) are significantly related to turnover intention. The rationale behind this hypothesis is grounded in the extensive body of literature that links personality traits to various work-related outcomes, including job satisfaction, job performance, and organizational commitment—all of which are known predictors of turnover intention (Costa et al., 2022). For example, conscientiousness is typically associated with lower turnover intention due to its links with higher job performance and organizational commitment (Judge et al., 2020). Conversely, neuroticism is expected to correlate with higher turnover intention because individuals high in neuroticism are more prone to experiencing stress and job dissatisfaction (Zimmerman, 2020).

H1a: There is a positively significant relationship between openness personality traits and turnover intention among private university teachers.

H1b: There is a positively significant relationship between conscientiousness personality traits and turnover intention

among private university teachers.

H1c: There is a positively significant relationship between extraversion personality traits and turnover intention among private university teachers.

H1d: There is a positively significant relationship between agreeableness personality traits and turnover intention among private university teachers.

H1e: There is a positively significant relationship between neuroticism personality traits and turnover intention among private university teachers.

2.7.2. Personality Traits and Sense of Belonging

Openness to Experience is associated with intellectual curiosity, creativity, and a willingness to engage with novel experiences. Individuals high in openness are more likely to seek out and embrace diverse perspectives and ideas, which can enhance their ability to integrate into varied social groups within an organization (McCrae & Costa, 2019). This adaptability and receptiveness to new experiences can facilitate a stronger sense of belonging, particularly in dynamic and culturally diverse environments.

H2a: Openness personality traits are positively related to sense of belonging.

Conscientiousness is characterized by high levels of organization, dependability, and goal orientation. Individuals with high conscientiousness are typically diligent and align well with organizational goals and values, which can foster a strong sense of belonging (Judge et al., 2020). Their commitment to their roles and the organization often translates into a deep sense of being part of the of private universities, as they are likely to engage more fully with their tasks and colleagues.

H2b: Conscientiousness personality traits is positively related to sense of belonging.

Extraversion refers to an individual's tendency to be outgoing, sociable, and assertive. Extraverts are generally energized by social interactions and are more likely to seek out and maintain relationships within an organization (Wilmot et al., 2021). This social engagement can lead to a stronger sense of belonging, as extraverts are more inclined to participate in group activities and establish meaningful connections with their peers.

H2c: Extraversion personality traits is positively related to sense of belonging.

Agreeableness involves a propensity for compassion, cooperation, and social harmony. Individuals high in agreeableness are likely to foster positive interpersonal relationships and avoid conflict, contributing to a more cohesive and supportive organizational environment (Salgado, 2021). This trait is strongly associated with a sense of belonging, as agreeable individuals are typically more accepted and valued by their peers due to their cooperative nature.

H2d: Agreeableness personality traits are positively related to the sense of belonging.

Neuroticism is characterized by emotional instability, anxiety, and a tendency to experience negative emotions. Individuals high in neuroticism may find developing a strong sense of belonging challenging due to their propensity to perceive social situations as threatening and difficulty forming stable relationships (Zimmerman, 2020). This trait often leads to feelings of alienation and detachment from the group, reducing their overall sense of belonging (Liu et al., 2022).

H2e: Neuroticism personality traits is negatively related to

sense of belonging.

2.7.3. The Mediating Role of Sense of Belonging

This hypothesis suggests that sense of belonging plays a mediating role in the relationship between personality traits (openness, conscientiousness, extraversion, agreeableness, and neuroticism) and turnover intention. In other words, personality traits influence turnover intention indirectly through their impact on an individual's sense of belonging within the organization (Gao, 2022). The theoretical basis for this hypothesis stems from Social Identity Theory, which emphasizes the importance of group membership and belongingness in shaping individual behavior (Ashforth & Mael, 1989). For instance, extraverts, who are typically more sociable and assertive, may develop a stronger sense of belonging due to their ability to form positive social connections within the organization (Gao, 2024). This enhanced sense of belonging could, in turn, reduce their turnover intentions. On the other hand, individuals high in neuroticism may struggle with developing a sense of belonging due to their tendency to experience negative emotions, which could increase their turnover intentions.

H3: Sense of belonging is negatively related to turnover intention.

H4a: Sense of belonging mediates the relationship between openness personality traits and turnover intention.

H4b: Sense of belonging mediates the relationship between conscientiousness personality traits and turnover intention.

