

The Impact of MBTI Occupational Personality Types on English-Speaking Anxiety Among College Students

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Abstract

This study investigates the influence of MBTI personality dimensions on college students' anxiety in speaking English. We surveyed 200 non-English major students from Xinjiang University, using the MBTI assessment and Second Language Speaking Anxiety Scale (SLSAS). Data were analyzed using SPSS, employing independent-samples t-tests. The results revealed two key findings. First, the Extroversion/Introversion (E/I) and Thinking/Feeling (T/F) dimensions significantly relate to speaking anxiety. Feeling-type students reported significantly higher anxiety levels than Thinking-type students ($p < .05$), indicating that introverted individuals and those guided by feelings face more psychological stress during oral communication. Second, no significant connections were found between the Sensing/Intuition (S/N) or Judging/Perceiving (J/P) dimensions and speaking anxiety. This research provides empirical support for MBTI-informed, personalized instruction can support English language learning effectively in EFL environments.

Keywords

MBTI Occupational Personality Types, English-Speaking Anxiety, non-English College Students, Impact.

1. Introduction

Speaking anxiety is a common psychological challenge in second language learning, especially noticeable in college students' English oral practice. Research shows Chinese undergraduates often experience significant speaking anxiety [1][2]. Psychological studies emphasize that factors like motivation, personality, and emotions—rather than intellectual ability—strongly influence this anxiety [3][4]. For example, extroverted students tend to participate more actively in speaking tasks [3], while introverted or feeling-oriented individuals are more prone to anxiety due to greater sensitivity to others' evaluations [5][6]. Most existing research focuses on the Big Five personality model or only the extroversion/introversion trait [5][6], which limits our understanding of how personality affects anxiety. The Myers-Briggs Type Indicator (MBTI) offers a detailed framework with four dimensions—Extroversion/Introversion (E/I), Sensing/Intuition (S/N), Thinking/Feeling (T/F), and Judging/Perceiving (J/P)—to analyze 16 distinct personality types. Recent language learning studies using MBTI have found that thinking-type learners rely on logical analysis [7], and judging-type individuals may experience lower anxiety due to their preference for structure and planning [3]. However, two key issues remain unresolved: (1) how MBTI dimensions specifically relate to speaking anxiety, and (2) the overuse of English major samples or regional populations [5][8]. This study aims to systematically explore the link between MBTI personality types and English-speaking anxiety among Chinese non-English majors, addressing these research gaps and informing tailored teaching methods.

2. Methodology

2.1. Participants

The study recruited 227 sophomore students majoring in non-English disciplines from Xinjiang University in 2022, all of whom had passed the College English Test Band 4 (CET4). After excluding invalid responses, 200 participants (99 males, 101 females) were retained as the final sample. Participants came from various disciplines, such as Geographic Information Systems and Sociology, with a nearly balanced gender distribution. The MBTI personality type distribution was as follows: Extroversion (E) 45.5% ($n=91$), Introversion (I) 54.5% ($n=109$); Thinking (T) 44.0% ($n=88$), and Feeling (F) 56.0% ($n=112$).

2.2. Instruments

A self-designed questionnaire with 20 items was divided into three sections. The three sections were: (1) Demographics information (4 items assessing gender, academic year, and English learning background), (2) Personality type, assessed using the *MBTI Step I* (Myers-Briggs Type Indicator, 2003)[9], completed in approximately 5 minutes, and (3) Oral Anxiety Evaluation adapted from Woodrow's 2006 [10] *Second Language Speaking Anxiety Scale (SLSAS)*, (Cronbach's $\alpha > 0.9$), with 16 items measuring four dimensions (e.g., communication anxiety, fear of negative evaluation) on a 5-point Likert scale (total score range: 16–80).

2.3. Data Collection and Analysis

Data were analyzed using SPSS 26.0. Correlation analysis and independent sample t -tests were conducted to examine (1) relationships between MBTI dimensions and overall speaking anxiety scores, and (2) significance levels of anxiety differences across personality dimensions.

3. Results

This study examined the relationships between MBTI dimensions and English-speaking anxiety (summed scores of communication anxiety, fear of negative evaluation, test/performance anxiety, and low self-efficacy) using independent sample t -tests in SPSS. The key findings are summarized as follows:

3.1. Group Differences

Introverted (I) students reported significantly higher levels of speaking anxiety than extroverted (E) peers (M difference = 3.79, $p=.007$; *Cohen's d*=0.384, small to medium effect). Similarly, Feeling (F) types exhibited significantly higher anxiety levels than Thinking (T) types (M difference = 3.94, $p=.006$; *Cohen's d*=0.400, medium effect). No significant differences were observed between Sensing/Intuition (S/N) or Judging/Perceiving (J/P) groups (See Tables 2 and 3).

