A Study on the Information Dilemma in Academic Decision-Making Among Cross-Cultural High School Students: A Case Analysis Based on a U.S. High School

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Abstract:

This study aims to explore the issue of information asymmetry and its impact mechanisms in the academic decision-making processes of newly arrived cross-cultural students and local students in the U.S. high school context. Employing a mixed-methods case study design, the research was conducted in a diverse private high school in South Florida. Qualitative data analysis was performed on in-depth interviews and survey responses from 30 students. The findings reveal that the fragmentation of the school's official information system is a common issue. However, cross-cultural newcomers, due to language barriers, lack of cultural capital, and weakened family support, find themselves deeper in an "information island" dilemma, leading to a high reliance on informal peer information networks, which significantly increases the risk and uncertainty of their academic decisions. In contrast, local students can effectively filter and correct information using their cultural capital and family support. Based on these findings, this study constructs an "information-social network-decision" impact mechanism model and proposes systematic policy recommendations for schools to build a supportive information ecosystem.

Keywords: Academic Decision-Making; Information Asymmetry; Cross-Cultural Students; Peer Influence; Case Study; Qualitative Analysis

1. Introduction

The United States, as a nation of immigrants, continuously integrates new students and families into its educational system. The successful integration of these students largely depends on their academic pathways, in which academic decision-making during high school—such as course selection, credit planning, and college preparation—plays a crucial role. Theoretically, schools should provide clear,

systematic, and accessible information guidance for such critical decisions. However, in practice, many high schools face scarcity and chaos in this type of guidance information. This information scarcity poses challenges to the academic planning of all students, but its negative impact is particularly pronounced for cross-cultural students newly arrived in the United States. To deeply analyze the unique difficulties faced by this group, this study focuses on comparing the experiences of two student populations within the specific context of one high school: one consists of "parachute" students who are separated from their parents and studying alone in the U.S.; the other consists of local students whose families have been established in the U.S. for at least one generation. Preliminary observations indicate significant problems in the internal knowledge transfer mechanisms within the school, shaping the decision-making paths of these two groups in different ways (Tomas et al., 2016).

Students and parents often struggle to search through a sea of disorganized information scattered across multiple channels. This fragmented information architecture creates a very high decision-making threshold for those new to the system. More critically, even when official documents are obtained, students and parents may lack the necessary contextual knowledge and interpretive skills to apply them effectively to their own situations, leading to decreased trust in official sources and a greater reliance on informal advice from senior students, the accuracy and applicability of which are often questionable (Cohen et al., 1989). For both groups, informal information circulating among peers plays a significant role in academic decision-making. While peer information can compensate for the lack of official information, its inherent inaccuracies and limitations can also lead students to make suboptimal choices, potentially undermining their academic performance and college application competitiveness. For those students whose parents are overseas and lack immediate family support, the influence of peers is drastically amplified, even becoming the primary basis for their decisions. Based on this context, this study aims to go beyond surface phenomena and deeply investigate and document the internal mechanisms of these information dilemmas and their relative intensity between the two study groups. The ultimate goal of this research is not only to uncover problems but also to lay a solid empirical foundation for the subsequent design and piloting of an effective intervention.

2. Research Design and Methods

This study employs a qualitative-dominant mixed-methods case study design to deeply investigate how two distinct student groups access, interpret, and utilize academic decision-making resources. A single high school was selected as a typical case, and the specific behavior of "course selection" was viewed as a key window into the broader information ecology of academic decision-making (McDonald et al., 2024; Paradis-Gagne et al., 2023).

2.1 Participants and Data Collection

The research was conducted in a large, diverse private high school in South Florida known for its multinational student body. Using purposive sampling, we recruited 30 students in grades 9 through 11, forming two comparison groups: 15 newly arrived cross-cultural students, defined as those with less than one semester at the school and whose parents reside outside the United States; and 15 local students, whose families have lived and integrated locally for at least one generation.

Data collection occurred in two stages. First, a questionnaire survey was administered to a broader range of students to quantitatively depict the overall landscape and group differences regarding information access channels, trust tendencies, and decision-making difficulties. Second, in-depth interviews served as the core of the research. We conducted semi-structured in-depth interviews with all 30 participants, each lasting 40-60 minutes, audio-recorded and transcribed verbatim. The interview guide was designed to explore themes such as personal experiences with academic decision-making, primary information channels, trust levels in different sources, difficulties encountered in interpreting information, and the specific roles of peers and family in the decision-making process.

2.2 Data Analysis Methods

The analysis of the transcribed texts followed a rigorous qualitative content analysis process, drawing on the grounded theory approach for a three-level coding process. The first stage involved open coding, where the interview texts were broken down and analyzed line-by-line to extract and conceptualize initial labels; this study abstracted 128 initial concepts from the 30 texts. The second stage was axial coding, which clustered and summarized the dispersed initial concepts into higher-level categories and explored the logical relationships between them, such as causal, contextual, and strategic relationships. The third stage was selective coding, which systematically selected a "core category" from all identified categories and connected it with other categories to construct a comprehensive explanatory model that summarizes the overall phenomenon. Theoretical saturation testing was subsequently conducted (Yoon et al., 2020).

2.3 Ethical Considerations

This study strictly adhered to behavioral research ethics standards. Prior to the study, permission was obtained from the school administration, informed consent forms from all participating students' parents, and verbal assent from the students themselves. Participants were clearly informed of their right to withdraw unconditionally at any stage. All collected data were anonymized, and audio files and transcripts were stored on encrypted devices accessible only to the research team members.