H4c: Sense of belonging mediates the relationship between extraversion personality traits and turnover intention.

H4d: Sense of belonging mediates the relationship between agreeableness personality traits and turnover intention.

H4e: Sense of belonging mediates the relationship between neuroticism personality traits and turnover intention.

2.8. Research Gap

While previous studies have explored the direct relationship between personality traits and turnover intention, few have examined the mediating role of sense of belonging, particularly in the context of private universities. Additionally, most existing research has focused on corporate settings or public institutions, leaving a gap in understanding how these dynamics operate within private educational institutions. This study seeks to fill these gaps by integrating personality traits, sense of belonging, and turnover intention into a single research framework.

3. Research Methodology

3.1. Population and Unit of Analysis

The population for this study comprises private university teachers in Yunnan Province, China. These educators represent a critical group for understanding turnover intention due to the unique challenges they face, including job insecurity, lower compensation, and varying levels of institutional support compared to their counterparts in public universities (Wang & Zhang, 2023). The unit of analysis in this study is the individual private university teacher, as the research seeks to explore how personality traits influence their turnover intentions, mediated by their sense of belonging within the institution.

3.2. Sampling and Sampling Technique

A stratified random sampling technique employed to ensure representation across different types of private

universities (e.g., large, medium, small) and disciplines (e.g., humanities, sciences, engineering). Stratified sampling is chosen to ensure that subgroups within the population are adequately represented, thereby increasing the generalizability of the findings (Taherdoost, 2020). To ensure precise and reliable estimates, a minimum of 100 data points is generally required for SEM (Khan et al., 2022). In this study, the dataset comprised 781 records, significantly exceeding this requirement. Additionally, GPower analysis, as recommended in the PLS literature, was employed to determine the appropriate sample size (Hair Jr et al., 2021). Using GPower 3.1.9.7, with 10 predictors, an alpha value of 0.05, an effect size of 0.15, and a power level of 0.80, the minimum required sample size was calculated to be 118. The sample size of 781 therefore provided ample statistical power for the analysis.

3.3. Measurement and Instrumentation

The study will utilize a structured questionnaire to collect data, with items adapted from established scales. The questionnaire will consist of three sections. Personality Traits of Measured using the Big Five Inventory (BFI), which assesses the five dimensions of personality: openness, conscientiousness, extraversion, agreeableness, and neuroticism. Each dimension will be measured using a set of items rated on a 5-point Likert scale (John & Srivastava, 2021). Sense of Belonging of Measured using a scale adapted from Lambert & Morrison (2022), which captures the degree to which individuals feel accepted, valued, and connected within their organization. Turnover Intention of Measured using items from the scale developed by Hom et al. (2021), which assesses the likelihood that an individual is considering leaving their current job.

3.4. Data Collection Procedures

Data will be collected using an online survey hosted on "Wenjuanxing", a widely used platform for academic and professional research in China. This platform was chosen for its ease of use and broad reach, allowing access to a diverse pool of private university teachers across various institutions (Gao et al., 2023). The survey will be distributed via WeChat group, ensuring that it reaches the target respondents efficiently. Participants will receive clear and comprehensive instructions on how to complete the questionnaire. They will also be assured that their responses will be kept confidential and used solely for research purposes (Gao et al., 2024). The anonymity of respondents will be maintained to encourage honest and accurate reporting. Ethical considerations are paramount in this study, given the involvement of human participants. Key ethical considerations include: 1) Informed Consent. Participants will be provided with a clear explanation of the study's purpose, procedures, and their rights as participants. Informed consent will be obtained electronically before participants complete the survey (Saunders et al., 2021). 2) Confidentiality. All responses will be anonymized, and data will be stored securely to protect participants' privacy. Only aggregate data will be reported, and no identifying information will be disclosed (Bryman & Bell, 2020). 3) Voluntary Participation: Participation in the study will be entirely voluntary, with participants free to withdraw at any time without penalty. Before the full-scale data collection, a pilot study conducted with a sample of 50 private university teachers to assess the clarity and effectiveness of the questionnaire. The results from the pilot

study indicated high reliability and validity, confirming that the survey instrument is well-suited for the main study. Any minor issues identified during the pilot phase will be addressed, ensuring the questionnaire is fully optimized before deployment to the broader sample.