Table 2. Independent-Samples t -Test results for E/I Dimensions and Total Speaking Anxiety Scores

Group	N	Mean	SD	Mean Difference	95% CI for Difference	t	df	p	Cohen's
E	91	29.29	9.66						
I	109	33.08	10.06	-3.80	-6.563~-	-2.707	198.000	.007	d=0.384
Total	200	31.36	10.03		1.031				

Table 3. Independent-Samples t-Test results for T/F Dimensions and Total Speaking Anxiety Scores

Group	N	Mean	SD	Mean Difference	95% CI for Difference	<i>t</i>	<i>df</i>	<i>p</i>	Cohen's
F	112	33.09	10.23						
T	88	29.15	9.38	3.94	1.171~6.713	2.805	198.000	.006	d=0.400
Total	200	31.36	10.03						

4. Discussion

4.1. Key Findings

This study identified significant correlations between specific MBTI dimensions and English-speaking anxiety. Introverted (I) students exhibited elevated anxiety levels, with the Thinking/Feeling (T/F) dimension demonstrating strong predictive power: Feeling (F) types reported significantly higher anxiety than Thinking (T) types. No significant associations were observed for the Sensing/Intuition (S/N) or Judging/Perceiving (J/P) dimensions. These results highlight Introversion (I) and Feeling (F) as key predictors of oral anxiety among college students, underscoring the need for targeted interventions such as incremental social engagement activities for Introverts and emotion-regulation training for Feeling-type learners.

4.2. Comparison with Prior research

Consistent with Kelsen [5] and Ito [6], introverted students demonstrated higher anxiety than extroverts, likely due to reduced engagement in spontaneous communication. Notably, this study expands existing literature by highlighting the unique role of the T/F dimension: Feeling type students' heightened sensitivity to social evaluation [11] contrasts with Thinking types' reliance on logical reasoning to mitigate stress [4]. The lack of significant effects for S/N and J/P dimensions diverges from findings in human computer interaction studies, possibly reflecting cultural factors (e.g., "face saving" concerns) [12]. Compared to the Big Five model, MBTI's multidimensional framework better captures nuanced anxiety mechanisms, such as the compounding effects of Introversion and Feeling traits.

This study finds Feeling (F) types reported significantly higher anxiety than Thinking (T) types, explained by China's educational cultural context. As Schreier et al. [13] noted, East Asian collectivism's high evaluative vigilance reshapes behavioral meanings. In high-stakes settings like CET4 Speaking Test, F-types' harmony-seeking and evaluative sensitivity create tension: balancing achievement pressure with avoiding "over-performance" discipline. This self-monitoring from normative-innate conflicts elevates their anxiety. Culturally, dual pathways amplify this: collectivist "harmony" norms require complex social risk assessments, while tests' competition contradicts self-prominence aversion. This forces F-types to manage linguistic tasks and "performance-compliance" conflicts, forming a chain of "cultural pressure → social anxiety → oral anxiety."

4.3. Limitations

First, the sample was limited to students from a single university in Northwest China, restricting generalizability. Future studies should employ stratified sampling methods across multiple regions to enhance representativeness. Second, the MBTI's binary typology may oversimplify the complexity of personality traits and neglect situational adaptability. Third, the self-designed anxiety scale lacked rigorous validation, risking measurement bias. Longitudinal designs and mixed method approaches (e.g., interviews, classroom observations) are recommended to clarify causal relationships and temporal dynamics.

5. Conclusions and Implications

5.1. Main Conclusions

The Extroversion /Introversion (E/I) and Thinking/Feeling (T/F) dimensions significantly predicted English-speaking anxiety. Students with Introverts and Feeling type students showed higher anxiety ($p < .05$), while S/N and J/P dimensions had negligible effects. These findings validate MBTI's utility in identifying anxiety prone learners and inform personalized pedagogical strategies.

5.2. Pedagogical recommendations

Pedagogical approaches should be customized to address distinct personality profiles. For Introverted learners, instructional design should incorporate low-pressure activities (e.g., small-group discussions) before progressing to public speaking tasks, while leveraging asynchronous platforms (e.g., AI chat-bots) to mitigate real-time interaction stress. Feeling-type students may benefit from integrated emotion-regulation modules (e.g., guided self-affirmation exercises) and formative assessment frameworks emphasizing peer feedback to reduce evaluation anxiety. Concurrently, cultivating a classroom culture that prioritizes communicative functionality over linguistic perfection through collaborative methods like role playing can enhance engagement and self-efficacy. Finally, aligning instructional content with MBTI profiles (e.g., assigning input-focused tasks for introverts and logic-based activities for Feeling types) may optimize anxiety management and learning outcomes.

5.3. Future Directions

Future research should prioritize cross-cultural comparisons to unpack how cultural norms moderate the relationship between personality traits and speaking anxiety. Longitudinal studies tracking anxiety and personality dynamics over time particularly in response to pedagogical interventions are essential for understanding causal mechanisms. Integrating MBTI with established theories of motivation or emotional intelligence could offer a more comprehensive model of anxiety drivers. Technology-enhanced solutions, such as virtual reality simulations for immersive language practice or AI-adaptive tools tailored to individual personality profiles, present promising avenues for anxiety reduction. Additionally, investigating the impact of instructors' personality traits on student anxiety could inform strategies to optimize teacher-student interactions and classroom climate.

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