3. Research Findings and Analysis

3.1 Coding Process and Core Category Refinement

Through the progressive coding of interview data, the study ultimately summarized 128 initial concepts into 28 initial categories and further refined five core categories that constitute the key dimensions influencing students' academic decision-making. These core categories include Information Environment Characteristics, covering attributes such as information fragmentation, information overload, multi-channel distribution, and low readability of official information; Individual Cognition and Resources, involving the student's language proficiency, prior knowledge, and familiarity with the education system, i.e., cultural capital; Social Network Influence, including the positive and negative effects of peer information flow, the effectiveness of family support, and the availability of teacher guidance; Decision-Making Behavior and Outcomes, manifested as risk-averse course selection, blind follow-the-trend behavior, post-decision satisfaction, and academic path fit; and Psychological Adjustment Mechanisms, relating to decision-making pressure, loneliness, and self-entertainment and resilience rebuilding achieved through means such as hobbies (Wallace et al., 1996).

3.2 Analysis of Influencing Factors

Regarding influencing factors, the study found that systemic information asymmetry is prevalent among students. The fragmentation of the information ecology is a common challenge faced by students at this school. However, cross-cultural newcomers, due to their inherent disadvantages in the dimension of Individual Cognition and Resources, such as insufficient language skills and lack of cultural capital, suffer a far greater impact than local students. They not only encounter the dilemma of "difficulty finding information" but also commonly face the predicament of "having information but struggling to understand it" or "misinterpreting information." Furthermore, there are significant group differences in the quality and quantity of social networks. The social networks of local students are usually diverse, with their information channels forming effective complementarity and cross-verification among peers, family, and school teachers. In contrast, the social networks of cross-cultural newcomers are highly homogenized, strongly reliant on peers, especially senior students from the same country, while support from family is severely weakened due to geographical distance and cognitive gaps, forming a fragile information support system lacking correction mechanisms. Additionally, risk perception strongly fosters herd decision-making in highly uncertain decision-making environments. Cross-cultural newcomers have a very strong perception of the risks that course selection errors could lead to grade declines, thereby affecting college applications. Consequently, adopting "safe course" options verified by predecessors becomes a common risk aversion strategy, even at the potential cost of course challenge and personal long-term interests (McDonald et al., 2024).

3.3 Construction of the Impact Mechanism Model

Based on the above findings, this study constructed an "information-social network-decision" impact mechanism model for the academic decision-making information dilemma. The model reveals that Information Environment Characteristics and Individual Cognition and Resources interact to determine the extent and quality of students' reliance on Social Network Influence. Cross-cultural newcomers often follow a path of high reliance on peers and low family support, whereas local students follow a path of balanced reliance and effective correction. This directly leads to a divergence in their Decision-Making Behavior and Outcomes: the former is prone to high conformity and suboptimal choices, while the latter is more likely to achieve greater autonomy and better choices. Throughout this process, Psychological Adjustment Mechanisms function as a buffer variable; cross-cultural newcomers generally report higher psychological pressure and rely more on personal hobbies for adjustment. This model clearly demonstrates how the interaction between the structural information environment and individual agency ultimately shapes different academic trajectories (Shaoshuai et al., 2025).

4. Policy Recommendations

Based on the research findings, we propose the following policy recommendations for schools and educators to address the identified information dilemmas in academic decision-making.

The primary task is the systematic optimization of the official information ecosystem. We recommend creating an integrated one-stop portal for new student academic navigation. This portal should present core academic requirements through clear timelines, visual flowcharts, and comprehensive multilingual versions. Concurrently, implementing a standardized information release process is crucial. Establishing a single official source of information ensures synchronization across all communication channels, effectively preventing information conflicts and obsolescence that currently plague the system.

Secondly, institutionalized peer support and correction mechanisms should be developed. This can be achieved through establishing a cross-cultural student mentor program that systematically recruits, trains, and pairs outstanding senior students with newcomers. Such formalization transforms potentially unreliable informal advice into supervised, properly oriented support. Complementing this, regular academic planning analysis workshops led by counselors should be organized, where senior students share both successful experiences and valuable lessons, focusing particularly on developing skills for critically interpreting official documents and navigating information traps (Eberth et al., 2023; Jiang et al., 2022).

Thirdly, enhancing remote linkage support for families of cross-cultural students is essential. Schools should establish dedicated multilingual parent communication platforms for distributing regular key information updates and critical deadline reminders. Additionally, organizing online multilingual admissions briefings can effectively explain the school's academic system to overseas parents, enabling them to become informed remote collaborators in their children's decision-making process rather than passive observers.

Finally, integrating psychological resilience building into the overall support system is recommended. Schools should actively encourage and fund diverse student club activities, particularly those centered around constructive hobbies like music, art, and sports. These activities provide crucial "life pivots" beyond academic pressure, promoting mental health and overall well-being, thereby indirectly enhancing students' resilience when facing decision-making challenges. By implementing this comprehensive strategy addressing "information," "people," and "systems" dimensions, schools can fundamentally improve their information environment and empower all students, especially the most vulnerable cross-cultural newcomers (Friedman et al., 2012).

5. Conclusion

This study establishes that the information ecology fundamentally shapes academic decision-making challenges in high school, particularly for cross-cultural "parachute kids" who face compounded vulnerabilities due to language barriers, limited cultural capital, and absent family support. These students enter a vicious cycle where information fragmentation drives reliance on peer networks that lack corrective mechanisms, leading to suboptimal academic choices. While peer information serves as a crucial lifeline, it carries inherent risks of inaccuracy. Similarly, while personal coping mechanisms like hobbies provide emotional relief, they cannot replace institutional support systems. Thus, these students' struggles represent not merely information scarcity but structural deficiencies in educational support. The "information-social network-decision" model developed in this study demonstrates how environmental and individual factors interact to shape academic outcomes, highlighting the need for systemic reforms to create equitable educational environments.

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