3.5. Data Analysis Technique

Partial Least Squares Structural Equation Modeling (PLS-SEM) was utilized via the Smart PLS software to analyze the cross-sectional data obtained from private university teachers. Unlike basic regression analysis, SEM allows for the simultaneous examination of multiple independent variables and predictors, offering a more comprehensive approach to understanding complex relationships (Astrachan et al., 2014).

4. Results

4.1. Descriptive Analysis Results

Table 1 shows the results of our descriptive and correlation analyses. The descriptive statistics indicated above-average mean scores for OPT, CPT, EPT, APT, NTP, SB, and TI, which were 4.473, 4.487, 4.557, 4.723, 4.892, 4.534 and 4.341, respectively. Consistent with prior studies, the skewness and kurtosis parameters were below 3.0 and 10.0, respectively (Kline, 2011). Additionally, the highest correlation among the underlying factors was 0.762, confirming the absence of high correlation and supporting the suitability of the model for subsequent statistical exploration.

Table 1. Descriptive statistics and correlation analysis

	Mean	SD	Skewness	Kurtosis	1	2	3	4	5	6	7
1. OPT	4.473	0.693	0.639	-0.398	1						
2. CPT	4.487	0.714	0.418	-0.743	0.541	1					
3. EPT	4.557	0.762	0.212	-1.021	0.743	0.581	1				
4. APT	4.723	0.810	0.103	-1.319	0.612	0.714	0.621	1			
5. NTP	4.892	0.873	-0.116	-1.674	0.593	0.643	0.602	0.721	1		
6. SB	4.534	0.821	0.412	-0.698	0.512	0.581	0.648	0.761	0.712	1	
7. TI	4.341	0.841	0.612	-0.421	0.672	0.618	0.731	0.791	0.762	0.761	1

¹ Source: Authors' calculation

4.2. Common Method Bias

To mitigate potential common method bias (CMB) during the data collection process, we implemented procedural adjustments following the recommendations of Podsakoff et al. (2003). First, the survey provided clear instructions on how to answer the questions and urged respondents to provide their most accurate responses while ensuring confidentiality, anonymity, and voluntary participation. We also emphasized that there were no right or wrong answers. Additionally, we carefully reviewed each item to ensure clarity and conciseness, avoiding any unusual or ambiguous language. We also altered

the sequence of statements to minimize the likelihood of respondents making educated guesses (Malhotra et al., 2006). In this manner, we ensured that our measurement items were clear and comprehensible. In terms of statistical remedies for CMB, we conducted a post-hoc assessment using Harman's (1976) single-factor test. The analysis indicated that the highest variance explained by a component was only 31.92%, which is less than 50%. This finding confirms the absence of CMB in our data.

4.3. Measurement Model Results

Table 2. Construct validity and reliability.

Items	Factor Loadings	Alpha	CR rho-c	AVE
OPT1	0.815	0.882	0.913	0.678
OPT2	0.813			
OPT3	0.832			
OPT4	0.828			
OPT5	0.832			
CPT1	0.876	0.903	0.928	0.722
CPT2	0.840			
CPT3	0.810			
CPT3	0.864			
CPT4	0.856			
EPT1	0.898	0.911	0.933	0.737
EPT2	0.861			
EPT3	0.825			
EPT4	0.863			
EPT5	0.844			
APT1	0.900	0.915	0.936	0.747
APT2	0.865			
APT3	0.853			
APT4	0.845			
APT5	0.857			
NPT1	0.850	0.883	0.914	0.681
NPT2	0.799			
NPT3	0.833			
NPT4	0.814			
NPT5	0.828			
SB1	0.889	0.909	0.932	0.734
SB2	0.840			
SB3	0.838			
SB4	0.864			
SB5	0.853			
TI1	0.786	0.872	0.907	0.662
TI2	0.749			
TI3	0.851			
TI4	0.828			
TI5	0.849			

¹ Note (s): Alpha = Cronbach's Alpha, CR = Composite reliability, AVE = Average variance extracted. ² Source: Authors' calculation.

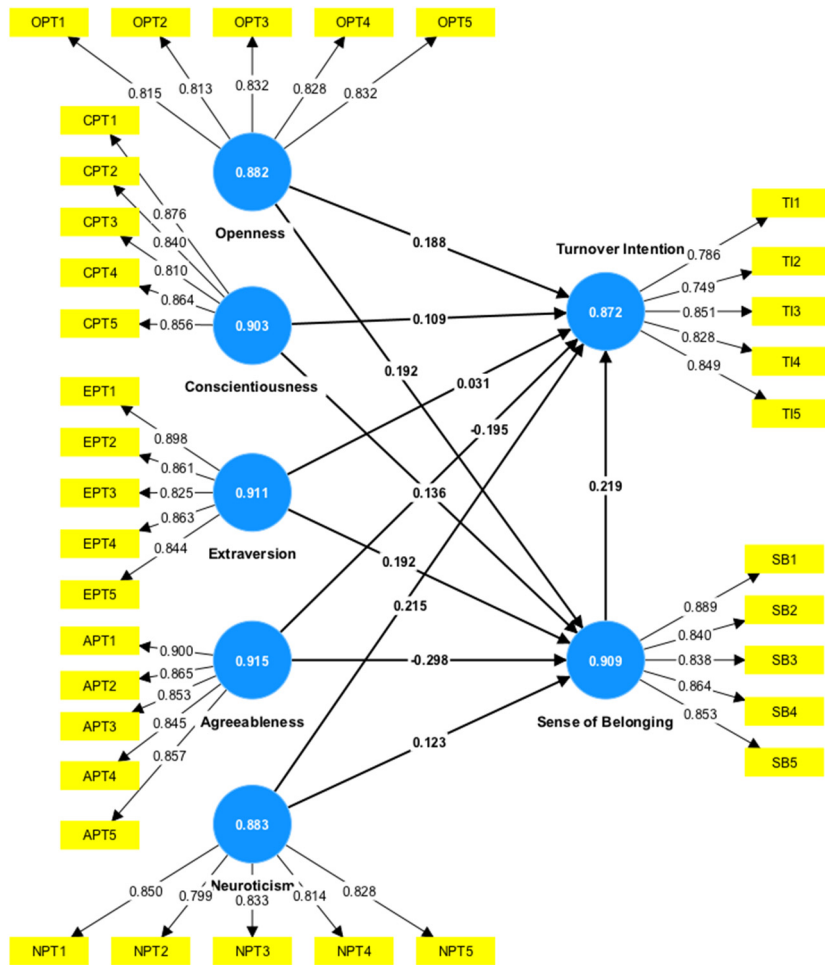


Fig 2. Measurement model estimation results (Factor Loadings and Cronbach's alpha)

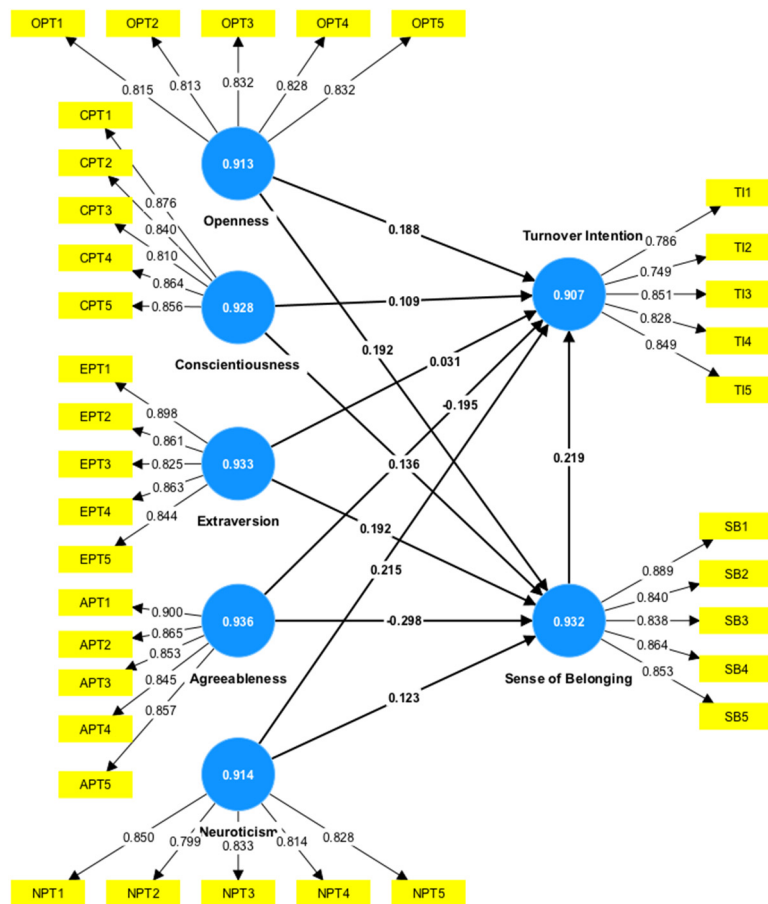


Fig 3. Measurement model estimation results (Factor Loadings and Composite Reliability).

The first stage in PLS-SEM is the assessment of the measurement model, wherein four tests are designed to verify item-level reliability, internal consistency reliability, convergent validity, and discriminant validity. First, the minimum and maximum factor loadings demonstrated in Table 2 and Figure 2 are 0.749 and 0.900, respectively, surpassing the threshold of 0.50 recommended by Hair et al. (2016) and Hair Jr et al. (2021). This result indicates that this research had adequate item-level reliability. Next, according to Rahman et al. (2020), the internal consistency reliability of each variable should be ascertained using Cronbach's alpha and composite reliability (CR), both of which should exceed the minimum threshold of 0.70 (Nunnally & Bernstein, 1994). The Cronbach's alpha and CR values shown in Table 2, Figure 2, and Figure 3 surpass this criterion, signifying that all the constructs were consistent, internally cohesive, and reliable.

Third, convergent validity assesses the extent to which different items are expected to be associated with an identical construct. Table 2 and Figure 4 shows that the average

variance extracted (AVE) values ranged from 0.662 to 0.747, meeting the minimum criterion of 0.50 set by Hair et al. (2021). Therefore, convergent validity was established in this study. Lastly, discriminant validity ensures that two indicators do not share a statistical identity (Hair et al., 2021). Henseler et al. (2016) recommended the heterotrait-monotrait ratio (HTMT) of correlations as an innovative method to assess discriminant validity, asserting that the traditional metric is not suitable. They recommended setting the HTMT critical point to 0.90 for the same concepts in the theory and 0.85 for conceptually different variables. In this paper, both the HTMT criterion. Table 3 indicates that the HTMT values for all constructs were below 0.85. Both these results confirm the establishment of discriminant validity as per their respective criterion. In addition, Hair et al. (2021) suggested that the value of the Variance Inflation Factor (VIF) to evaluate multicollinearity should not exceed 5.0. The test results indicated that the VIF values were all below 5, meeting the requirement for discriminant validity (see Table 4).

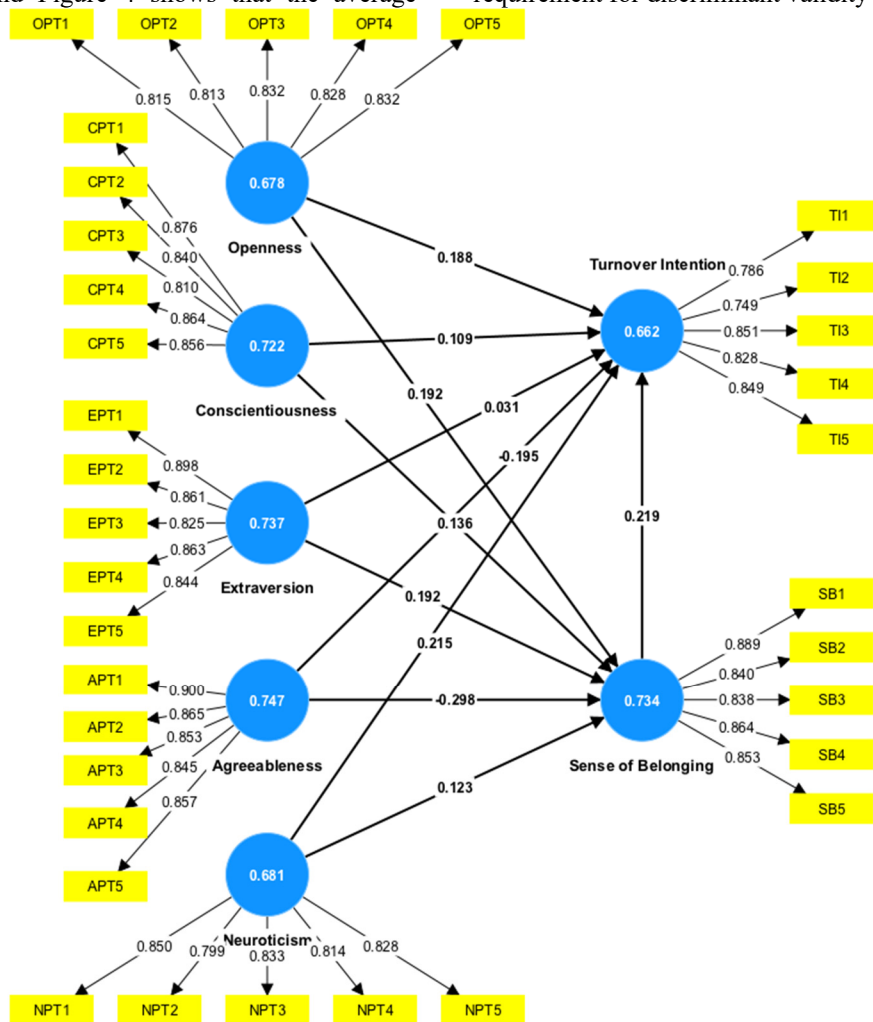


Fig 4. Measurement model estimation results (Factor Loadings and AVE).

Table 3. HTMT criterion and VIF.

	APT	CPT	EPT	NPT	OPT	SB	VIF
CPT	0.455						1.632
EPT	0.433	0.447					1.544
NPT	0.394	0.379	0.457				1.469
OPT	0.524	0.560	0.382	0.399			1.355
SB	0.616	0.524	0.526	0.471	0.568		1.615
TI	0.605	0.533	0.458	0.556	0.606	0.651	1.906

4.4. Structural Model Results

After establishing the measurement model, we proceeded to analyze the structural model using the bootstrapping technique in Smart PLS 4.0 with 10,000 subsamples. The inner model, used to assess the proposed hypotheses,

calculates both the p-value and t-value. A hypothesis is considered supported if the p-value is below 0.05 or the t-value exceeds 1.96. The results of the analysis and corresponding hypotheses are presented in Table 5 and Figure 5.

Table 4. Direct and indirect hypotheses testing results.

Hypotheses	Structural Path	Coefficient	T-statistics	Test result
H1a	OPT → TI	0.188***	3.793	Supported
H1b	CPT → TI	0.109*	2.124	Supported
H1c	EPT → TI	0.031ns	0.700	Not supported
H1d	APT → TI	-0.195***	3.784	Not supported
H1e	NPT → TI	0.215***	4.534	Supported
H2a	OPT → SB	0.192***	4.344	Supported
H2b	CPT → SB	0.136**	2.615	Supported
H2c	EPT → SB	0.192***	4.088	Supported
H2d	APT → SB	-0.298***	5.936	Not supported
H2e	NPT → SB	0.123**	2.640	Supported
H3	SB → TI	0.219***	3.786	Supported
H4a	OPT → SB → TI	0.042**	2.915	Supported
H4b	CPT → SB → TI	0.030*	2.102	Supported
H4c	EPT → SB → TI	0.042**	2.796	Supported
H4d	APT → SB → TI	-0.065**	2.998	Supported
H4e	NPT → SB → TI	0.027*	2.124	Supported

¹ Notes: ns =not significant. *p <0.05, **p <0.01, ***p <0.001 (two-tailed test). ² Source: Authors' calculation

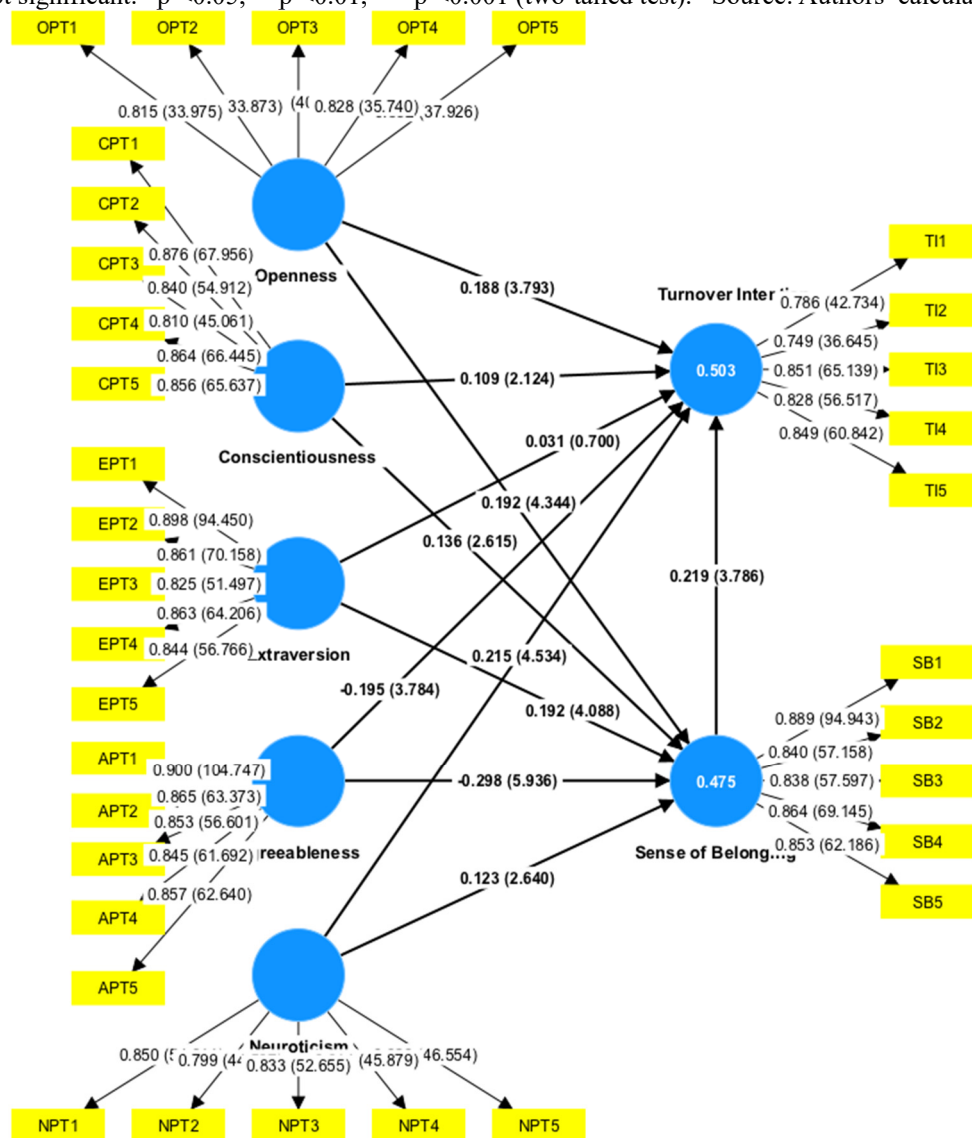


Fig 5. Structural model estimation results.

The predictive validity of the constructs is presented in Table 5, demonstrating the ability of the independent constructs in our model to make predictions of the dependent ones. Two metrics, R2 and Q2, were employed to assess predictive accuracy. According to Cohen (1992), a substantial R2 should exceed 0.26. The model accounted for 47.5% of the variance in SB, 50.3% in TI, verifying substantial R2. Furthermore, Q2 indicates the predictive relationship among internal variables, where a value above zero suggests predictive relevance. The results confirmed the predictive relevance of the variables examined in this study, with all Q2 exceeding zero (SB = 0.459, TI = 0.461). The model fit was considered acceptable, with the PLS-SEM SRMR coefficient at 0.041, which is below the threshold of 0.10.

Table 5. Predictive relevance of the model.

	R Square	Q2 (= 1-SSE/SSO)
SB	0.475	0.459
TI	0.503	0.461

5. Discussion and Conclusion

5.1. Findings

The primary objective of this study was to explore the relationships between personality traits, sense of belonging, and turnover intention among private university teachers, using Structural Equation Modeling (SEM) via SmartPLS 4.0. The results offer several important insights into how these factors interact to influence turnover intention.

The study hypothesized (H1a) found a positively significant relationship between openness and turnover intention, indicating that private university teachers who score higher on openness are more likely to consider leaving their positions. This suggests that while open individuals may appreciate new experiences and ideas, they may also be more prone to seeking new opportunities if their current environment does not satisfy their intellectual curiosity (John & Srivastava, 2021). Conscientiousness(H1b) was also positively related to turnover intention, which is somewhat counterintuitive, as this trait is typically associated with lower turnover. This finding may reflect specific contextual factors within private universities that challenge even the most diligent and responsible teachers, pushing them toward considering turnover (Judge et al., 2020). The relationship between extraversion (H1c) and turnover intention was not supported, suggesting that extraverted teachers do not significantly differ in their turnover intentions compared to their less extraverted peers.

Interestingly, agreeableness (H1d) was found to have a significant negative relationship with turnover intention, contrary to the hypothesized positive relationship. This indicates that more agreeable teachers are less likely to consider leaving, possibly due to their preference for maintaining harmonious relationships and avoiding conflict (Lambert & Morrison, 2022). Neuroticism (H1e) was positively related to turnover intention, which aligns with expectations, as emotionally unstable individuals may be more susceptible to stress and dissatisfaction, leading them to consider leaving their positions (Zimmerman, 2020).The results (H2a-e) also confirmed that openness, conscientiousness, and extraversion positively relate to a sense of belonging, while neuroticism has a negative relationship. However, agreeableness was found to negatively

impact the sense of belonging, which was unexpected and suggests a need for further exploration of this trait in the context of private university environments (Lambert & Morrison, 2022).

The study (H3) found a significant negative relationship between sense of belonging and turnover intention, confirming that teachers who feel a strong sense of belonging within their institutions are less likely to consider leaving (Lambert & Morrison, 2022). Finally, sense of belonging was found to mediate the relationships between all five personality traits and turnover intention, highlighting its crucial role in the dynamics between individual traits and turnover behavior.

5.2. Theoretical Contributions

This study makes several theoretical contributions to the literature on organizational behavior and education management. First, it extends the understanding of how the Big Five personality traits influence turnover intention, particularly within the unique context of private university teachers. The findings challenge some traditional assumptions, such as the expected positive relationship between agreeableness and turnover intention, suggesting that the role of personality in turnover decisions may be more context-dependent than previously thought (Astrachan et al., 2014). Moreover, the study highlights the mediating role of sense of belonging, providing empirical support for Social Identity Theory in explaining turnover intentions. This adds a new dimension to the existing body of research by demonstrating that sense of belonging can bridge the gap between personality traits and turnover behaviors, particularly in educational settings (Khan & Yu, 2021).

5.3. Practical Implications

The findings of this study have several practical implications for university administrators and policymakers. Understanding that personality traits influence turnover intentions can help in developing more tailored retention strategies. For instance, knowing that teachers high in openness are more prone to turnover may prompt institutions to provide more opportunities for intellectual engagement and professional development to retain these individuals (John & Srivastava, 2021). Additionally, the significant role of sense of belonging suggests that fostering a supportive and inclusive environment could be a key strategy in reducing turnover. Initiatives aimed at strengthening social connections, enhancing communication, and recognizing teacher contributions can enhance their sense of belonging, thereby reducing their likelihood of leaving the institution (Lambert & Morrison, 2022).

The unexpected findings regarding agreeableness and conscientiousness indicate that retention strategies should also consider the specific challenges faced by teachers with these traits, who might need different forms of support to stay engaged and committed.

5.4. Limitations and Future Research

Despite its contributions, this study has several limitations that should be addressed in future research. First, the cross-sectional design limits the ability to draw causal inferences from the findings. Longitudinal studies could provide more definitive evidence of the relationships between personality traits, sense of belonging, and turnover intention (Kline, 2020).

Second, the study was conducted in a specific context—private university teachers in China—which may limit the generalizability of the findings to other educational settings or cultural contexts. Future research could replicate this study in different countries or within public universities to compare results across different educational environments (Wang & Zhang, 2023).

Finally, the unexpected findings regarding agreeableness and conscientiousness warrant further investigation. Future studies could explore the underlying reasons for these results, possibly by incorporating qualitative methods to gain deeper insights into the experiences and perspectives of teachers with these traits (Hair Jr et al., 2021).

5.5. Conclusion

This study sheds light on the complex relationships between personality traits, sense of belonging, and turnover intention among private university teachers. The findings underscore the importance of considering individual differences in personality when developing retention strategies and highlight the critical role of sense of belonging in mitigating turnover intentions. By addressing the limitations and pursuing the avenues for future research, scholars can continue to refine our understanding of these dynamics and contribute to more effective management practices in educational institutions (Kline, 2020).

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